

Applying for Research Grants

Research Office
James Cook University

1997

Compiled by the Research Office
with the invaluable assistance of Ted Nielsen.

Acknowledgement is made to the following publications:

Handbook for Staff New to Research. University of Adelaide, 1995.
How to Win Funds and Influence Panels. University of Western Australia, 1995.
“Instructions to Applicants.” *ARC Large Research Grants Scheme.* DEETYA, 1996.
University Research – Some Issues. AVCC, 1996.

INTRODUCTION.....	1
TIME FOR A PROFESSIONAL APPLICATION.....	1
REVIEWING YOUR APPLICATION BEFORE YOU SUBMIT IT.....	1
QUALITY ASSURED?	2
YOUR PROPOSAL.....	2
YOUR RESEARCH RECORD AND PUBLICATIONS.....	2
THE NEED FOR PROFESSIONAL PRESENTATION.....	2
RESEARCHING YOUR RESEARCH GRANT.....	3
FAMILIARITY WITH THE FUNDING BODY.....	3
ASSESSMENT CRITERIA.....	3
PRIORITY AREAS.....	3
AVERAGE SUCCESS RATE.....	3
AVERAGE VALUE OF GRANTS.....	3
DURATION OF FUNDING.....	4
LENGTH OF PROPOSAL.....	4
WRITING FOR YOUR ASSESSORS.....	4
NOMINATING ASSESSORS.....	5
INTERVIEWS.....	5
SPECIAL INSTRUCTIONS.....	5
APPLICATION FORMS.....	5
ACCOMPANYING DOCUMENTATION.....	5
THE PROPOSAL	6
TITLE.....	6
SUMMARY.....	6
STATEMENT OF CENTRAL HYPOTHESIS.....	6
AIMS AND SIGNIFICANCE.....	6
RESEARCH PLAN, METHODS AND TECHNIQUES.....	8
TIMETABLE.....	8
TIME TO UNDERTAKE RESEARCH.....	8
THE BUDGET	9
INTRODUCTION.....	9
WHAT IS PERMITTED, WHAT REQUIRED?.....	9
<i>What level of assistance is available?</i>	9
<i>For what will the scheme provide funds?</i>	9
ACCURACY.....	10
COSTS AND COSTING.....	10
<i>Direct and indirect costs</i>	10
PRIORITIES AND RANKINGS.....	11
WHAT YOU NEED TO INCLUDE.....	11
JUSTIFICATION OF THE BUDGET.....	13
<i>Justify the important items</i>	13
<i>Justify your personnel</i>	14
<i>Justify the bottom line</i>	14
AND FINALLY.....	14
SAMPLE ARC LARGE BUDGET.....	15
<i>Notes</i>	15
APPLICATION CHECKLIST	16
APPENDIX I:.....	18
HERE TO HELP: RESEARCH OFFICE SERVICES AND INFORMATION.....	18
RESEARCH OFFICE CONTACT NUMBERS.....	18
RESOURCES ON THE WWW.....	18
APPENDIX II:	19
REDUCING THE SHOCK OF THE NEW RESEARCHER.....	19

You cannot afford to leave your proposal to the last minute.

Peers and colleagues can provide you with invaluable feedback.

Introduction

Time for a Professional Application

If your application is to have any chance of success, you will have to put in the time and effort necessary to prepare a professional, thorough document. You are about to engage in a competitive process, and your application will need to stand out from the competition. Remember that the funds for which you are applying will be drawn from a finite pool, and in any given year many deserving projects may miss out. You cannot afford to leave your proposal to the last minute.

To compete effectively you will need more than an excellent idea. You will need to research the scheme to which you are applying and develop a well-structured, thorough proposal that addresses the criteria and meets the requirements set out by the scheme. Your proposal will have to describe the significance of your project and provide a clear statement of its objectives. You will need to write a detailed research plan and set out a realistic timetable, and you will need time to gather the information for an accurate and defensible budget that must be explained and justified. These are not trivial tasks, and your chances of success are commensurate with the time you spend on each of them.

Reviewing Your Application Before You Submit It

Writing that would not benefit from revision is very rare, and you should not assume your application is any different. Allow yourself time to have your proposal reviewed before you submit it. You may be so absorbed by your project that your proposal fails to get the message across to others, or your proposal may make assumptions that are not fully explained. Trusted peers and colleagues can provide you with invaluable feedback, and you should check with the Research Office to see if they are conducting workshops or seminars designed for applicants to the scheme you are targeting. The time to identify problems with a proposal is before you submit it, not while you are reading the assessors' comments after it has been judged unsuccessful. (This can be a useful learning experience, but will not help your immediate funding situation.) Remember, too, that staff in the Research Office will check your proposal for any apparent deficiencies and give you the opportunity of correcting them if you submit it on time.

Quality Assured?

Your Proposal

Your application will rarely succeed unless your proposal is of high quality. Quality research will stand out as meritorious in a pool of applications. And while excellent research is excellent research, different schemes do measure quality differently. For example, in the ARC Large Grants Scheme quality is measured in an international context. In the internal Merit Research Grants Scheme, the funding panel considers each application against the other proposals, taking account of the coherence, novelty, significance and feasibility of the proposal, including the research plan and budget. Despite these variations in approach, the quality of your proposal should be evident to others and earn the respect of your peers.

Your Research Record and Publications

Winning grants is not enough. You must also demonstrate that you can achieve your research objectives and communicate your findings. Your published research record provides your assessors with proof of your abilities in these areas and is a vital factor in many schemes. For instance, a successful applicant to the ARC Large Grants Scheme will invariably have an outstanding publications record. Other schemes may make provision for researchers without such a record. In past years the ARC Small Grants Scheme has considered the potential of the applicant (to assist early career researchers within five full-time equivalent years of academic or research-related employment) and any special circumstances which may apply (such as being a single parent, suffering a severe illness, or coming from a non-academic career path, etc). You may wish to flag publications relevant to your proposal. Whichever scheme you choose to target, your CV should only include articles and papers that have been published or accepted for publication. You must be prepared to provide evidence of acceptance, so do not include work you have submitted but about which you are waiting to hear.

The Need for Professional Presentation

While professional presentation will not save a poor proposal, it can help to ensure a good one receives the attention it deserves. Put the same effort into your proposal as you would into a job application or article in a high-quality journal. It must have no obvious faults. Your assessors may view mistakes and formatting problems as evidence of a lack of attention to detail on your part, which in turn may lead them to doubt your ability to bring your project to a successful conclusion. You cannot afford anything that might put your assessors offside, so ensure there are no typographic or arithmetic errors. Generally, you should not use a font size smaller than ten point, but some schemes (for example, the ARC Large Grants Scheme) will not accept applications set in anything under twelve point, and may also instruct you to use one of a set list of acceptable fonts. Follow the instructions set out in the guidelines, use a simple, clear layout, and always use the stipulated headings if the scheme asks you to divide your document into specific sections. These precautions will help to convey your message effectively and prevent your application from being excluded prematurely.

The quality of your proposal should be evident to others and earn the respect of your peers.

You cannot afford anything that might put your assessors offside, so ensure there are no typographic or arithmetic errors.

Take the time to familiarise yourself with the guidelines issued by the funding agency and the Research Office.

Do not be put off by low success rates. With minor modifications your proposal may be suitable for submission to several schemes.

Researching Your Research Grant

Familiarity with the Funding Body

This can be crucial to your chances of success. All funding schemes differ in some respects, and many revise their guidelines from year to year. If you are to succeed in obtaining a grant, you need to structure your application in a way acceptable to the body to which you are applying. Take the time to familiarise yourself with the guidelines issued by the funding agency and read their annual reports. If in doubt, discuss the guidelines with your colleagues or contact the Research Office for advice. Some of the smaller funding bodies encourage researchers to discuss their proposals prior to submitting an application. Others will deal only through the Research Office.

Assessment Criteria

Are you aware of the assessment criteria employed by the scheme? Each funding agency specifies their criteria in their guidelines. Find out what they are and tailor your application accordingly. For example, if you are a new researcher without an extensive publication record, the internal grant schemes would offer you an opportunity for success that the ARC Grant Schemes would not. Make sure you are not wasting your time on an application that cannot meet one of the relevant criteria – if this is the case, you should consider another scheme whose requirements you can satisfy.

Priority Areas

A funding scheme may have areas of priority, and some schemes will only provide grants in those areas. Others may allocate a higher proportion of their funds to their priority areas or use them to separate marginal applications. You should seriously consider targeting a priority area if you have the opportunity, but make sure you can justify the decision.

Average Success Rate

You should be aware of the average success rate for applications to the scheme you have chosen. This can provide you with a realistic sense of your chances and keep you from building your hopes too high. Remember that success rates vary across schemes. For example, the NHMRC and ARC Large Grants Scheme may have success rates as low as 20%, while the rates may be higher in other schemes. Do not be put off by low success rates – many top researchers claim only a one in seven rate of success. With minor modifications your proposal may be suitable for submission to several schemes, thereby multiplying your chances of success.

Average Value of Grants

Find out details of the funds available and the average value of grants awarded by the scheme. If you think your budget will be significantly higher than average, you should discuss its feasibility with the funding agency. If the agency will reject your application because of its cost, there is little point in submitting it, and you should look elsewhere.

Duration of Funding

Be aware that some schemes have limits on their period of funding. For example, the ARC Large Grants Scheme currently offers grants of three years' duration, however, there is talk of introducing five year grants. Other funding bodies only offer funding for one year at a time. If your project is likely to extend beyond the funding period of the grant, you must address this in your application. Will the funding body allow you to submit another application at the end of the initial funding period? If so, indicate your intention to make further application. If not, you must explain how you plan to obtain continuing funding.

Length of Proposal

Although it may seem trivial, the length of your proposal can be very important. Some agencies impose strict limits. For example, if you exceed the stipulated page length for ARC or NHMRC proposals, your application may be significantly weakened by having the additional pages removed, or it may simply be declared ineligible. Determine the proper length and write your proposal accordingly. Remember that some schemes set a minimum font size, so do not try to disguise an overly long proposal by setting it in a tiny font. Edit your document if it is too long.

Writing for Your Assessors

Try to find out who will be assessing your proposal and write with them in mind. Many funding agencies do not seek external assessment because of the time and cost involved, and in most cases a generalist panel will assess your application. Such a panel could include representatives from industry and members without research backgrounds. Some panels might be drawn from allied disciplines, but the members may not necessarily be experts in your field. In almost all cases, the initial exclusion of applications will be done by a general panel or one drawn from allied disciplines. Therefore, you must write your application so it can be understood by people who are not expert in your field. However, it should not be too basic, especially if there is some chance the application will be assessed externally. Striking the correct balance may be difficult, but you must explain the aims and significance of your proposed research in a way which satisfies these criteria.

Put yourself in the shoes of your assessors. Remember that they may be assessing a large number of applications in a short space of time, and will be looking for excuses to exclude applications. Focus and clarity are of primary importance. Your idea and reasons for undertaking the research will have to stand out in a group of good proposals. Panel members and external assessors have to understand and be excited by your project. Seek advice and comments from your colleagues – their feedback can significantly improve your prospects of success.

If your project is likely to extend beyond the funding period of the grant, you must address this in your application.

Seek advice and comments from your colleagues – their feedback can significantly improve your chances of success.

Read the guidelines closely and follow the required procedure.

Nominating Assessors

Some schemes may require you to nominate a list of suitable assessors from which they will choose. Be careful when nominating potential assessors – your application may suffer if they refuse to reply. Generally speaking you should advise them of their nomination and check their availability. If they are agreeable, remember to include their full addresses (including facsimile number and email address) on your application. However, schemes may have different rules regarding applicant's contact with potential assessors, and different criteria by which they determine a nominee's suitability to the task. Again, read the guidelines closely and follow the required procedure. Contact the Research Office if you need advice.

Interviews

A few granting bodies still interview applicants. While an interview should allow you to present your case and clear up any misconceptions, do not assume you will be given the opportunity to expand on your submission. Take care to include all of the relevant information in your written application.

Special Instructions

Be sure to follow any special instructions applying to the scheme, such as addressing particular headings or stating the relevance of the research to the funding body's strategic objectives. More and more schemes are simply excluding applications if they have not complied with instructions or have been completed incorrectly.

Application Forms

If an application form is to be submitted it is essential all the information requested on the form is complete and accurate. Application forms are designed to provide summarised information quickly and easily and are referred to frequently by assessors. In many cases the forms are used to enter data into databases to run electronic checks on researcher's time, classification codes, priority areas, etc.

Accompanying Documentation

Accompanying documentation may be requested as evidence of non-overlap between the research proposed and research programs undertaken by government funded organisations such as CRCs, of time commitments, funding commitments or partner collaboration. Ensure all such documentation is included, and make sure it is appropriately endorsed and within any prescribed page limits. If you require supporting documentation from external parties seek it well in advance of the closing date.

If you require supporting documentation from external parties seek it well in advance of the closing date.

The Proposal

Title

Your proposal must have a clear, concise and informative title. A poorly chosen title can be misleading and will jeopardise your chances of success. The title should succinctly and accurately describe your project and enable your assessors to readily recall it. Make sure your title gives an indication of the project's content and avoid using terms that might generate negative associations.

Summary

The title and summary are usually the first components read by your assessors and often determine your chances of success. These components must capture your reviewers' attention and make them want to know more about your application. Remember, too, that your assessors will return repeatedly to your summary to ascertain what your project is about – they should not be forced to examine the body of your proposal for this information. Your summary must be clear, easy to read, and must accurately reflect the aims and objectives of your project. It should be readily understood by non-experts and experts from allied disciplines. Make sure your summary complies with the number of words or lines stipulated in the guidelines.

Statement of Central Hypothesis

If appropriate, you should place your hypothesis (or hypotheses) in bold in the earliest pages of your application. Make sure it is eye-catching and easily found. You should present multiple hypotheses in a logical progression, but take care not to try to investigate too many ideas in one project. Remember to present contingency plans in case your outcomes do not support your initial hypothesis.

Aims and Significance

This section must outline the project's aims and state what you intend to accomplish over the duration of the grant. It must be more than simply a list of experiments or studies to be undertaken with no logical links other than a general relevance to your topic. And you should take care to avoid overly broad general goals – these may be useful for you, but will not give your assessors a precise idea of your project's aims. Strive to make your aims specific and present them in a logical sequence. Each aim should build upon the previous one, and they should demonstrate the same logical progression as (and relate directly to) any hypotheses expressed. Ensure your aims are directly relevant to your anticipated research outcomes.

Once you have a clear statement of your project's aims, you need to explain its significance. You must make a case as to why this research needs to be undertaken and why you are the researcher to do it. You should aim to engage a naive reader and set out the fundamental questions your project asks. Take the following issues into account:

- The material you include must relate to the project's aims. A general technical overview or substantial scholarly literature review will not assist your assessors. However, you should demonstrate your familiarity with the field of knowledge you

The title and summary are usually the first components read by your assessors and often determine your chances of success.

You must make a case as to why this research needs to be undertaken and why you should do it.

Establish the relevance of your own work, but try to avoid excessive self-citation.

are challenging and with ‘state-of-the-art’ methodology if appropriate.

- Include a summary of your contributions to work in the area and refer to the facilities and expertise available to you.
- Citing your own work may be useful if, for example, you propose to use methodology developed in your own laboratory. If you are challenging orthodoxy it is vital you establish the relevance of your own work, but try to avoid excessive self-citation. A better way to establish your intellectual credibility is to analyse the most recent work in the field. If citing the published work of potential assessors, briefly justify any differences between their position and yours in a non-confrontational manner.
- The background material you provide must place the project in its national and international context. Demonstrate an awareness of your project’s cultural context and discuss any difficulties that may arise. For example, if you plan to research Asian Law, describe the differences from the Australian situation and explain the relevance of your expertise.
- Refer to the social and/or economic impact of your research, the advantages and disadvantages of your proposal, and any difficulties with biohazards or ethics. Where appropriate, refer to clearances sought or pending and give details of applications already approved.
- If your project is collaborative, explain why the collaboration is necessary to achieve the stated aims and discuss the benefits of the collaboration.
- If you give obscure or difficult to find references, include instructions on where they may be found, as assessors will often seek out the supporting literature.
- The unpublished results of any preliminary research can strengthen your application, but deciding how much information to give can be difficult – too much may suggest the project is unnecessary, while not enough may suggest the project is impossible. If you do include preliminary results, be sure to set them in the context of the current project and emphasise the need for continuity.
- If you are targeting a priority funding area, remember to specifically address the relevant objective or objectives of the scheme.
- Provide a clear summary of your project’s significance and re-emphasise its potential benefits to the field of knowledge. It may be useful to describe how your results will be disseminated to potential users or how the new knowledge will be implemented.
- Remember that your arguments will appear stronger if they are balanced.

Remember to specifically address the relevant objective or objectives of the scheme.

Research Plan, Methods and Techniques

The research plan should summarise your general approach to the project and must describe a logical progression of steps in which each stage leads on to the next. Ensure that the structure of your plan is consistent with the questions asked in the aims. You may find it useful to use the aims as sub-headings. Be sure to address any potential problems you may have previously raised and allow for alternative research directions if the initial results do not emerge as expected.

State explicitly how the results you expect to obtain relate to the project's aims, and set out the criteria you will use to judge if the research has been successful. Describe your anticipated outcomes clearly without resorting to jargon. Demonstrate how each component of the project contributes information of direct relevance to the stated aims.

Your research plan should also give some indication of the resource needs of each stage of the project. This will prepare your assessors for your budget justification, and will make your task there easier. Finally, you should establish that facilities not requested in the application are available to you, and if you are collaborating with other researchers, indicate who will be doing what and when they will be doing it.

Timetable

Your proposal should include an outline of your project's timetable. The timetable will usually break the research into components of two to three months' duration, and will specify the order in which the research will be undertaken. A gantt chart is often a useful tool for presenting a clear and concise timetable. Some funding schemes require the timetable to be set out as formal goals to be achieved by certain dates.

You must be realistic when planning your timetable. Ensure your objectives are achievable within the period you set out and think through the possibilities of delays and set backs. Some agencies will require you to refund their funds if you fail to achieve your objectives on time. Other schemes will deny you further access until satisfactory final reports have been submitted. Remember that delays in completion of reports may jeopardise your chances of future funding.

Time to Undertake Research

The time commitments of applicants play a big part in the selection process. The ARC Large Grants scheme requires all Chief Investigators to devote a minimum of four days per month to the project. Applications submitted with less than the minimum number of days are automatically excluded. However, overestimating the time you will spend on the project is just as dangerous. Most granting bodies assume a twenty-one day working month and will take into account the time stated for this project, any other ongoing projects you have listed and your teaching commitments. Be realistic about your time and make sure you disclose all of your research projects.

Ensure that the structure of your plan is consistent with the questions asked in the aims.

You must be realistic when planning your timetable.

Your budget must be accurate, detailed, flexible and realistic, and you must be able to justify it.

Make sure you only include items permissible under the guidelines of the scheme.

The Budget

Introduction

Every component of a grant application is important, and none more so than the budget. Preparation is again the key to success, so allow yourself enough time to do the job properly. You should know what the funding body is prepared to fund and what information they require, and you should check with the Research Office to find out if the University has policy guidelines you must follow when applying to that particular body. Your budget must be accurate, detailed, and realistic, and you must be able to justify it. You will need to provide up-to-date quotes and costings, so have your figures ready. Be aware that many funding bodies will ask you to rank the items in your budget according to their importance to your project. You may not receive the amount for which you ask so your budget should be flexible, but remember you are competing for limited funds so your assessment of the project's needs must be realistic. Present the document professionally and keep in mind that you must be able to justify the items and amounts for which you claim.

What is permitted, what required?

Before beginning your budget document, you must familiarise yourself with the requirements of the funding body to which you are applying. This is a two part process. First, you should read the current guidelines for the appropriate scheme. Guidelines are frequently revised, so ensure that your knowledge of the scheme is up to date. Second, check with the Research Office to see if the University has any policies which may bear upon your application or documents which may assist you in preparing your budget. Some important questions to which you should know the answers are:

What level of assistance is available?

Check if the scheme has minimum and maximum levels of assistance. Does your project fall within this range? If not, you might be better served to look elsewhere. Find out how much money is available through the scheme and the average value of grants awarded. If your project requires funding at a higher than average level your chances of success may decrease. You should also check the duration of funding offered by the scheme. If your project will continue beyond the funding period of the grant, you will need to indicate how and where you intend to obtain other sources of support.

For what will the scheme provide funds?

Make sure you only include items permissible under the guidelines of the scheme. Some schemes will only consider funding the direct costs of a project such as research assistance, equipment and maintenance, and the cost of consumables. You may be able to claim travel to carry out research but not to attend conferences. Different schemes require you to allow for such things as salary on-costs and superannuation in different ways. Check the guidelines for the correct procedure. If you remain unsure, contact the Research Office for advice.

Accuracy

This is crucial. If your figures are inaccurate your proposal loses credibility and your application's chances of success evaporate. Always ensure you are working with up-to-date figures and remember to double-check your arithmetic.

Costs and costing

The key words here are accuracy and detail. Your budget must demonstrate that you have a clear sense of how much things cost. Although the budget document itself may present totals for each item, you will still need to satisfy your assessors as to how you arrived at those totals when justifying the budget. Thoroughness and attention to detail are the hallmarks of a professionally presented budget and greatly increase the likelihood of your application being funded.

Direct and indirect costs

You must also ensure you ask for sufficient funding. Given the current difficulties faced by the higher education sector, it is increasingly important to attempt to recover the full costs of research. University policy is to seek full cost recovery for externally funded research. Accordingly, the price charged for a project conducted under contract from an outside organisation generally would not be less than the full costs and in some cases should include a profit component. Pricing at less than full costs may be justified for projects that benefit the University in a particular way (for example, that support the training of postgraduate students) or for which the University receives an alternative source of funding intended to cover part of the costs of the project (for example, receipt of Research Quantum funds or National Competitive Grants).

When calculating the full costs of a project, the following items need to be estimated:

- Direct payroll costs – salary and on-costs
- Direct project costs – consumables, travel, equipment, audit fees, etc
- Capital costs – large items of equipment or facilities
- Infrastructure costs – provision of overheads and general support for the project

Contact Human Resources to ensure you budget for correct salary and salary on-costs. And be aware that for external research grants requiring audited financial statements as a condition of award, the costs associated with the audit should be budgeted for in the application. If an internal audit will satisfy the granting body, the costs will be borne by the Internal Audit Unit as part of its standard operating costs.

Infrastructure costs relate to the general overheads associated with the functioning of the University and are not easily assigned to individual projects. Overheads include:

- general technical support
- accounting and administrative services
- building maintenance and running costs
- telecommunications

If your figures are inaccurate your proposal loses credibility and your application's chances of success evaporate.

Contact Human Resources to ensure you budget for correct salary and salary on-costs.

Some competitive funding agencies require you to disclose the full costs of a project, even though they will not fund those costs.

Think carefully about the priorities you set – leave yourself and your assessors room in which to move.

- library and information services
- mainframe computing
- workshops
- use of existing equipment
- office support and secretarial services
- office and laboratory space; and
- amortisation of buildings

To meet infrastructure costs JCU currently imposes an overhead charge of 15% of the total direct costs of research grants and an overhead charge of 25% of direct salary costs on contract research and development and consultancies. (**Note:** No overhead is charged on projects supporting PhD students or on National Competitive Grants unless the granting body permits. In some instances overheads may also be waived if the funding source is a small philanthropic foundation or the granting body specifically prohibits the inclusion of an overhead charge, for example, Queensland Health. Check with the Research Office if you are unsure.)

Funds provided for overheads are distributed two-thirds to the University and one-third to the School. School overheads are credited to a Services Fund nominated by the Head of School (HOS) and may be used at the discretion of the HOS. The University component is used to offset central administrative costs. In exceptional circumstances a HOS may waive or lower the component due to the School, but the University component cannot be waived without the approval of the Pro Vice-Chancellor (Research and International).

Be aware that some competitive funding agencies require you to disclose the full costs of a project even though they will not fund those costs. Check the guidelines carefully to see if you will be asked to do this and contact the Research Office if you remain unsure. Remember that the University often provides a significant in-kind contribution such as time or specialised equipment and facilities. Strong in-kind contributions should be listed as they can influence the success of the proposal.

Priorities and rankings

Most granting bodies will ask you to set priorities for the items in your budget. This is not a trivial task, and you should not simply rate every item as essential. Look carefully at the project and decide what you absolutely must have if the project is to be a success. Mark those items as the highest priorities then work from there. A realistic and honest ranking of your budget items will assist the funding body in determining the absolute minimum level of support it must provide if it cannot offer full assistance. If you have ranked everything equally your assessors will be left to their own devices and may cut items from the budget that leave the project crippled. Think carefully about the priorities you set – leave yourself and your assessors room in which to move.

What you need to include

Again, each scheme will have different requirements, so check the guidelines closely. An indication of the level of detail necessary can be gleaned from the *ARC Large Research Grants Scheme Guidelines* (17/12/96, 20-21):

- *Personnel*

Requests for personnel should show the official designation of the position (technician, laboratory attendant, etc). Any part-time or short-term assistance should be requested under this heading and designated ‘assistance’. When the appointment of a particular person is envisaged, the name of the person should be provided.

Requests for personnel funds must be based on the standard salary levels applying with the institution...

If it is expected that the same person will be appointed as a Research Associate or Senior Research Associate for the duration of a multi-year project, increments should be built into the amounts requested for the ARC’s provision towards that person’s salary for subsequent years.

Argument for support to relieve a staff member of teaching and other duties where essential for the research and successful outcome of the project should be provided in the justification of the budget... [Few funding bodies provide support for teaching relief, particularly in the case of early career researchers.]

- *Equipment*

Equipment should include hardware and software items individually costing \$1000 or more. Indicate the cost of equipment and installation and the names of the manufacturer and supplier. The cost of equipment and installation should not be estimated but should be based on the latest prices that can be obtained from the supplier at the time of application...

- *Maintenance*

Estimate the prices which will apply at the time of purchase. ‘Maintenance’ includes:

- items of equipment costing less than \$1000;
- consumables (major headings only);
- sets of printed materials and microfilm;
- computing (other than funds requested for the purchase of computing equipment or the hire of personnel for data preparation or programming which must be included under ‘Equipment’ or ‘Personnel’, respectively)...

- *Travel*

Itemise under ‘Travel’ the costs of fares, daily allowances, field expenses and field allowances. Include travel expenses for the appointment of Senior Research Associates, Research Associates and other personnel in accordance with your institutional policy. Show the origin and destination of all fares requested.

Requests for personnel funds must be based on the standard salary levels applying with the institution.

Itemise under ‘Travel’ the costs of fares, daily allowances, field expenses and field allowances.

Other

Any other cost items should be included. While the ARC does not provide funds for basic standard research materials, it is willing to provide funds for:
special materials needed for the conduct of a good research project; and
specialist library needs.

Please note that the information above is for illustrative purposes only. Always refer to and follow the guidelines of the scheme under which you are applying for funding.

Justification of the budget

Among the most common reasons cited for rejecting an application are shortcomings in the budget justification. Your budget justification has to convince your assessors to provide you with the funding for which your budget asks. It is not the place to be springing surprises on your assessors. Your research plan should have already indicated the likely resource needs for each stage of the project, so your assessors should have some idea of the most important personnel, equipment, and other items needed, and some sense of how these elements fit into your overall plan.

A typical application will be seeking funds for research assistance, equipment, operating expenses and possibly travel money. Having decided what you need to accomplish the research you have proposed, you must justify your need for funds in light of what is already available to you from the infrastructure provided by your department. Again, you must be realistic – if a suitable piece of equipment is already available, you will need a very convincing argument before you receive any funding for a new one. [Funding bodies generally expect researchers to have their own computers, however, specialised software is often supported.]

If you have prepared your budget conscientiously you should have little trouble justifying it, but you cannot let the figures speak for themselves. It is not enough simply to repeat the information contained in your budget – you must explain why you need these items. And remember that it is particularly important for you to explain the priorities given to individual budget items. Some things to keep in mind are:

Justify the important items

Outline clearly which are the most important budget items and explain their importance. Briefly discuss the way in which each item will contribute to your objectives, and indicate why these items have high priority. But make sure you have a real need for every item. For example, you might have decided you need a DEC Alpha workstation, but can you justify this in terms of the equipment already available to you? If departmental equipment is already heavily utilised and your programs are likely to have CPU times of hours or days, then you should be able to make a strong case for funding. Similarly, if you ask for a specific piece of hardware, such as a transputer or mobile robot, your claim will be easier to justify if you do not already have access to such devices. And be aware that if a particular piece of equipment is available in a wide range of suitable models and you have requested the most expensive one, you will need to provide very strong

Your budget justification has to convince your assessors to provide you with the funding for which your budget asks.

Unless you can convince them otherwise, funding agencies will be reluctant to fund above the base level.

justification for your choice. Unless you can convince them otherwise, funding agencies will be reluctant to fund above the base level.

Justify your personnel

A well-reasoned case is essential. Justify the level and amount of research each position will undertake. If you are thinking of employing particular researchers, describe their qualifications and experience and explain why they are crucial to the project's success.

Justify the bottom line

Your budget must appear feasible. Time invested in preparing your budget document will be rewarded here. Provide your assessors with as much information as possible and show them how you arrived at the amounts set out in your budget. Equipment and maintenance requests should be broken down to show the costs of specific components. You will need to provide quotes for expensive items (again, check the guidelines to determine the level at which this becomes necessary). Remember to provide detailed costings for travel and accommodation as required.

And finally

Check your completed budget and justification carefully. Make sure your budget includes everything you need to complete your project. Ensure that everything has been assigned a priority. Read your justification closely and ask yourself if it addresses and explains every item in your budget. And finally, check once again that your numbers add up.

A well reasoned case is essential.

Check your completed budget and justification carefully.

Sample ARC Large Budget

The sample budget is included as a guide to presentation only.

Detailed Budget Items	Priority	Amount Requested		
		1997	1998	1999
<i>Personnel</i>				
Research Associate Level 1 (\$40,378 + 26%)	A	50876	52744	54611
Research Assistant Grade 1 (\$24,182 + 26%)	A	30469	31272	31753
Research Assistance (X hours @ \$X.XX)	A	12000	12000	12000
Postgraduate Scholarship	A	15637	15637	15637
<i>Equipment</i>				
Supplier: NQ Equipment Manufacturer: XYZ Corp. Multiplexamatron	A	15000		
Supplier: NQ Equipment Manufacturer: XYZ Corp. Flange Attenuator	B1	6000		
<i>Maintenance</i>				
Chemicals	A	2000	2000	2000
Gas	A	300	300	300
Glassware	A	1000	1000	1000
Analyses	A	5000	5000	5000
<i>Travel</i>				
Dr. Anne Applicant				
<i>Airfares</i>				
2 x Townsville/Brisbane Return @ \$490 Economy	C1	980		
<i>Subsistence</i>				
10 days @ \$156 per day	C1	1560		
Dr Collaborator				
<i>Airfares</i>				
London/Townsville Return @\$1800 Economy	C1	1800		
<i>Subsistence</i>				
2 weeks @ \$600 per week	C1	1200		
<i>Field Trip Expenses</i>				
Vehicle Hire (1400km @ \$0.19/km)	C2	266		
Total		\$144088	\$119953	\$122301

Notes

- Show the base salary for each position.
- Remember to include increments and on-costs.
- Remember to give numerical rankings to B and C priority items.
- Check your totals.

Application Checklist

Initial Checks

- Are you applying to an appropriate scheme?
- Have you read and followed the Guidelines and Instructions to Applicants carefully?
- Is your title accurate and appropriate?
- Is the Field of Research Classification code correct?
- Does the summary clearly and accurately reflect the aims and objectives of the project?
- Is the hypothesis clearly stated in bold in the early stages of the application?

Aims and Significance Section

- Do the aims address the hypothesis (or hypotheses) in a logical order?
- Is the background material relevant to the aims of the project?
- Does it clearly set out the project's national and international context?
- Does it demonstrate the relevance of your own work?
- Does it establish your expertise as a researcher?
- If the project is collaborative, does the section clearly establish the need for collaboration?
- Does it establish the significance of the research and refer to key references?
- Does it address the objectives and priorities of the funding body?

Research Plan

- Is the Research Plan clear, and does it include references to resource needs?
- Does it work logically through the project's stated aims?
- Are the outcomes clearly stated?
- Does it include a timetable?

Budget

- Have you checked the current salary levels of appointments with Human Resources?
- Have you checked the increments and on-costs with Human Resources?
- Have you set and checked the priority rankings of requested items?
- Do your totals add up correctly?
- Are the requested items allowed under the guidelines of the scheme?

- Is every capital item requested clearly and correctly costed (with quotes where necessary)?
- Have you included maintenance costs?
- Have you included audit fees (where applicable)?

Budget Justification

- Have you justified every request for a capital item?
- Have you justified the need for personnel and the levels requested?
- Have you justified named personnel (where applicable)?
- Have you justified the travel requested?
- Have you provided details of all other anticipated sources of funding?

Final Checklist

- Has the application been signed by the researcher and all others as required?
- Does the application follow the format required by the funding agency?
- Is the whole application within the scheme's prescribed page limits?
- Is the application set in a suitable font at an acceptable point size?
- Is the application set out in appropriately spaced sections with headings in bold?
- Has all the required documentation (CVs, statements of support, etc) been attached?
- Have ethics clearances been obtained (where applicable)?
- Have the nominated referees or assessors been contacted to check their willingness and availability?
- Has the application been read and checked by at least one other person?

Appendix I:

Here to Help: Research Office Services and Information

The Research Office is located in room 015A of the Kevin Stark Research Building on JCU's Douglas Campus. The Research Office aims to support, promote and advance the conduct of ethical and responsible research within the University in accordance with the Research Strategic Plan. We strive to provide the best possible administrative, financial, legal, policy analysis and information services on all facets of research to external and internal clients.

The Research Office acts as a clearing house for ALL research grant and fellowship applications to external granting agencies. Internal closing dates are set to allow time for checking and processing applications and for obtaining the endorsement of the PVC (Research and International).

Applications are checked to ensure compliance with granting body guidelines and advice on budget modifications or ways of enhancing proposals may be proffered.

As applications may need to be returned to applicants for amendments it is essential that researchers adhere to the internal closing dates to allow time for corrections, seeking endorsement, photocopying and arranging courier delivery. Late applications may jeopardise the chance of success.

The Research Office also maintains a small resources library containing information on granting bodies, annual reports, publications of general interest (eg. *New Scientist*, *R&D Review*, *SciTech Journal*), general research policy and information kits.

Research Office Contact Numbers

	Telephone	Facsimile
<i>Director</i>		
Jenna Clark	4781 5011	4781 5521
<i>Secretary</i>		
Jacqui Segond Von Banchet	4781 5011	4781 5521
<i>Funding Opportunities Officer</i>		
Ted Nielsen	4781 5361	4781 5521
<i>Administrative Officer (ARC/External Grants)</i>		
Robyn Nickalls	4781 4484	4781 5521
<i>Administrative Officer (Internal Grants/Information Systems)</i>		
Jennifer Ruttledge	4781 4084	4781 5521

Resources on the WWW

The Research Office maintains a number of web pages of relevance to researchers. The Research Office homepage provides an index of the various pages available:

http://www.jcu.edu.au/adm/Research_Admin/homepage.html

Researchers should also keep up-to-date by reading the *Research Applications & Grants (RAG) Newsletter*, which carries a wealth of information about funding opportunities and granting bodies:

http://www.jcu.edu.au/adm/Research_Admin/rag_htm/

Appendix II:

Reducing the Shock of the New Researcher

Taking the Longer View

Beginning a career in research can often be difficult and disheartening. Sometimes you may feel the expectations placed on you are unrealistic, the opportunities offered few and far between. At other times you may feel as though you need a track record to win the funding you need to develop your track record. It may be small consolation, but you are not alone – virtually every early career researcher will experience similar feelings. The early years of your career will test your dedication and resolve, but there are strategies that can help to minimise some of the pain.

For the majority of new researchers, success in the most competitive schemes requires long term planning. Establish some long term goals then work out the steps you will need to take to achieve them. You might find it useful to think about where you would like to see your research program in two, three or five years time. Once you have developed this broader plan, target schemes that will help you to achieve your interim goals and try to develop continuity in your research. Remember, too, to take advantage of the services offered by the Research Office – browse their library, read their publications, and attend the seminars and workshops they run. If no seminars are scheduled, the Research Office may run informal small group workshops addressing major schemes on request.

You can develop your track record by:

- identifying all of the accepted funding sources for your discipline
- utilising internal research grants schemes (for example, Merit Research Grants)
- seeking funds from less competitive sources and using them effectively
- obtaining some preliminary data, perhaps via a student based project
- collaborating with other researchers at the local, national and international levels
- developing more than one thread to your research program

You can develop your publications record by:

- contributing to joint publications
- publishing review or methods papers
- aiming for publication in good quality, refereed journals
- identifying other accepted means of publishing in your discipline

But I Need Funding Now!

As an early career researcher you should pay particular attention to the following points when applying for funding:

- Research the scheme to which you are applying and carefully read and follow its guidelines. Include all of the information the scheme requires, and always follow the specifications for presentation.

- Look at some of the successful applications in your discipline from the last round and analyse their strengths.
- Finish your application early and have as many people as practical review it. Attend Review Groups if they are available.
- Talk to people who may have served on relevant selection panels.
- Ensure your collaborators have agreed to participate and that they understand the nature and extent of their anticipated contribution.
- Contact the assessors named in your application to ascertain their willingness to review the project and their availability.
- If your discipline has a low success rate over a relatively long period, it may be necessary to organise your discipline and become political. Write to the granting body and ask how applications in your field are handled and/or nominate someone from your discipline for the selection panel. (**Note:** Seek the advice of the Research Office before embarking on this course of action.)
- Accept that some of your proposals will not succeed and learn from each application. Read the reports, analyse your proposal document, and keep trying.