



## Assessment criteria for referees

AOARF Advisory Committee assessment of any research proposal is based on three core criteria:

- **Importance:** how important are the questions, or gaps in knowledge, that being addressed?
- **Scientific potential:** what are the prospects for good scientific progress?
- **Resources:** are the funds requested essential for the work, and do the importance and scientific potential justify funding on the scale requested?

In addition, referees are asked to identify any **ethical issues** or risks to human participants that need further attention.

In giving a written report on this proposal, please use the above headings. The detailed questions given below under each heading are intended as prompts, but you do not need to address each of these in your report.

### 1. Importance

- Is research in this area needed?
- How important are the questions, or gaps in knowledge, that are being addressed? Is there a good rationale for pursuing these? Is success likely to lead to significant new understanding?
- Does the proposal realistically set out the ultimate potential benefits with respect to improving human health?
- How important it is to do the work now?
- Is there similar or complementary research underway elsewhere? Are the proposals competitive?

### 2. Scientific potential

#### 2.1 Environment and People

- The individual or group will have provided details of either recent research in their laboratory or work produced under a previous grant. Has the individual or group established a high quality track record in the field?
- Are the applicants uniquely placed to deliver the work?
- Where the proposal embarks on work in a field new to the applicants, or is a first funding application, is there a firm foundation to take the work forward?
- How well does the work fit with other relevant research pursued by the applicants?
- Has the host institution demonstrated a commitment to supporting the Guideline for Grant Assessment (2006)
- Does this project lead to a career development in research for an orthopaedic surgeon?

#### 2.2 Research plans

- How innovative are the proposals?
- Are the experimental plans realistic, given the aims of the research and the resources?
- Are the methods and study designs clear and of the highest standard?
- Have major scientific, technical or organisational challenges been identified, and will they be tackled well?
- In the case of grants for pilot or proof of principle work, how will the work be developed and how feasible are the subsequent proposals?

### 3. Justification of resources requested.

- Is the number of staff appropriate for the work described, and are the reasons for purchasing major items of equipment clearly set out?
- The AOARF does consider funding for a research assistant but not for the principal researcher or researchers who are salaried employees of the research institution.
- Consideration can be given for a young orthopaedic surgeon where involvement in the research might encourage a career in research.
- Cost of equipment and disposables necessary for the research should be based on firm quotations from suppliers. In general principle, funding will not be provided for standard equipment which should be readily available at any research institute.
- The AOARF grants do not provide for any administrative charges to an administering institution.

### 4. Ethical and Other Implications

- Is the work ethically acceptable?
- Are there any ethical issues that need separate consideration?
- Are the ethical review and research governance arrangements clear and acceptable?

### 5. Overall score

Each referee should provide a **score** for each application. The referee then ranks all applications from most meritorious (1) to least meritorious and indicate a level above which funding should definitely be granted (ie. short list). The advisory Committee will meet to discuss all grant applications and determine a final ranking by consensus with short list recommendations for definite funding which will be taken into consideration by the Board in determining those applications which will receive funding. Guideline for Grant Assessment (2006)

## ASSESSMENT CRITERIA AND SCORING

### 1. Scientific Merit and feasibility of the proposed study: 50%

- Clarity of purpose (process and outcomes)
  - Near-flawless design
  - Accomplishable in reasonable time
  - No ethical issues

### 2. Impact.25%

- Relevance to musculoskeletal disease:
  - Importance of issue being addressed
  - Translation into important outcomes likely to impact on science and the practice of musculoskeletal medicine.
  - Should lead to publications in journals
  - Should be subject of invited presentations
  - Lead to further research in the specific field

### 3. Track record of the applicant or research team: 25%

- Independence
- Leadership
- Grants/awards
- Invited presentations
- Publications
- Patents
- Books

### New Investigators track record scoring.

#### To qualify,

1. Applicant has not been a Principle Investigator before.
2. Must supply a CV with the Grant application.

The track record score is determined by averaging the top experienced investigators for the Grant round.

**Please note.**

1. The AOARF Board has decided that the NHMRC Scoring system will be modified to 0-5 for 2012. The maximum total score will be 20 points with 10 points awarded for Scientific Merit/Feasibility, 5 points for Impact and 5 points for track record. Assessors are asked to score applications against each of the three criteria using the following scale:

0 Poor	1 Marginal	2 Good	3 Excellent	4 Highly Competitive	5 Highest International Standard
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CAT	CATEGORY DESCRIPTION	NOTES	RELEVANCE	SCIENTIFIC MERIT	TRACK RECORD
5	Highest International Quality and Research Performance	It is anticipated that only 1-5% of applications will fall into this category	The planned work addresses an issue of utmost importance to human health and will translate into fundamental outcomes in the science and practice of clinical medicine or public health. It will be published in journals of the highest impact factor and will be the subject of invited plenary presentations at international meetings, often with relevance across several fields. The work is highly innovative and introduces advances in concept.	The proposal is lucid in its objectives, exemplary in design and certain to be accomplished.	Applications in this category are generally from the most outstanding researchers in the country. They have strong international reputations or are well on the way to developing them.
4	Highly Competitive	The panel regards these applications as in the "absolutely must fund" category. It is anticipated that 5-10% of applications will fall into this category with a maximum of 10% in categories 6 & 7.	The planned work addresses an issue of major importance to human health. It will be published in journals of the highest impact factor for the field and could be the subject of invited plenary presentations at international and national meetings. The work is innovative with respect to the question being addressed and the approach to it.	The proposal has clarity of purpose and a near flawless design. There is a high probability of successful accomplishment.	The applicants have a record of achievement, relative to opportunity, that places them in the top 10-20% of papers and have a growing international reputation. One or more of the CI's are frequently on the stage at international specialty meetings as leaders in their field or as emerging leaders.
3	Excellent	The panel regards these applications as in the "strong desire to fund" category. It is anticipated that approximately 15% of applications will fall into this category.	The planned work addresses an issue of considerable importance to human health. It will be published in the top two or three journals for the field and could be the subject of invited plenary presentations at national specialty meetings. The work contains at least one innovative idea.	The proposal has clarity of design and any reservations are minor and unlikely to prevent successful outcome.	The applications have a record of achievement, relative to opportunity, that places them well above average for their peers. They have a growing national reputation and their work appears frequently at national meetings.
2	Good	The panel regards these applications as in the "fundable" category, budgetary restrictions aside. It is anticipated that approximately 25% of applications will fall into this category	The planned work addresses an issue of some importance to human health. It will be published in the middle-ranking to major journals for the field. The work may have some novel aspects, while others underpin or extend existing knowledge. There are minor concerns about successful completion.	The proposal is sound, but has several areas of minor concern in experimental design or feasibility.	The applicants have a solid record of achievement, relative to opportunity. One or more of the CI's has an existing or emerging national reputation, albeit in a niche area.
1	Marginal	These applications display a number of good features but are not competitive			
0	Poor	Unfundable grants (reasons must be clearly articulated to applicants)			

2. We will plan to use two Assessments Teams again this year, 2012. If there is wide divergence in scoring of an application by a team, the application will then be assessed by the other team.