

Figure 1: RGF Relationships

The arrows indicate principal lines of accountability to illustrate the RGF model.

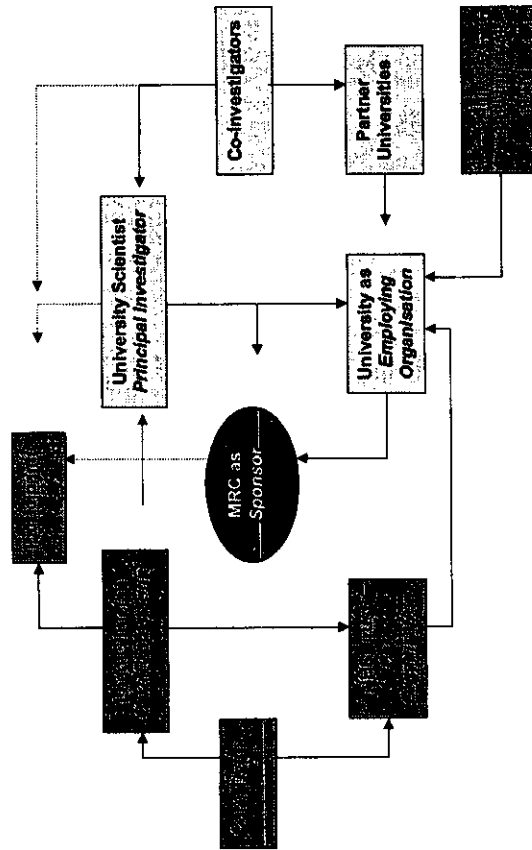
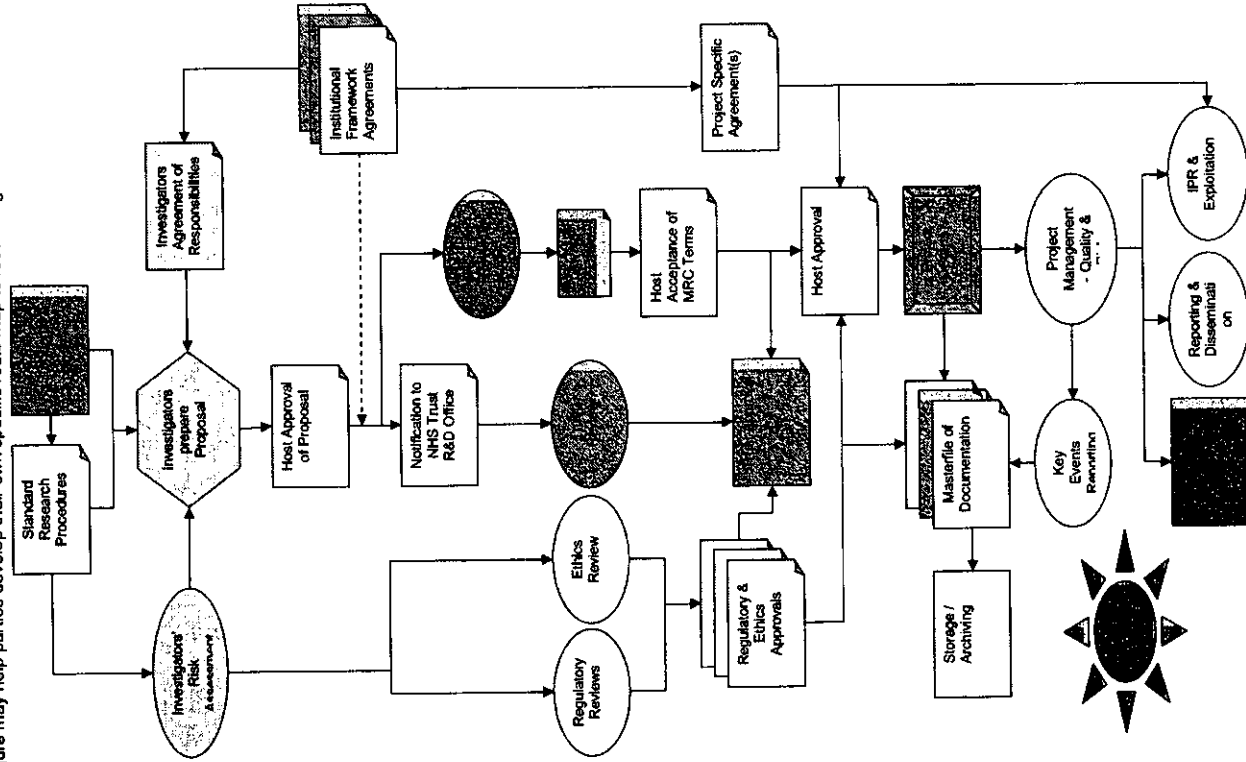


Figure 2: RGF Route Map

The Figure may help parties develop their own specific route map to research governance.



Appendix 1

Definitions

The Health Departments' / NHS Research Governance Frameworks define the main players in research and their responsibilities. MRC Terms and Conditions use other terms. The following list elaborates and adds to the RGF definitions to facilitate reading across between the RGF and our Terms and Conditions.

1. **Research**
 - The **Project** is the investigation, study or controlled trial involving human participants, their organs, tissues or data. For the purposes of this Guidance, programme grants, co-operative groups and component grants, strategic project grants, research training fellowships and MRC Unit projects are all "Projects".
 - **Investigational products** include diagnostic, medicinal, behavioural, organisational or other products, technologies or services (including placebos) that are investigated in the Project.
2. **People**
 - **Participants** are defined by RGF as "patients, users, relatives of the deceased, professional carers or members of the public agreeing to take part in the [Project]." MRC consider this includes healthy volunteers.
 - **Principal Investigator** is defined by the RGF as "the person designated as taking overall responsibility within the team of researchers for the design, conduct and reporting of the study." For grants, this is taken by MRC to correspond to one person - the first (or lead) applicant in the list of applicants in the Project proposal. For a Project funded in an MRC unit, the Principal Investigator is the lead scientist approved for that purpose by the Director.
 - **Co-investigators** are the named applicants / investigators in the Project proposal other than the Lead Applicant / Principal Investigator. They have the responsibilities of Researchers under the RGF and are assigned specific responsibilities in the research proposal and ethics approval documentation.
 - **Collaborators** accept responsibility for providing specified expertise or other resources particular for a limited period or range of work. They do not usually accept wider responsibilities for the ongoing management of the Project. They are generally named in the research proposal.
 - In a multicentre project, a **Site Lead Investigator**²² takes responsibility for duties delegated by the Principal Investigator to him/her for the conduct of the study at a designated site participating in the study. While the responsibilities will be documented, the Site Lead Investigator is not necessarily named in the research proposal approved by MRC²³.

3. **Organisations**

- The **Employing Organisation** is defined by the RGF as the "organisation employing the principal investigator and/or other researchers. The organisation employing the principal investigator will normally hold the contract(s) with the funder(s) of the study." For MRC-sponsored research, the Employing Organisation equates to either

²²

Some Trusts refer to the Site Lead Investigator as the site "Principal Investigator"

²³ It is likely that not all the sites will have been recruited to a large multicentre study at the time of application to MRC, and that MRC will approve funding if it considers that recruiting the additional sites is feasible. The recruitment of sites is then monitored by the steering committee. Consequently, the Host Institution is responsible for ensuring that the Site Lead Investigator has the appropriate expertise and skills.

- the **Host Institution**, when the funding agreement is with universities, NHS trusts and other non-MRC organisations
- or the **MRC** itself when the research is funded directly by MRC in one of the Councils establishments (Institutes, Units and Teams). The responsibilities of the Employing Organisation are exercised by the MRC Head Office, its local MRC administrative Centres and its establishments. Guidance similar to this has been prepared for the MRC.
- **Partner Organisations** are the organisations other than the Employing Organisation which are involved in managing and delivering the research. They include the following.
 - **Care Organisations** are defined by the RGF as the NHS Trusts or other organisations "responsible for providing health or social care in the UK".
 - Research often involves a **Commercial Organisation** supplying an investigational product or service directly relevant to the research.
- For multicentre studies, a **Co-ordinating Centre** is usually identified to take responsibility for defined aspects of the day-to-day management of a study²⁴. The Centre may be embedded in a Partner Organisation and not necessarily in the **Host Institution**.
- The **Sponsor** takes "primary responsibility for ensuring that the design of [the Project] meets appropriate standards and that arrangements are in place to ensure appropriate conduct and reporting; the sponsor is usually, but does not have to be, the main funder."²⁵

²⁴ For example, the MRC Clinical Trials Unit and the Clinical Trials Service Unit both co-

ordinate trials supported by MRC grant awards to universities.

²⁵ This Guidance should not be interpreted as the MRC accepting that it will decide to become a "sponsor" under the terms of the EU Directive relating to *Good Clinical Practice in the Conduct of Clinical Trials on Medicinal Products for Human Use*. The Directive defines the sponsor as "an individual, company, institution or organisation which takes responsibility for the initiation, management and /or financing of a clinical trial." This would appear to be a broader set of responsibilities than defined by the RGF and appears to be inconsistent with current UK practice outside the commercial sector.

Appendix 2

Template for a Host Institution's RGF Checklist

It is for the Host Institutions and their partners to determine the details of their policies, systems and agreements in relation to their responsibilities under the Health Departments Research Governance Frameworks, and to allocate their responsibilities between them.

This checklist aims to help the Host Institution identify key research management obligations and prioritise work to remedy any gaps. It is not an MRC requirement that the University to use this. Nevertheless, it is designed to be consistent with work currently in hand under the auspices of the NHS/University Partnership Group to define a Model Agreement for Research.

Project Governance

Governance responsibility	Timing
1. Agreeing and documenting the terms of reference of the investigators' study/trial management group(s), and any independent steering / scrutiny bodies (such as the Trial Steering Committee required under MRC Good Clinical practice in Clinical Trials	Before any participants are recruited

Managing People

Governance responsibility	Timing
2. Agreeing and documenting the responsibilities of the Principal Investigator and Co-investigators for managing the Project	Before any participant is recruited
3. Ensuring systems are in place for agreeing and documenting the responsibilities of the other members of the research team, including those who are in training, are visitors or join the team at a later stage, and <ul style="list-style-type: none"> the clinical supervision of clinical / non-clinical team members who have responsibilities bearing on participant safety and welfare. 	No member of the research team should work with patients, their tissues or data without their responsibilities being agreed and documented and without appropriate supervision.
4. Managing arrangements, where an employee of one organisation has responsibilities in another - in particular supervision, appraisal, development and (for clinicians) revalidation, or other (in keeping with the principles recommended in the Follett report).	No investigator should work with patients / tissues / data in another organisation without the appropriate honorary contract. Otherwise, systems for managing responsibilities of employees across organisations should be in place by March 2004 or as required by the NHS.
5. Ensuring staff directly involved in the Project have the appropriate qualifications, skills, expertise and training needed to conduct the research to a high quality and to ensure the safety and well being of participants	MRC assesses the research expertise of the applicants. In relation to its own staff, the Host Institution should have its own policies in place now. Otherwise, systems for obtaining assurances from Partner

	Organisations in place by March 2004 or as required by the NHS.
6. Ensuring policies and systems are in place for supervision of students, training fellows and visitors	No students, training fellows or visitors should work with patients / tissues / data without an agreed supervision plan
7. Ensuring systems are in place for promoting relevant MRC, professional and institutional codes of good practice and RGF requirements throughout the Project	At the outset of the project and as new staff join the Project
8. Ensuring systems for managing complaints from participants, employees and others and learning lessons	By March 2004 or as required by the NHS.
9. Ensuring systems for investigation of allegations of scientific or patient-related misconduct	Host and Partner organisations should have individual policies in place now. Agreements for co-operation in joint investigations should be in place by March 2004 or as required by the NHS.

Managing Research Activity

Governance responsibility	Timing
10. Ensuring systems are in place to document <ul style="list-style-type: none"> Project protocol amendments, including the rationale for the change submissions to and approvals from ethics and regulatory authorities are in place compliance with reporting and other requirements of ethical, legal and regulatory authorities 	No research requiring ethical approval may recruit participants / tissues / data without that approval A systematic approach to documentation should be an integral part of operational management of the Project
11. Ensuring quality and risk management systems are in place <ul style="list-style-type: none"> Operational management of the research should be consistent with professional and MRC Ethics and Good practice guidelines (e.g. standard operating procedures for clinical and laboratory investigations, data collection, management, analysis and preservation...) 	Project-specific quality control and risk management should be implemented as part of operational management, and quality / risk critical procedures documented.
12. Ensuring policies for protection and exploitation of intellectual property are in place	Host Institution policies should be in place now

Managing Access to and Management of Participants, their Organs, Tissues and Data

Governance responsibility	Timing
13. Ensuring documented procedures are in place for <ul style="list-style-type: none"> access to participants including the obtaining and documentation of consent access to, use and storage of participants' organs, tissues, DNA and histological material 	No research requiring ethical approval may recruit participants / tissues / data without the procedures being in place.

- for access to, use and storage of participants' personal data and for data protection

Managing Information about the Research

Governance responsibility	Timing
14. Systematic documentation ²⁶ of research management approvals, assurances and agreements are in place, such that they are readily available for inspection by the Host Institution itself, or by regulatory authorities or the MRC on request	As required by law, regulation, Research Ethics Committees or MRC Terms & Conditions.
15. Preservation of primary research data, consent forms and key derived datasets	As required by MRC Terms & Conditions, ethical and regulatory authorities, and law
16. Progress reporting, including significant events affecting the progress and outcome of the Project	As required by MRC Terms & Conditions, ethical and regulatory authorities, and law.

Managing Finances and Resources

Governance responsibility	Timing
17. Securing the provision of Investigational Products through Host Institution agreements with Commercial Organisation(s) consistent with MRC Terms and Conditions	Agreements made after October 2002 need to comply with the new section governing such agreements in MRC's Terms & Conditions
18. Ensuring systematic early identification to the NHS of data required to assess service support ("support for science") and treatment costs	Discussions should have been in place when the research proposal was submitted to MRC
19. Insurance and indemnity arrangements	Before work with patients / tissues / data is initiated
20. Agreeing distribution of costs and resources between the organisations involved	By March 2004 or as required by the NHS

²⁶ Pharmaceutical companies require Host Institutions / Investigators to establish and maintain study files. Such practice may have wider utility.

Appendix 3

DRAFT

Host Institution's Declaration

The UK Health Departments' Research Governance Frameworks for Health and Social Care sets out the broad areas of responsibility for Principal Investigators and other researchers, the Employing Organisation, the Sponsor and others²⁷. MRC has issued Guidance to Host Institutions on how the Council will implement the RGF and its expectations of Host Institutions. MRC's detailed requirements of Host Institutions and investigators are set out in our Terms & Conditions.

In accepting this award, the Host Institution should assure the MRC that

	Initials
1. The Host Institution accepts responsibility for ensuring that the research undertaken by the organization itself under this award is managed and monitored so as to comply with (a) MRC Terms and Conditions, including MRC's ethical and good practice guidance, and (b) the requirements of the Employing Organisation set out in the Research Governance Framework.	
2. The Host Institution accepts responsibility for ensuring that the agreements and systems are in place with NHS Trusts and other Partner Organisations, including Commercial Organisations, so as to comply with MRC Terms and Conditions and the Research Governance Framework.	
3. In particular, the Host Institution accepts responsibility for ensuring that it or a Partner Organisation systematically documents regulatory and ethical submissions, approvals and amendments and that it and they will not permit work that requires such approvals to be undertaken without the necessary approvals.	
Name of Signatory	
Responsibility of the Signatory within the Host Organisation	
Signature	

END

²⁷ For definitions, see the RGF itself and the MRC Guidance on the RGF.

MRC Guidance on
Reviewing Research Proposals



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Medical Research Council

2001

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PREFACE

In general, the principle of peer review has the overwhelming support of the academic community as the best means of assessing the quality of research proposals; whilst current mechanisms are certainly not perfect, they have yet to be improved upon. Criticism centres around the issues of equity and efficiency. Consequently there is an obligation on those using peer review to strive to make practices fair, transparent, effective and rigorous.

Bibliometric analysis has been proposed as one alternative to peer review – the use of mathematical models of scientific productivity measured by scientific publication. MRC commissioned an evaluation of the bibliometric option in 1999¹; this concluded that since citation analyses are post-hoc measures, they are better suited to the review of past progress than future proposals. As such bibliometrics would not substantially enhance current MRC procedures.

MRC fully accepts the need to regularly revisit peer review practices, and to listen to the reviewers and the reviewed, in order to improve the quality of peer review and reduce the work involved. As well as providing more detailed guidance, we have invested in improved electronic communications, and are looking at ways of providing clear, concise information for reviewers.

Over the last few years the Medical Research Council has been making more efforts to listen to the views and concerns of the experts about peer review, and especially to the members of the MRC Advisory Board, which was established in 1997. We have held several regional meetings for the Advisory Board, and consulted widely. Many people asked for better guidance and training for reviewers. I see this guide as a major step towards meeting this need.

Finally, I wish to express my own gratitude, and that of the MRC, to the many scientists and health professionals who freely give of their time and energy to peer review. The quality of this work underpins everything that MRC achieves and is key to the excellence of UK science.

Professor Sir George Radda
Chief Executive

¹ MRC Bibliometric Analysis Pilot Study, MRC Web site, 1999. Study to assess the utility of incorporating bibliometric analysis routinely into MRC's peer review procedures.

1 – PEER REVIEW: THE PRINCIPLES

Effective peer review of research underpins every aspect of the Medical Research Council's work.

Peer review should be applied broadly and flexibly. Experts should be engaged fully in all aspects of the management of research, helping to:

- support the best science and address the most important and urgent questions
- obtain value-for-money and ensure effective and efficient use of resources
- assess progress of groups and schemes
- train and nurture the best people in the best environments for these purposes

There is an implicit contract between applicant, MRC and reviewer: effective review requires commitment by all three. MRC must establish clear aims and assessment criteria for its schemes and effective working arrangements. Applications should fall within the criteria for the schemes and be explained clearly and comprehensively. Reviewers must devote their time and intellect to the constructive, honest critique of others' work.

Peer review must be conducted with:

Rigour and selectivity

Progress in medical research depends on careful scrutiny of research plans, and selective investment of the limited funds and time available. Difficult judgements are asked for, but avoiding them would harm research in the long run. Assessments of proposals for funding should be competitive in nature: i.e. they should involve comparison with other proposals in the same scheme, and usually in other schemes, and across all relevant subject areas. This may not be possible at the level of the individual reviewer (e.g. external referees or MAB members), but does happen further on in the peer review process, e.g. the Cross-Board Group (XBG), Research Boards, Awards Advisory Group (AAG), Training and Career Development panels.

A reasonable balance of risk must be maintained, some work supported carrying greater potential gain, but with lesser chance of success than other, safer, projects.

Equity

As far as possible, all research should be assessed against the same basic set of consistent, clearly stated, standards.

Adherence to best practice in Equal Opportunities should be maintained.

² See MRC's *Equal Opportunities in the Medical Research Council*

Integrity

Personal interests of those involved must never influence the outcome. Peer review is a system potentially open to biases, and all those involved share the responsibility for guarding against this. Integrity between applicant and reviewer is essential, as is the relationship between the Office applicant and reviewer.

Assessment must not only avoid conflict of interest between reviewers and applicants, but also avoid circumstances that might give the impression there is a conflict of interest. When reviewing a proposal any conflicts of interest must be declared.

Reviewers must never derive unfair competitive advantage from their knowledge of the applicants' ideas or plans.

Confidentiality

Reviewers have an obligation to protect the ideas and plans of applicants. Confidentiality also allows the free exchange of views amongst reviewers.

Openness

Researchers and reviewers should be fully informed of the review processes and their outcomes.

Efficiency

Review is time-consuming for applicant, reviewer and for MRC. The time and effort needed must be kept to the minimum consistent with effectiveness and fairness.

Like all broad aims, these principles will conflict with each other from time to time. In these cases, striking the right balance is often a matter of common sense, but reviewers should be guided by the maxim, do as you would be done by.

1.1 The specialist and the generalist reviewer

Peer review is a delicate balance of finding a reviewer close enough to the field of research to contribute expertise yet far enough away to avoid conflict of interest.

Effective peer review involves a range of judgements, about the quality of the research, its significance, value for money, and applicability. Researchers working in the specific field are almost always the best placed to assess the quality and feasibility of the research. However, judgements on the broader significance of the work, and on priorities, usually benefit from a broad view across several disciplines and fields. One person cannot always contribute from both viewpoints, and exchange of views between specialists and generalists is considered a particularly valuable part of the review process.

MRC Advisory Board (MAB) members can be asked to play both roles. For this reason, an individual MAB member may have less specialist expertise in a particular area than a typical referee, or may be expert in one aspect of a proposal only. The key question is whether the selected triad of MAB reviewers have the necessary expertise to consider all aspects of the proposal.

MRC programme managers are responsible for choosing a group of MAB members who are well placed to assess the proposal, but also take other factors into account, such as the need to spread workload fairly among members.

Nevertheless, reviewers are the best judge of their own expertise. If MAB members consider it is necessary, they may nominate additional specialist referees to review the application, which will inform the MAB decision. On occasion, MRC programme managers will automatically choose specialist referees to aid MAB members; programme managers use a number of methods to do this, including searching databases such as Medline, checking potential reviewers' current research interests on Web pages, consulting MRC research Board members and searching the MRC's own referees' database. To avoid delays, reviewers should decide immediately upon receipt of a proposal whether additional referees are needed and alert the Office.

For Programme Grants and other schemes where proposals are assessed in two stages, first by referees, and then by a multidisciplinary committee, the referees are usually chosen for their expertise in the specific research area. But there are exceptions; some referees are chosen for their ability to advise on the applicability or medical / industrial importance of a project. Others may be chosen for their methodological expertise.

Reviewers should always say in their response how their own expertise relates to the proposal, and whether they see their contribution as that of a "specialist" or "generalist". This issue is addressed explicitly in MRC's Electronic Application and Assessment system (EAA). Research Training Referee Teams for pre/early post-doctoral research training schemes are asked to indicate their level of confidence in their assessment.

1.2 Boundary areas

The relevant programme manager should already have considered whether an application fits within MRC's remit. Reviewers should not give a proposal a lower rating simply because it is questionable whether MRC, rather than another Research Council or Government Department should fund it. Funders' remits should and do overlap, and while the boundaries have to be carefully managed, research in 'boundary' areas must not be disadvantaged. The application should be reviewed on merit, but reviewers should inform the relevant programme manager of their concerns regarding suitability.

It can also be difficult to judge whether research - especially applied research - could reasonably be expected to win commercial funding instead of public funding. Different industry sectors differ in their R&D strengths and it is impossible to generalise. MRC Head Office will ensure that in these cases, the review includes experts who can comment from an industrial perspective.

1.3 Risk

MRC policy is to maintain a reasonable balance of risk throughout its portfolio. Although there are special schemes for promoting and funding high-risk studies, MRC expects to see some innovation and risk in all the proposals it funds, and especially where researchers are given long-term support.

Reviewers should query proposals that stay entirely within safe and predictable research areas. A proposal which has no chance of failure also has no chance of breakthrough.

For Fellowship projects that provide a basis for research training, high risk approaches may be appropriate as long as there is a clear fall back line of research.

1.4 Ethical acceptability

MRC takes the view that - although research is also supervised by Research Ethics Committees, and under the Animals (Scientific Procedures) Act - MRC itself should be satisfied that the work it supports is ethically acceptable. What does it expect from reviewers?

From their scientific background, reviewers are likely to be particularly knowledgeable about the potential risks of, and concerns about, research involving people, as well as any potential therapeutic effects of the types of research proposed. They are also likely to have first-hand experience of practical problems that may arise in the conduct of the work. It is therefore very important for reviewers to consider proposals from this perspective and to highlight any concerns or queries. The Council does not expect each reviewer to attempt an overall ethical assessment. Often there will be nothing to say.

The Boards will discuss any ethical concerns raised, and, if necessary, ask MRC's Council for a judgement on whether a particular study is acceptable.

1.5 Equal Opportunities

The MRC values the diverse skills and experience of its own employees and is committed to achieving equality of treatment for all. Its objective is that all individuals shall have equal opportunities for employment and advancement on the basis of their ability, qualifications and fitness for work. Reviewers have a responsibility to ensure that their assessment is free from any unlawful race, sex and disability discrimination. Where a reviewer is uncertain about MRC's equal opportunities policy or grant and fellowship eligibility regulations, they should contact the Office before completing their assessment. This should take into account issues such as employment status and career breaks of principle applicants.

1.6 Clinical and public health research

MRC has made a long-term commitment to strengthen its portfolio of high quality clinical and public health research. MRC also aims to promote integration of the best basic and clinical research and to raise standards through research training.

Many reviewers are concerned that peer review discriminates against clinical studies. It has been claimed that is because of the greater practical constraints on study design, the narrower focus of clinical studies, or its less "original" character.

Reviewers should:

- be aware of the danger of unintentional bias, especially if they do not routinely review clinical research
- assess clinical proposals against the **highest international standards in clinical and public health research**
- note any concerns about their banding in their report.

For its part, MRC will:

- ensure that clinical proposals are reviewed mainly by clinical researchers and practitioners
- monitor standards and funding decisions across its portfolio to ensure equity.

1.7 Value for money

Reviewers should consider whether the research is sufficiently important overall to justify the expenditure.

Reviewers should bear in mind that MRC's aim is to provide high quality research groups with the resources needed for internationally competitive research. Providing an inadequate level of resources will result in poor value for money, just as much as providing excessive funding.

Many research teams are supported by several different funders. Reviewers should, where possible, take account of all the resources available to a team when assessing past progress.

1.8 Use of animals

In the case of animal experimentation, reviewers may be better placed than others to comment on the species and numbers used, as well as on current best practice in the area and on alternatives. They must also ensure that MRC only supports the use of animals in well-designed, high-quality studies.

1.9 Disseminating and exploiting results

MRC aims to help researchers improve their ability to disseminate and exploit their results. MRC also needs to identify, before funding, any factors that might reduce the chances of research being translated into practice.

Even if reviewers have not had first hand experience of knowledge transfer, they should be able to help identify scientific, technical, or clinical issues that the applicant has not anticipated.

When applicants have given significant thought to dissemination/exploitation issues reviewers should give due credit in their assessment.

1.10 Feedback

Reviewers' reports should be detailed enough for others to understand fully the rationale for a particular rating, and reach a collective agreement. The reports should be balanced - highlighting the strengths of proposals as well as their weaknesses.

Reports should also highlight any concerns the reviewer may have about the assessment itself, or about particular aspects of the proposal (e.g. ethical acceptability costs).

Specific constructive criticism or suggestions of alternative approaches that can be fed back to applicants is particularly important where the scheme is addressing the needs of younger researchers developing careers. It can also be important in fields where the body of research expertise needs to be strengthened, and reviewers outside the area can make important contributions. These points should ideally be supported by evidence or references. Reviewers do not need to offer detailed comments on the research proposed in every case.

Reviewers should consider issues such as the following when giving feedback:

- 'Do as you would be done by'
- Banding should clearly follow from the comments
- Write your comments in language you would like others to use if they were reviewing your own work
- There is such a thing as constructive criticism!
- What advice could you give the applicant to improve the proposal? Suggest alternative approaches.
- If the application is not recommended for funding, should it be revised, or would you recommend serious re-thinking?
- Where possible, support criticisms with evidence
- Give praise where it's due.

2 – MRC BANDING, SELECTION CRITERIA AND ASSESSMENT FACTORS

GRANTS

2.1 Applying the banding system and assessment factors

MRC's banding system and standard assessment factors are defined below. Each funding scheme is intended to play a distinct role in supporting science, and has separate eligibility criteria to ensure a good fit with the role of the scheme, but the basic grading and research assessment remain similar across all grant schemes. This helps ensure that applications are assessed consistently and equitably and makes it easy for new reviewers to learn the system.

2.2 The banding system

MRC's banding scale is based on a single concept for simplicity - the national or international significance of the new knowledge likely to be gained, based on the assessment of the various aspects of the proposal. This concept has to be interpreted carefully:

- when a discipline or topic is very narrowly defined, or there are relatively few researchers in the field, a study may appear to be at the forefront. Reviewers should always take a broad view of the field to which the proposal will contribute, and should not be reluctant to question its significance relative to competing areas. MRC recognises that sometimes disciplines or medical specialities may go through periods when research is unproductive, and that special measures to strengthen the discipline may be needed. MRC's research Boards, Strategy Development Group and Council are responsible for deciding how to handle these areas.
- top quality research that addresses UK health problems should be given the highest bandings. Its international standing can be judged through comparison with research into comparable issues in other countries; consideration of the generic scientific knowledge likely to emerge; or consideration of the originality of the approach and methods.

MRC Scientific Merit Banding Criteria for Grants

ALPHA - A

Work which is at the forefront internationally, or nationally where there are no international comparators, and which is judged will have an important and substantial impact on understanding, practice or policy

ALPHA - B

Work which is at the forefront of the UK effort in the field, is internationally competitive in a significant proportion of the research proposed - where such comparisons can be made, and will make a significant contribution

ALPHA - C

Work which is nationally competitive and will make valuable contributions to addressing important scientific and/or policy questions

ALPHA - D

Work which is nationally competitive but which is at a lower priority in the competition for funds

DEFER

Work which is clearly worthy of support, but where clarification of SPECIFIC issue(s) is required before a banding can be confirmed subsequently either by Designated Board Members and Chair immediately or by the Board at a later meeting

DECLINE

(i) Work which is potentially worthy of support, but requires complete revision and resubmission for consideration without commitment (ii) Work which adds to understanding but is not competitive; (iii) work which is judged to be seriously flawed in design; (iv) work which is not suited to the form of support requested

³ The 'defer' band is only applicable to research proposals submitted to one of the four research Boards (HSP/HBS, MCMS, NMHD, PHIB), and to the Cross Board Group.

2.3 MRC assessment factors

2.3.1 The relative weighting of the assessment factors

It is best not to use a formulaic approach, as research proposals vary widely in, for example, the:

- importance and timeliness of the proposed study
- originality of the proposal
- 'leading-edge' nature of the scientific methods
- track record of the applicant - young investigators or those more established in the field
- expertise of the applicant in the particular proposal
- competition in the field
- costs
- suitability of the environment.

Good reviewing means respecting the nature of the study proposed, and giving greatest weight to the factors that are most relevant to the expected benefits from the work.

The validity and quality of the research approach and the likelihood that it can be carried through are always important factors. Research quality is often seen in terms of the originality or challenge inherent in the approach or the question: our experience is that the most novel studies often lead to the most important advances in basic scientific knowledge. However, reviewers should not place undue emphasis on conceptual novelty in those fields where data gathering is critical but not necessarily 'novel', e.g. applied research, health services research, trials, bioinformatics, sequencing.

A study using very ordinary approaches to fill a gap in our knowledge of an important biological system or disease process, or to compare treatments, should still be able to win the highest ratings, if this is justified by the significance and timeliness. This is most likely to arise in relation to new scientific or medical problems; with familiar but relatively intractable problems, only proposals that involve novel ideas or methods are likely to merit support.

Although issues such as the plans for the management arrangements and the ethical implications of the proposed work are not central to the quality of the science, reviewers should satisfy themselves that they are acceptable, and if not, should flag up why they consider them inappropriate.

2.4 The assessment factors

MRC's assessment factors are covered under the following headings:

2.4.1 Summary of assessment of the proposed research

Taking into account your views on the application as a whole, what is the overall quality of the proposal? Is a * Grant the most appropriate form of support in this case?

2.4.2 Significance of the topic

How significant is the proposal in terms of its potential impact? To what extent will it extend the base of knowledge relevant to improving human health? To what extent will it contribute, directly or indirectly, to relieving the burden of disease?

Is it important to pursue the topic now? For example: does the proposal capitalise on a new advance, offering the UK the possibility of an international lead; does it relate to a new or developing healthcare need; does it exploit a "window of opportunity", e.g. for the introduction of a new clinical development into practice?

Is the topic important for other reasons? Have the applicants adequately explained and justified these?

2.4.3 Details of proposal

Are the aims and objectives realistic within the timeframe and with the resources proposed?

How convincing and coherent is the overall approach proposed? How researchable is the programme by the approaches proposed? Are the methods proposed appropriate to the problems being addressed? Is the experimental design appropriate; in particular, is this the most effective and economical way of tackling the problem?

How original are the proposals? Do they address novel or innovative concepts, approaches or methods? Has the work already been done or is it being done elsewhere? How persuasive is the case that earlier work needs to be replicated or extended to another system?

How good is the prospect for significant scientific advance?

2.4.4 People

What is the recent track record and standing in the field of each of the named applicants? How appropriate is the expertise of the applicants to the proposed programme of research?

Is the commitment of each of the applicants (in terms of hours per week to be spent on the research) appropriate and sufficient?

Where MRC funding for the personal salaries of any of the applicants is being requested, is the explanation for this, and the duration requested, reasonable in each case?

Are the arrangements that the host institution proposes for taking over personal salary support in each case satisfactory?

Other issues you may wish to comment on if you have specific concerns

- Are the posts requested at an appropriate grade for the duties described?
- Are all the posts needed?

2.4.5 Environment

Is the environment appropriate for the research proposed?

Are the collaborators well chosen?

Has the host institution demonstrated a clear commitment to the research programme proposed?

Does the environment provide appropriate opportunities for the training and career development of personnel supported on the grant?

Other issues you may wish to comment on if you have specific concerns

- Is access to key equipment/facilities guaranteed?
- Is any new equipment requested fully justified?

2.4.6 Management

(Applicable to Co-operative Group Grants (COGGs), Co-operative Group Development Grants and Co-operative Group Component Grant applications)

Are the management arrangements proposed satisfactory - and if not, why not? Although not central to the quality of the science, you should satisfy yourself that the management arrangements are acceptable.

2.4.7 Value for money

Does the proposal represent good value for money in respect of the resources being requested from the MRC? Are the resources requested fully justified in terms of the science proposed? (If not, indicate any pruning of staff, running expenses, equipment or any other requests you consider to be appropriate).

Will the expected benefits of the research, if supported by a * Grant, justify its cost to:

- the MRC?
- the public purse, i.e. taking account of any additional costs of undertaking the research (e.g. to the NHS)?

2.4.8 Ethical and other implications

Is the work ethically acceptable?

Where applicable, is the involvement of human participants and/or the use of human tissue/biological samples appropriate? Do the expected benefits of the research outweigh any potential risks to the participants? Is the number of human participants or the nature and quantity of the human biological material appropriate for the research? Does the proposed research raise particular ethical issues and if so, what are they?

Where applicable, can the proposed use of animals, the species selected and the level of suffering involved, be justified in terms of the likely outcomes of the research? If the use of primates, cats, dogs or equidae is proposed, could the research provide equally valuable results if other animal approaches were used? Is there potential for improvement in the research approach that could replace the use of animals, reduce the number of animals used (to the minimum needed for the research) and/or reduce suffering? Are there components of the research approach that would allow the investigator(s) to derive significantly greater scientific benefit from the use of animals? Would any of the studies not be considered acceptable in your laboratory - and if not, why not?

Is the work likely to have other implications which could put the Council, participants in the research or the applicants at risk (bearing in mind that medical research has inherent risks) which are such that the Council should take these specifically into account in deciding whether or not to fund the proposed research?

Although not central to the quality of the science, you should satisfy yourself that the ethical implications are acceptable - and if not, why not?

Other issues you may wish to comment on if you have specific concerns

- Where appropriate, has ethical approval been requested (e.g. for clinical trials)?

2.4.9 Renewal (where relevant)

Have the aims and objectives (original or revised) of the research been met? How productive has the research supported under the current grant been, bearing in mind the scale of support provided? What has been (or is likely to be) the benefit of the research carried out to date?

Taking into account your comments on the application as a whole, should the grant be renewed?

Other issues you may wish to comment on if you have specific concerns

- Is the work proposed for the next period more of the same, or does it constitute an incremental step forward?

2.4.10 Additional topics you may wish to comment on

Public Engagement in Science

Commercial exploitation

Dissemination of research results

FELLOWSHIPS

2.5. Assessment and selection

2.5.1 The assessment factors

The key questions which both referees and members of the interviewing panels are asked to address are:

- the standing and potential of the individual
- the suitability/scientific merit of the research project
- the excellence of the centre where the work will be based

The MRC's Fellowship awards provide opportunities for initial research training, acquisition of further research skills and development and consolidation of a research career; the detailed questions that referees and panel members are asked to address therefore vary depending on the career stage the applicant has reached. As well as providing a written assessment, referees are asked to summarise their critique with a score using the following categories:

Score	
6	outstanding
5	above the standard sufficient for award
4	certainly of a standard sufficient for award
3	possibly worthy of consideration for award
2	fair, but below the standard for award
1	well below the standard for award

In addition to the assessment factors above, the interviewing panel will be asked to consider the following:

- where applications are of equal scientific merit, whether strategic weighting should be given to an application which is in an area identified by the Council as in need of special strengthening of the research workforce
- where the applicant proposes to work with animals, whether the use, number and species of animals is justified
- whether any specific ethical issues are raised by the research

2.5.3 Selecting referees

An application to one of the MRC schemes for pre and early post doctoral research training fellowships (Clinical Training Fellowships and Research Fellowships) is assessed by one of several expert Research Training Referee (RTR) teams, drawn from the MAB. These teams, usually comprising about four members, typically cover broad areas of the Council's remit, as follows:

- molecular and cellular medicine (clinical and non-clinical)
- neurosciences and mental health (clinical and non-clinical)
- physiological medicine and infections (clinical and non-clinical)
- health services and public health research

All applications in a particular scientific area are sent to each member of the appropriate expert RTR team, unless there are conflicts of interest. This means that members of the team are able to gauge the range of applicants, and make an assessment of each candidate in the light of the overall standard of applicant for a particular competition. RTRs are asked to focus on the potential of candidates based on their career to date, the quality of training the host centre is likely to provide, and the suitability of the project as a basis for training. The contribution to research costs is fixed for the junior schemes, so consideration of resources is minimal.

Postdoctoral Fellowships (Career Development and Clinician Scientist Fellowships) and Senior Fellowships are assessed by external specialist referees, one of whom will, where possible, be selected from scientists nominated by the candidate. Here referees will be able to look at the more extensive track record of such candidates, the merit of the project as an original piece of scientific work, and the appropriateness of the level of resources requested. In addition, referees will look at the training element in intermediate awards.

2.5.4 Shortlisting

The Chair of the appropriate interviewing panel, assisted by the Office, will decide, on the basis of the scores and comments of the referees, which candidates should be invited for interview. Where possible, roughly twice as many candidates are interviewed as there are fellowships available for award. Great care is taken over this selection: the detailed comments of referees are particularly important.

2.5.5 Interviewing

The questioning of each shortlisted candidate is led by a designated member of the interviewing Training and Career Development Panel (TCDP) whose expertise most closely matches the candidate's background or proposed area of scientific work. The aim of the questioning is to collect evidence against key assessment factors. Other Panel members are given an opportunity to ask questions or to pick up on points that have emerged. Following interview, the individual members of the Panel first privately score the application before discussing the application and deciding on final scores.

MRC is an equal opportunities employer and considerable emphasis is laid on avoiding unintended bias on the basis of gender, ethnicity, personality, appearance etc., and basing the score solely on the available evidence. Guidance from the Equal Opportunities Commission follows.

Once the last candidate has been interviewed, individual scores are collated to prepare a rank order of mean scores, which the Panel will review. Only candidates who are assessed as meeting the appropriate standard, as outlined in the scoring system, will be recommended for an award. If the number of

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fundable candidates exceeds the number of awards available, careful consideration will be given to candidates ranked either side of the funding line taking into account any strategic considerations that might apply in assessing the candidate. The TCDP then agrees a final rank order and takes decisions on which candidates to fund.

Extracts from *Fair and Efficient Selection an Equal Opportunities Commission publication*

The Interview

Research has shown that the interview is a very fallible forecaster of future performance. An interviewer who seeks precision and who relies on facts rather than hunches will be less likely to fall into unconscious racial or sexual bias, or other forms of discrimination.

Some important general points about the interview are:

- Impressions of personality based on the behaviour during the interview are very unreliable. Assessments should be based on past performance, behaviour, selected roles, etc. as far as factual evidence can be obtained.
- The likes and dislikes of an interviewer will not necessarily be shared by others. They are, therefore, in most situations, of little importance.
- Vague general conclusions such as "I felt he/she would fit in well" are mostly useless hunches. The interviewer should seek evidence as to how the interviewee has "fitted in" in the past.

The Final Selection

The Panel should realise that:

- Overall judgements based on general impressions are inadequate. They are likely to be more influenced by prejudices, conscious or unconscious than are analytical judgements based on facts.
- The selection process is essentially one of matching the various previously decided job requirements against the assessed relevant characteristics of the individual.
- The matching should be done systematically, taking each essential/desirable characteristic in turn and bringing together the information collected during the assessment procedure on each one.
- When this has been done for each characteristic, the "profile" of the requirements can be matched against the "profile" of the individual.
- Requirements and individual characteristics will never match exactly. The individual will exceed the required standard in some respects and fall short in others. The final decisions on the candidate will depend on assessing the balance of pros and cons.

Q: Should I review this? Do I have a conflict of interest with this application/applicant(s)?

A: You should declare any private, professional, political, commercial, or other interests that might be perceived to conflict with MRC interests. If in doubt about what to declare please discuss the situation with the relevant programme manager at MRC Head Office. MRC requires all its Council, Board and Committee members and external reviewers to make such a declaration whenever they review an application. The Council then takes a decision on whether or not the reviewers' interests are such that their assessment should be precluded from the peer review of the application.

MRC's 'Good Research Practice' Guidelines⁴ state: 'A conflict arises when a person's judgement concerning a primary interest, such as scientific knowledge, could be unduly influenced by a secondary interest, such as financial gain or personal advancement. There is nothing inherently unethical in finding oneself in a position of conflict of interest, what is required is to recognise the fact and deal with it accordingly.'

Having an interest in the outcome of an application does not necessarily constitute an **actual conflict of interest**. The ultimate test should be whether a reasonable person when faced with the facts would consider that a conflict of interest was sufficiently significant that the objectivity of the reviewer (or in the case of a Board member, of other members influenced by their presence) might be called into doubt. You should automatically ask yourself "Would I feel comfortable if others learnt about my secondary interest in this matter or perceived that I had one?" If the answer is no, you should declare the interest.

Conflicts of interest may arise from:

- having a personal relationship with, or being a close relative of, an applicant
- a close professional collaboration with an applicant. Many researchers collaborate very widely, such that peer review would be impossible if all past and current collaborators were excluded. We expect that reviewers will exercise their judgement here: smaller collaborations, and those in the past that are unrelated to the current assessment, might not constitute a conflict of interest. However, all significant collaborations should nonetheless be declared
- membership of the same University Department or research institute
- having been consulted by the applicants on a particular aspect of the design of the study e.g. a specialised area of expertise

⁴ 'Good Research Practice' Guidelines, MRC Ethics Series, 2000
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- being a named collaborator on the study e.g. being responsible for running a trial at the local level
- a commercial or financial interest in an organisation or issue under consideration

MRC often asks for advice from those who are likely to be beneficiaries of a particular research facility or project. Where this is clearly the reviewer's role, there is no **conflict** of interest, but the interest should be declared as a matter of course.

You should also ask yourself whether **you could be seen as having a clear negative interest** in the application. Examples include:

- competing directly with the applicants' group
- being in a position to gain advantage from knowledge of the applicants' ideas or by 'scoring down' a proposal to give yourself a competitive edge

In this area, you should exercise greater caution when reviewing funding applications than when refereeing publications, as the potential for harm is even greater.

Of course, the Office will always try to avoid approaching people if there is obvious potential for a conflict of interest. However, a researcher's interests are not always self evident, and MRC relies on the honesty of the reviewer, and on fellow reviewers, to ensure that all potential problems are spotted early.

Q: In what circumstances would the MRC allow me to review an application even though I declare a conflict of interest?

A: Sometimes, MRC will ask reviewers to assess proposals in spite of their declared interest. This depends on the nature of the interest declared, and is decided on a case-by-case basis. Often this is done if there are no other people expert enough to assess the work, even if they are potential competitors in the field. The Board/Panel reviewing the application will consider your review in the light of your declared interest. But if you are a member (or Chair) of a Board/Panel, under certain circumstances you may be asked to withdraw from discussion of an application; MRC's basic principles are as follows:

- Members (or the Chair) should withdraw from discussion of an application where:
 - ◆ a proposal comes from the same academic department/division or MRC research establishment
 - ◆ they have a significant interest ie as a co-applicant or close collaborator

- Board members may wish to withdraw where the discussion involves a close colleague.

- However, a member need not withdraw simply because the application comes from the same institution. There would nevertheless be a clear potential conflict of interest that the member should still draw to the Board's attention, and on which the Chair should adjudicate

- At ranking, a member should withdraw if they are an applicant or co-applicant on a proposal being ranked. (Such applications can be discussed together at the end of the ranking process.) A member with any other potential conflict of interest regarding an item (e.g. because they come from the same institution) should not contribute to the ranking discussion on that item, but they need not withdraw

MRC permits applicants to identify reviewers who, in their view, should not be involved in reviewing their work. However, the final decision rests with MRC.

MRC also permits applicants to nominate possible reviewers. The fact that you have been nominated by the applicants does not remove the need to ask whether you can properly review the application, and does not change the principles you should apply

Q: Can I meet the deadline for review?

A: MRC aims to complete peer review of grant applications within 6 months, no matter when we receive them. This time has to encompass uploading the application onto our database, initial checks on the application and discussions with the applicant, choosing reviewers, reviewers' response time and, later, circulation to Board, Panel or Cross-Board. Group members well in advance of their meeting, and then feedback to the applicants.

About half of this time is set aside for review by members of the MAB or referees. Members of MAB and external referees are normally asked to complete their review of a proposal within three weeks. Working within these deadlines is an important part of reviewers' responsibilities; MRC's ability to respond promptly to applicants depends on it.

MRC gives grant scheme reviewers advance notice of applications in order to make planning of work easier for reviewers; an email is automatically sent by the Council's EAA system as soon as a reviewer is selected.

MAB members should, where feasible, notify the Office of major absences in advance, and must always make arrangements for the Office to be contacted if proposals arrive while they are absent.

If at any time a proposal is received which you will not be able to attend to before the deadline, please inform the Office immediately, so that another reviewer can be asked to help.

Q: Are specialist referees needed?

A: MAB members should inform the relevant programme manager immediately upon receipt of a proposal if they consider that specialist referees are needed; it may be too late to accommodate this requirement if the request is left until the reviewer actually evaluates the application.

3.2 The Review

Q: Should MRC be considering this proposal?

A: There are a number of issues to consider in establishing whether an application is appropriate for consideration by the MRC. For example:

Q: Is the work already being funded?

A: Applicants are asked to declare other relevant support or applications. Reviewers who suspect that the work is already being carried out – 1) by the applicants or 2) by another group – should, in the case of 1), contact the relevant programme manager, and in the case of 2), state in the review that the work is repetitive or lacking in novelty.

Q: Is the applicant/institution eligible?

A: The Office should already have checked this, but if you have any queries or doubts please contact the relevant programme manager.

Q: How do I know if others interpret the rating scale in the same way that I do?

A: Banding research proposals calls for a good degree of subjective judgement, and each person will interpret the scale in slightly different ways. Also, some reviewers concentrate more on the strengths of a proposal, while others may concentrate on the weaknesses.

MAB members are asked to make an individual judgement on a proposal and assign an individual banding; they may, if they wish, exchange views with the other experts reviewing the application if this helps them reach a judgement. **The lead MAB member must always consult the other triad members on the consensus assessment and banding.**

In view of the fact that MAB members/referees are often chosen for specific expertise, disparity in the bands given by individual reviewers does not necessarily mean that wrong assessments have been made, e.g. the clinical aspects of an application might be banded Alpha - B by referee A, whereas the molecular genetics aspects of the same application might be banded Alpha - A by referee B. This underlines the importance of reviewers specifying in the review the focus of their expertise.

Reviewers should always write the reasons for their rating into their assessment. This allows MRC's Cross Board Group (XBG), Research Boards, and Awards Advisory Group (AAG) to check that similar proposals and assessments lead to similar bandings across the full range of MRC's work. MRC will give feedback to MAB members if there are serious inconsistencies.

3.3 Feedback

Q: Will I get feedback on the outcome of the application and if so, how?

A: You will be informed of the Council's funding decisions. The long-term aim is for individual decisions to be posted on the EAA. Details of all awards made by Council are available on the MRC web site (<http://www.mrc.ac.uk>) following each award point.

4.1 Why the MAB was created

The MAB was established in 1997 as a key element of the peer review process for certain of MRC's new funding schemes. In setting up the MAB we were conscious of the need to reduce the demands on reviewers as much as possible, whilst still maintaining rigorous review procedures.

4.2 The structure

The MAB currently comprises about 500 members drawn from the scientific community in the UK. Members' expertise covers the range of our scientific portfolio. The MAB has equivalent status to that of the other four MRC Research Boards. It does not meet as a body to assess research proposals, but members meet annually at workshops to discuss matters of common interest and concern.

4.3 The role

- **SCIENTIFIC ASSESSMENT** – acting as a core body of scientific advisors, assessing applications to the MRC for support (in consultation with external referees from the UK and overseas, when required) in order to formulate a scientific judgement on proposals
- **REVIEW** – acting as a pool of experts for MRC establishment reviews, topic reviews, etc
- **DECISION-MAKING** – individual MAB members also act as members of the Career Establishment Grant Panel to take decisions on the award of applications submitted under this scheme.
- **STRATEGY DEVELOPMENT** – contributing to the development of MRC scientific strategy

4.4 Assessing an application for a Co-operative Group Component Grant or Co-operative Group Development Grant

4.4.1 The Purpose

Co-operative Group Grants aim to bring researchers together to add value to a collection of individual research projects and improve productivity. MRC funding for individual projects is provided through **Co-operative Group Component Grants**.

MAB members and external referees will only occasionally be asked to review a proposal for Co-operative Group Grant (COGG) support, because they usually contain no new scientific proposals. The Cross-Board Group (XBG) will assess the COGG application, focussing on the case for the Co-operative Group as a whole.

Co-operative Group Development Grants aim to help researchers in universities reach the point where they can make competitive applications for funding under the Co-operative Group Grant scheme.

4.4.2 The MAB 'triad'

We normally assign a 'triad' of MAB reviewers to each Component Grant or Development Grant application, and nominate one to be a 'lead' MAB member. However, the group assigned to assess the application does not always consist of three MAB members, sometimes two or four are asked, depending on the expertise required to review the proposal. The 'triad' does not meet, but the members communicate with each other by email/telephone.

4.4.3 Applying the assessment factors

As an individual member of a triad, you will be asked to assess the scientific merits of the proposal by addressing all the assessment factors (discussed in Chapter 2). You may, if you wish, 'discuss' the proposal with the other members of the triad (by whatever means, electronic, telephone, etc).

Normally, the combined expertise of the triad should be sufficient for the group to assess the scientific content of the proposal. In some circumstances, however, it may be necessary for external referees to be consulted. In this case, we may have already suggested the name of, or written to, a referee(s) and we will inform you of this. If not, and you consider that the opinion of an external referee is needed for the triad to be able to make a fully informed assessment, you should let us know as soon as possible to avoid a delay in the peer review process. You may nominate a referee yourself or we will do so on your behalf. External referees might need to be consulted if:

- the MAB member(s) with the most appropriate expertise has(ve) a conflict of interest
- the application is in a research area where there is insufficient representation on the MAB
- there is a high degree of novelty associated with aspects of the application

The MRC XBG considers how the Components in a COGG fit together scientifically to add value to individual grants.

4.4.4 Applying the banding criteria

Each member of the triad is asked to band the Co-operative Group Component Grant application individually. MAB members are not asked to band Co-operative Group Development Grants, either individually or as a consensus; the XBG is asked to agree a banding for Co-operative Group Development Grants. As discussed in Chapter 2, it is possible that individual MAB members will band the same application differently. This does not necessarily mean that one of the bands must be 'wrong'. If a research proposal elicits substantially different assessments from reviewers in the same triad, it is important to analyse the reasons and try to reach a consensus as to whether the proposal is of high or low quality. Members may have been banding different aspects of the same application, e.g. different strands of a multi-stranded proposal. Alternatively, individual MAB members may be contributing different viewpoints, e.g. one, the importance of the question, the other, the strength of the methodology; or the specialist or generalist viewpoint (see p.8).

4.4.5 Reaching a consensus

Once you have reviewed and banded the proposal, you should 'send' your assessment and banding (usually via the MRC's Electronic Application and Assessment system (EAA)), to the lead MAB member. **The triad should then agree a consensus banding; the lead MAB member must always consult the other triad members on the consensus assessment and banding.** It is the role of the lead MAB member to take the initiative in the process of developing consensus. It is essential that the consensus assessment is achieved through a process of 'discussion' between members of the triad. The EAA provides a forum for these discussions through a 'chat room', (whereby MAB members reviewing the same application can exchange views by e-mail). This should help you review proposals in the future, because the system allows you to look back at past discussions that you had with other MAB members and at reviews of proposals you assessed previously. Reviewers should pause for thought if there is an apparent consensus on a controversial question, in case opinion is sharply polarised and only one view has been obtained. (Again, this stage in the process does not apply to Development Grants).

If you are the lead MAB member, you should then 'send' a composite, or consensus assessment to us, explaining any differences of opinion between the MAB members. **The lead MAB member must always inform other members of the triad of the final assessment submitted to MRC.**

4.4.6 How the funding decision is made: the roles of the Cross-Board Group, Awards Advisory Group and Council

The Cross-Board Group (XBG) will not normally re-visit the MAB assessment of the scientific merit of Component Grant applications, and the normal expectation is that the consensus banding recommended by the MAB will be confirmed. The XBG will, however, assess whether or not a proposal for a new ('add-on') Component fits the scientific remit of an existing Co-operative Group.

The XBG's role is to assess the case for the Co-operative Group as a whole. The XBG makes its assessment on the basis of two issues; firstly, and most importantly, the scientific merit of the Co-operative Group 'package' and secondly, whether the 'added value' of the grouping is high, medium or low. In order to assess the added-value the XBG must decide to what extent the proposed grouping will establish or bring together a critical mass in ways which add value to individual projects and improve the productivity of the research. The following examples of added-value are neither prescriptive nor exclusive:

- More focussed strategic planning of research priorities and/or individual projects
- Intellectual interaction i.e. cross fertilisation of ideas, insights and skills
- Collaboration on joint projects

- People i.e. the existence of a COGG may influence host institution/departmental recruitment activities and may have the effect of attracting key researchers to the group
- Sharing of resources, especially through organisation and management of shared technical facilities and/or services
- Enhancing training and career development opportunities
- Partnerships with the host institution

It is also the XBG's role to assess the scientific merit and agree a banding for **Co-operative Group Development Grant** applications, taking into account the individual opinions of the triad of MAB members asked to review the application.

The XBG agrees a rank order list of COGG and Development Grant applications, determined on the basis of their overall quality. This list is considered by the MRC Awards Advisory Group (AAG) alongside funding recommendations made by the MRC's four subject-based Research Boards and assessment panels for other MRC funding schemes. AAG agrees a consolidated rank order list, applying weightings for strategic factors and makes final recommendations on funding to Council. Council then takes the decisions on funding at its next award point.

4.4.7 Feedback

You will be informed of the Council's funding decisions. The long-term aim is for **individual** decisions to be posted on the EAA. Details of all awards made by Council can be found on the MRC web site (<http://www.mrc.ac.uk>) following each award point.