Summary of Public Consultation Outcomes

The Research Fellowships Scheme

Population of Respondents

252 people responded to the Research Fellowship questionnaire; however some respondents did not answer all of the questions. Population statistics worth noting include:

- 44.1% of respondents were current NHMRC Research Fellows; and
- 34.1% of respondents did not hold a NHMRC or any other type of People Support Award. Of these, 60% were greater than nine years post-doc with 34% of this group indicating having previously applied for a NHMRC Research Fellowship.

Issue 1

Providing Initial Applicants or Renewals with Distinct Advantage

Question 9 – Should all Initial and Renewal applications continue to be ranked together?
27% of respondents (64 out of the 238 that responded to this question), thought that Initial Applications and Renewals should be ranked together.

Question 10 – Should the current policy on recommendations for funding be changed?
86% of respondents (198 out of 230 that responded to this question), believed that the current policy on recommendations for funding should be changed.

Question 10a – If Yes: Should recommendations for funding for Renewing Fellows be supported based on category rather than ranking within the category, increasing the likelihood of all those in the "Excellent" category being funded (thereby reducing the number of successful Initial Applicants)?
77% of respondents (164 out of 213 that responded to this question), believed that recommendations for funding for Renewing Fellows be supported based on category rather than ranking within category.

Question 10b – Should recommendations for funding for Initial Applicants continue to be based on order of overall rank?
81% of respondents (173 out of 213 that responded to this question), thought that recommendations for funding should continue to be based on order of overall rank.

Question 10c – Should Renewals who achieve the category of "Very Good" or below NOT be recommended for funding?
67% of respondents (142 out of 212 that responded to this question), believed that Renewals who achieve the category of "very good" or below should NOT be recommended for funding.

Question 11 – Should successful Renewals be awarded a 10 year Fellowship (eg Model 2), with open competition for Renewal every 10 years and a performance review every 5 years?
57% of respondents (134 out of 235 that responded to this question), believed that successful renewals should be awarded a 10 year Fellowship, with open competition for Renewal every 10 years and a performance review every 5 years.

Question 11a – If No: Should all Renewals be assessed in open competition every 5 years (as is the current policy, see the Policy document, page 8, clause 21b)?
46% of respondents (57 out of 124 that responded to this question), believed that Renewals should be assessed in open competition as is the current policy.

Question 13 – Should the NHMRC consider quarantining a specific number of positions each year exclusively for Initial Applications?
80% of respondents (192 out of 240 that responded to this question), believed that the NHMRC should consider quarantining a specific number of positions each year exclusively for Initial Applications.

Question 13a – If Yes: Should the quarantine be limited to only those applying for the SRF levels?
63% of respondents (127 out of 202 that responded to this question), believed the quarantining of positions should only apply to those applying for SRF level fellowships.

Question 12 – Do you have any additional comments or alternative models on the concept of providing the Scheme with a nurturing career structure?
Click here to view the Raw Comments to this open question.

Question 14 – Do you have additional comments on how to maintain a Scheme that attracts and encourages younger talented scientists?
Click here to view the Raw Comments to this open question.

Outcome

After considerable discussion of the issues surrounding NHMRC Fellowship career structure the Research Committee decided NOT to support a proposal to provide a 'Distinct Advantage' to renewing fellows. The proposal was that renewal applications be recommended for re-appointment if applicants achieved a ranking of excellent or better in their first five year cycle alternating with an 'open competition' round in the second five year cycle.

Research Committee was concerned at the potentially distorting effects of 'Distinct Advantage' for any sub-group of Research Fellowship applicants because 'Distinct Advantage' for one group necessarily implies 'Distinct Disadvantage' for another. Research Committee felt that the current provision of a sixth year of funding (unique to the Fellowship Scheme) provided an opportunity for unsuccessful renewals to re-apply for a Fellowship without loss of funding continuity. Indeed half the unsuccessful renewals, seven out of eleven that applied, from the 2003 application round were successful in the 2004 application round.

The distorting effects of the proposal were seen as the following:

(1) By proposing an absolute bar for renewal it will be impossible to guarantee appropriate access to new applicants. If all renewing applicants are judged excellent or better then they will be renewed despite the fact that some may have been 'out-ranked' by new applicants also in the excellent category. Without significant growth of the Fellowship Scheme this will make entry even more difficult for new applicants and, without knowing whether or not renewals have achieved the excellent ranking in advance, it will be impossible to quarantine positions for new applicants within a fixed budget.
(2) Even renewal applications will be disadvantaged relative to other renewals. Renewals in their 'open competition round' may outrank other renewals in their 'Distinct Advantage' round but if the latter are ranked excellent or above they will be renewed in preference to the former.
(3) Another distorting effect would arise in dealing with 'renewals with promotion'. If they were to be awarded in the 'Distinct Advantage' cycle by achieving an excellent category rather than ranking then timing of application for promotion could become critical. If it were by ranking then a "Distinct Advantage' cycle would become 'open competition' thus disadvantaging renewal applicants seeking promotion compared to ordinary renewal applicants who are also in their 'Distinct Advantage' cycle.

Issue 2

Impact of Open Competition

Question 5 – Do you consider that there is a problem with the career structure of the current RF Scheme?
91% of respondents (219 out of the 241 that responded to this question), thought there was a problem with the career structure of the current Research Fellowships Scheme.

Question 5a & 5b – If Yes: Are there major problems for:
a) Initial appointments?
b) Existing Fellows?
71% of respondents (179 out of 252 that responded to this question), agreed that there are major problems with the career structure for Initial Appointments compared to 78% (197) that thought there are major problems for Existing Fellows.

36% of respondents (91) to questions 5a and 5b were NHMRC Research Fellows. 73% of this group (66) believed there were problems for Initial Applicants, 96% of the group (87) believed there were major problems for Existing Fellows.

Question 6 – Is the "open competition" policy being applied too rigidly (by being used for all levels of RF appointment, and making no distinction between initial and continuing appointments)?
82% of respondents (196 out of 239 that responded to this question), thought that the open competition policy was being applied too rigidly.

Question 7 – Should the words "open competition" be removed altogether from the Policy document and changed to "maintaining a high standard of research excellence"?
83% of respondents (195 out of 235 that responded to this question), believed that the words "open competition" should be removed and replaced with "maintaining a high standard of research excellence".

Question 8 – Do you have any additional comments on mechanisms that could be adopted to address the conflict between "open competition" and maintaining a "career structure" within the Scheme?
Click here to view the Raw Comments to this open question.

Outcome

In support of the decision regarding Issue 1, the concept of "open competition" is to remain; therefore the term "open competition" has not been replaced in the Research Fellowships policy document.

Issue 3

Entry Level of Initial Appointment

Question 15 – Should an application be rejected based on an inappropriate selection of entry level by the applicant?
23% of respondents (54 out of the 236 that responded to this question), agreed that an application should be rejected based on an inappropriate selection of entry level by the applicant.

Question 16 – Should the PRAP and the RFC have discretionary power to consider an Initial Applicant at a level that differs from that initially requested by the Applicant?
95% of respondents (225 out of 237 that responded to this question), agreed that the PRAP and the Research Fellowships Committee should have discretionary power to consider an Initial Applicant at a level that differs from that initially requested by the Applicant.

Question 17 – Do you have any additional comments relating to the entry level of appointment requested by Initial Applicants?
Click here to view the Raw Comments to this open question.

Outcome

Research Committee Members considered if applications, where an inappropriate entry level has been selected, should be rejected and whether the Research Fellowships Committee (RFC) should be able to change the level of the application at the initial review meeting or following interview. Whilst supporting this concept, Members requested the Office of the NHMRC obtain legal advice about this proposal. Until the Legal Services Branch of the Department of Health and Ageing has provided this advice, the policy will not give the RFC power to consider an initial applicant at a level that differs from that originally requested by the applicant.

Issue 4

Balance Between the Objectives of Providing a Career Structure for Existing Fellows and Ensuring Equity for Initial Applicants

Question 18 – If not financially possible to have BOTH protection of career structure for Renewals AND quarantining of Initial Applicants, which do you consider more important?
71% of respondents (152 out of 214 that responded to this question), believed that supporting career structure was more important than quarantining initial applicants. 55% of respondents who do not hold a People Support Award (48) supported career structure over quarantining. 89% of the Research Fellows who responded to this question (84) answered that the support of career structure was more important than quarantining.

When asked to provide a ratio of Career Structure:Initial Applicants, 37 respondents said they should be equal. As well as 50:50, 12 other combinations of ratios were suggested.

Question 19 – To what extent do you value the ratio between them?
Click here to view the Raw Comments to this open question.

Outcome

In support of the decision regarding Issue 1, there will be no quarantining of Fellowship positions for either initial applicants or renewals.

Issue 5

Exit Strategies

Question 20 – Do you have any suggestions regarding "exit strategies" from the upper levels (PRF and SPRF) of the Research Fellowship Scheme?
Click here to view the Raw Comments to this open question.

Outcome

The Research Committee is aware that there remain significant issues regarding "exit strategies" from the Research Fellowship Scheme and recognises the importance of new developments in this area. The Wills Report pyramid concept was based on the expectation that external opportunities exist for Research Fellows to exit the Scheme. In an endeavour to identify solutions to the lack of suitable exit strategies within the Scheme, the Research Fellowships Committee and the Research Committee reviewed all the submissions and discussed the following:

- Part-time Fellowships: Research Fellowships Committee did not support this option. There was mixed support by Research Committee Members to this option; and
- Co-funding: Research Fellowships Committee supported exploration of this option. There was mixed support by Research Committee Members to this option.

The Research Fellowships Committee are aware of the need to provide an avenue for Fellows to exit the Scheme to pursue more prestigious research appointments. The Committee will continue to discuss and explore potential opportunities for Fellows to productively leave the Scheme and welcome any further contribution from the research community.

Summary of Raw Comments

Providing Initial Applicants or Renewals with Distinct Advantage

Two open-ended questions were asked relating to providing distinct advantage.

Question 12: Do you have any additional comments or alternative models on the concept of providing the Scheme with a nurturing career structure?

Respondents: Hold a NHMRC Career Development Award

Individuals who have obtained a NHMRC career development award have already shown a commitment to a career under the auspices of the NHMRC. Yet there is no attempt by the NHMRC to selectively foster the careers of these individuals. Such individuals could be offered a selective advantage when applying for initial appointment to SRF.

We need some advantages for early career researchers too – not apparent from the models shown here, Although termed “early career”, these individuals have committed substantial time/effort to getting there.

Again, continuity is an issue when there are career interruptions. Having a longer time between assessments helps when there are career interruptions but its is difficult to rank someone who has been 3 days a week for 5 years with 2 6 month periods of maternity leave against someone who has been full time for 5 years. The career structure only seems nurturing if you do not deviate off it.

At present the system is anything but nurturing. The fellowships are seen as a very risky career move. They don't provide anyone's entire salary and so the unis are pressuring people to do more teaching because of the "gap" which needs to be funded. This means fellows are less likely to be refunded as they have to spend less time on research. Should be assessed in Model 1 changes every 5 years

Respondents: Hold a NHMRC Career Development Award and have applied for a NHMRC Research Fellowship

More positions should be available -i.e. more money form NHMRC/government. Far too many people are not being supported, and this is widely discouraging outstanding people at early stage career.

Provide many more initial fellowships where there is obviously a bottle neck!

All applications ranked at in the top 10% internationally should be funded ie. the amount of money going into the fellowship system needs to be increased.

The previous "gravy-train" fellowships scheme did have problems and therefore introduction and regular competitive reviews is excellent and will maintain high quality research. The dissociation of project grant funding from salary funding has been excellent. The problem now is that limited funding within the scheme appears to be preventing excellent senior scientists from maintaining their research groups as well as preventing young talented scientists from having any salary-stability.

The scheme is highly competitive but I would like to think that ALL applications ranked in the excellent category get funded. The current system makes Fellows feel like they are "disposable" items and some recognition of years of excellent to outstanding service needs to be considered. There needs to be some openings for new people trying to enter the scheme.

Initial applicants should compete amongst themselves only at SRF level.

I believe the 10 year Fellowship term to have many advantages over the current 5 year term.

Respondents: Do not hold a NHMRC People Support Award and have never applied for a Research or Practitioner Fellowship

The scheme has to commercialise the research outcomes effectively to be capable of supporting both a good nurturing career structure and also allowing for new entrants. Anything else would be either unsatisfactory to the fellowship holders or unsustainable economically.

It seems to me that the Australian political parties haven't woken up to the fact that we are also in global competition with the rest of the world in science as well as sport!

I don't understand nurturing career structure. I think someone has lost the plot here. Science is cutthroat whether you are in Australia or overseas. Overseas probably not so much as there is more research money in the US and Europe. But when was it that science was supposed to be nurturing? Not since I started as a Ph.D student. It's only got harder from there.

However, the real problem with the current RF scheme is basically dollars. Apparently, there isn't enough money to fund all the excellent and outstanding RFs. But that's not surprising given we are continually producing Ph.D students but don't have the places to soak them up. The knock on effect from this is that many leave science and those that are left are the cream. Therefore, leaving us with outstanding RFs 5-10 years post their Ph.D.

Therefore, there are two solutions:
1. More money into research
2. Stop producing so many Ph.Ds.

5years is often too short a period to accurately assess if a new appointment is going to maintain their productivity, but by 10years it is apparent. Therefore to give someone 5 years first followed by 10 years is combining the worst 2 features

Provide a system of support for researchers whose ideas conflict with the administration of the department in which they are working

Ideally, Fellows should be assessed for renewal every five years; if they are still rated as excellent or better, they should be renewed automatically; if not, they get one year and then have to reapply, as now. If this is not going to be acceptable, then model 2 is an improvement on the current situation.

The real problem is inadequate funding from the Government to provide these valuable schemes with the level of support they need. This has created a range of problems, many of which are NOT fixable without greater resources.

Fellows have a powerful lobby group that has recognition and a career structure (although imperfect). The NHMRC sidesteps the majority of people who have had their career funded by the grant system. That is, those people who are not fellows who have been funded by NHMRC for their entire career should BE ABLE to consider that they have a career. However this is not the case as;
1) most universities and research institutions only put people on for 12 months even though they are employed on a 3 –5 year program\project.
2) Even though the universities are the employers they do not give the same employment conditions to NHMRC employed staff.

Serious analysis/modelling needs to be done to determine what number of new applicants, and number of non-renewed fellows make the scheme sustainable. i.e. possibility of entry to the scheme without throwing away excellent current researchers.

Clearly non-competitive fellows cannot be renewed but those who are productive and achieving excellence need to have some reassurance of renewal

I think that successful renewals should continue to be given 5 year fellowships, with a 6th year if unsuccessful, but that they should be judged on whether they have been performing at the required standard (outstanding or excellent) over the period of their fellowship, rather than how they rate against everyone that happens to apply in the year in which they have to seek reappointment. This is not a 'career path' if you can miss out on being reappointed even though you are still ranked as an

'excellent' researcher because you happen to go up in a particularly competitive year (this has been shown up in recent years with the de-blocking of the Institutes). 5 yearly fellowships will keep fellows focussed, although a 10 year appointment would allow fellows time to get into new and potentially important areas of research that often encompass more risk and significant lead time and could be considered in particular specific cases. It could then be used as an option in cases warranting this level of confidence but not as the norm.

A nurturing career structure is certainly not one where you can lose your position because 'excellent' is not good enough. Important to remember that there are very few other research career options in this country.

The current system has not been operating long enough to tell how it is working.

Five years is more than sufficient to allow evaluation of performance, even in those areas where the research takes longer.

Introducing 10 year renewals is a recipe for disaster. This means that current fellows who have moderate performance could be locked in for ten years, which is totally against the carefully thought out reforms that were introduced from the Wills report. Remember that many applicants are rated in the higher categories, but this does not mean that they should be automatic selections for fellowships or renewals.

Respondents: Do not hold a NHMRC People Support Award and have applied for a Research Fellowship

While some bias towards renewals promotes career structure it is not quantitative. How is continued low performance distinguished from a lull in performance? Could a demotion reflect this?

Rating parity of new and renewal applicants is essential to maintain standards.

You are referred to the comments in Question 8, which outline the difficulties of the current "non-nurturing" career structure.

One way of maintaining the career structure without allowing complacency or maintaining funding to demonstrably non-productive researchers would be to establish a clear set of minimum criteria for reappointment after 5 years which are independent of competition. That is, regardless of competition, a researcher who does not meet these would not be re-appointed. If a researcher meets the criteria Model 1 should apply with the variation that anyone in the "very good" category would compete openly with new applicants.

Where-ever the dividing line is drawn there will be people who just miss out or just get in. It would be unfair and not in the best interests of supporting high quality research if a high quality new applicant's place was taken by a 'borderline' renewal

At the Sydney meeting there were a lot of people looking after themselves - pulling the ladder up.

These questions appear to have been designed by continuing fellows who want to cement their security - it smacks of conflict of interest. The suggestion of appointment for 10 years is ludicrous. A career structure in research has to be based on high performance. The challenge is to get more people to leave the scheme and make way for young researchers to enter. I think older fellows should retire at 65 and take their superannuation while they can, and free up places for young people. Fine if they continue research.

Respondents: Hold a NHMRC Research Fellowship

The Fellowships Scheme must be based on fostering research excellence. Fellows independently assessed to be in the top 10% on an international scale (ie. Excellent and above) therefore must be supported.

The current “open competition” system is flawed. I favour Model 2 over Model 1, although further refinement of Model 2 is required. For example, the 5th year “performance review” should comprise assessment of whether the Fellow meets the relevant Classification criteria and no ranking. Fellows ranked in the "Excellent" category and above after open competition in the tenth year should funded. Model 2 incorporating these suggestions would maintain excellence in the Scheme and provide longer-term career structure consistent with the original recommendations of the Wills Review.

One change that would help maintain a career structure that is nurturing rather than antagonistic would be to encourage promotion. Thus, applying for a promotion and not getting it would not lead to exit from the system. Also, there should be more levels within each category.

I believe that the only real solution is expansion of the scheme through allocation of new money. Abolition of the research fellow level was a mistake. Admission of new fellows who meet the criteria should be based on merit and be considered separately to existing fellows.

I think model 1 is a good alternative, except that renewals ranked as very good should not be disadvantaged compared to initial applicants ranked as very good. These could be ranked together, thus the renewal has no advantage nor disadvantage at that level.

The 10 year model seems the best compromise between allowing researchers competitive access to the scheme while providing career structure. The 10 years following reappointment are likely to be the most productive of the researcher's career, so it is appropriate that they should be allowed to complete this without the risk of open competition disrupting this mid-stream. Loss of the fellowship would also have major negative knock-on effects regarding the fellow's research team of more junior scientists.

I see this as a very important and also difficult issue. While maintaining the quality of the scheme and provide career structure is important it is crucial to make sure that the entry in to the scheme is seen as something achievable for young researchers. The 10-year fellowship is a good idea. There is an important question of the philosophy behind the scheme, whether it is seen as an endpoint in one's research career or a springboard to new bigger challenges. What if there is a limit imposed on the maximum number of years for somebody to be supported by research fellowship - 15, 20 years?

The major ongoing research productivity of the nation comes from researchers in the 'excellent' category (eg Peter Doherty at the time he made his Nobel prize winning findings) rather than from the lower numbers and more sporadic output of researchers in the 'outstanding' category. Therefore nurturing and providing stability to fellows in the excellent category is essential for the success of this scheme. Being judged frequently against 'all newcomers' changes the course of the ongoing work and will result in a completely destabilised, transient research work force. Progress and maintenance of fellowship funding for established fellows should surely come from a more individualised, expert assessment of their progress and output rather than pitting them in an impact factor numbers war for open competitive funding.

I support renewals every 5 years in a competitive manner but that a certain fraction of each category should be quarantined for renewals. The system should be biased to support those in a category and make entry and promotion dependent on outstanding performance. I think it is obvious that there are periods of high and low productivity and to be dumped because a particular line of research takes 3 years to come to fruition seems very harsh.

Some allowances should be made for existing fellows who used to have a sensational output and are dropping off in later years (but if they are approaching >65) those would be encouraged to leave the scheme to make room for initial appointments. Also scientists with a previously good but not sensational record, when dropping off in productivity, should not get special favours.

Feed money into the scheme and start realising that we are currently too critical of what standards deserve career support. You can spend as much time as you like juggling the criteria to split the funds. There has been nothing particularly unfair about the scheme over the past 5 years other than it does not have the funds to support people at entry that deserve it and people renewing that deserve promotion. Changing the criteria yet again is a bandaid solution to a major problem. Increasing the

length of support is positive step if it is provided from PRF upwards.

There should be no competition. The scheme should be funded so that all researchers judged to be very good or better are funded.

In order to have a career structure, people must be appointed until review determines that their productivity does not reach an appropriate standard. In order to have equity, entry to the scheme must be by open competition.

I am unaware of anyone within the peer reviewed, public funded medical research system who believes that the recent changes to the fellowship scheme had anything to do with preserving/creating a career path for research scientists.

Many view the changes as a significant component of a concerted strategy to focus resources around a relatively small number of established scientists of advancing years who were trying to preserve their research income at a time of diminishing productivity. The dismantling of a career structure has been widely seen as a mechanism to force younger scientists into posts within larger groups in which they will have little opportunity for expressing their own creativity.

Model 2 provides a good compromise. Initial appointment followed by performance leads to a 10 year appointment with a 5 year performance review (so fellows know where they rank).

However, I have a problem with reducing this to a bean counting exercise that assumes a degree of homogeneity and that all applicants will be successful in similar ways. RFs are highly individual people who often do things outside the square, that is usually why they are successful. The RORA is inflexible and does not recognise this.

Excellence must underpin the entire fellowships scheme. Incumbency shouldn't confer special privilege, however there must be a level playing field for all fellowship applicants.

The problem with "open competition" is that people and institutions compete for unfair advantage. There are examples of very senior people applying for entry level SRFs competing against "genuine" SRF people. The senior candidates already have a senior title and senior post at their host institution, and thus as a matter of course score highly on many of the RORA criteria which are a proxy for "seniority" (as opposed to research output). The senior candidates, if successful, then use the NHMRC SRF to pay a portion of their salary and are often topped up.

SOLUTION: applicants cannot apply for a NHMRC fellowship at a level LOWER than their current appointment. Thus A/Profs cannot apply for SRF-A or SRF-B, and must apply in open competition with PRF.

(This questionnaire lacks options for each question). The concept of a career structure should include some mentorship or advice as to how a Fellow is progressing, rather than the current system where advice on non-renewal arrives far too late (in practical terms) to do anything about. Most large organisations have performance review and career development advice at more regular intervals than every 5 years.

I think there needs to be balance between ensuring the capacity to bring new fellows into the scheme with the ability of fellows to actually have a career within the scheme, assuming they perform at an appropriate level. It seems untenable if Excellent fellows cannot be re-appointed. I also think the 10 year fellowship requires clarification to make everyone realise that appointments are still 5 yearly. In the case of Very Good existing fellows, there needs to be a degree of flexibility to take into consideration possible extenuating factors.

Please make the funding mix between programs, projects and people support more transparent.

I favour a version of model 1. By "binning" but not ranking renewals you create a model where all Excellent renewals are considered equal. Under this proposal, although in open competition, initial appointments do not replace incumbents as they cannot be considered as better than the existing Fellows and swapping Excellent for Excellent does not add to the scheme and therefore only serves to destroy the "career" nature of the scheme (which as pointed out remains a tenet of the Wills paper). If this is to go forward, RC must NOT rank renewals within categories, as this immediately undermines

any argument that all Excellent renewals are equal. The RF scheme is designed to support Excellence and no appointment (either renewal or initial) should be made to applicants who do not achieve a rating of Excellent. Under this model, I would also remove the potential for 7th year funding. Those renewals ranked only Very Good should consider themselves under notice and have the 6th year to find alternative funding if required. This should provide some funds savings that could go towards supporting additional New appointments.

I think most fellows would agree that it is harder now to get into the scheme and progress through it than it was 10 years ago.

Fellowships (initial and continuing) are to be awarded for a 10-year period, with performance review at the end of 5th year. See exit strategy for further detail.

Comparing individuals who apply for Initial appointments at the height of their research career (their choice) with those who have a history of strong research output over many years but may not be at a peak at the time of reappointment (scheme choice) is not fair or reasonable.

Without providing more detail of how the scheme functions at present, it is hard to assess the impact of the proposed models. It is not publicly known where in the "excellent" category the current cut-off for funding fellowship applications is. How many renewals and how many initial applications fall below this cut-off? With the proposed Model 1 changes, would ALL renewal applications rated as "excellent" now get funded or would some (a significant number) still miss out?

Under Model 2, it is not clear how the first renewal after 5 years as a fellow is to be done. Is the review after the initial 5 years of appointment done in open competition or simply by assessment as "excellent" against the set criteria? If the former, then this retains the element of "open competition" that is currently destroying the fellowship scheme a career scheme. In my view, Model 2 should explicitly be that the review after the initial 5 years as a fellow should be simply the requirement to score "excellent" against the criteria (ie: without ranking or open competition).

I do not agree with Model 2. It retains the practice of "open competition" which is incompatible with a true career scheme. A career scheme should require re-appointment to be based on "excellent" performance as its prime criterion.

My comments under Q8 above still apply. The scheme should be revised so that ALL renewal applications rated as "excellent" get funded. If this requires revising the definition of "excellent", this should also be done.

There should possibly be two pools of assessment. One to deal with reappointments and another with initial applicants. It is a little optimistic to expect the same criteria and ranking to be applicable to both pools. While I appreciate that funding at the end of the day is the defining reason why applicants will/will not miss out, neither pool of money should be compromised in terms of candidates that fulfil the grade but are not appointed/re-appointed because of funding shortfalls.

I think that if we go with the 10 year model, which has clear merits for the provision of a career structure for fellows, then there needs to be a mechanism for termination of under-performing fellows at the 5 year performance review.

Requiring fellows up for renewal (whether at 5 years or 10 years) to be performing at a level equivalent to those being considered for initial appointment (presumably this would be something like being in the excellent or outstanding categories) would provide additional career stability, and avoid the situation where a fellow might lose their fellowship but potentially still have ongoing grants that they can no longer carry out as they have no salary support for themselves.

Although, as a Fellow, I obviously want the scheme to support a career structure, I think it will eventually back fire if too much support is given to renewals vs new appointees, nor would it be fair. I think that Fellows NEED strict review every 5 years but I also think that there needs to be a little security so it is reasonable for all 'excellent' renewals to be funded before 'excellent' new appointments.

The interviews as currently structured are adversarial rather than constructive. A committee report

clearly outlining concerns to be addressed, and an opportunity for the applicant to respond in written form - using a two page rebuttal or similar - would be preferable. Alternatively, a review of the current committee culture would be necessary is the process was to be constructive and in any way 'nurturing'.

The scheme should not be forced to eject highly productive research scientists based on numbers applying in any given round. Either government sees that they are not supporting the talent that the country is generating or the scheme will fold based on stress and disillusion as to the prospects of a career in medical science. By changing the rulings as in point 11. this is only a temporary patch that will not resolve the problem. Review at 5 years for all fellows is a good system, but the scheme clearly needs further financial support to sustain viability.

Renewals should be every 5 years and based on excellent to outstanding performance, as it has been in the past.

The scheme has to have certain criteria that if met result in reappointment. At present a Fellow ranked excellent may be reappointed one year and not another. This is a lottery not a career scheme.

Applicants should be assessed by category. Appointments should then be made in sequence: Outstanding reappointment, outstanding new appointment, excellent reappointment ahead of excellent new appointments, etc.. On question 10a, suggest: transfer funds from other schemes so that all those rated 'excellent', renewal and new, are appointed. By the available criteria, Fellowships give exceptional value for money invested. The document does not address how different Fellowship levels are handled and the dilemma faced by Fellows seeking promotion: "I think I should aim for a higher level, but would I be competitive there? Better play safe." Some further thought and flexibility are needed.

I believe the model whereby renewals are awarded for 10 years with 5 year performance review provides more career stability whilst still maintaining a high level of excellence within the scheme.

Quality of the interview process could be improved considerably. Very little meaningful feedback is obtained. Too many cases of unprofessionally aggressive interviews. Sloppy procedures at times (although improved from the past) - eg an interview where two were absent due to COI and the person chairing was also a declared COI so was unable/unwilling to reign in an inappropriately aggressive spokesperson. Applicants should be aware of the declared COIs before attending the interview.

The Model 1 with separate ranking of initial and renewal and reappointment of excellent and above restores the career structure. The criteria for excellent will need to be spelt out very explicitly. The relative contribution to the different components such as research, contribution to discipline and field etc need to be determined.

If successful Renewals were awarded a 10 year Fellowship, they could be allowed an additional renewal attempt somewhere in the second 5 years after the performance review. The applicant could choose the timing of this application which would be assessed in open competition. If successful, the applicant's 10 years would start again. If unsuccessful they could try again at the end of their original 10 years.

The major problem with providing a nurturing career structure is that there is still simply too little funding in the NH&MRC as a whole. The Australian Government needs to look at elevating the level of funding to the OECD average. Currently it is too hard to get into the system – Phil Robinson said at the public consultation forum that there were 360 of Australia's "brightest and best" in training and career development awards chasing approximately 36 Fellowship positions. Those trying to enter the scheme are finding it too hard. From observing that those in the scheme have apparently a very rocky career structure many of the brightest and best are deciding to go elsewhere and this means in many cases leaving the country. In addition, the NH&MRC pay scales are dreadful. If the "brightest and best" had any sense, they would do almost anything other than pursue a career in medical research in Australia. The enterprise bargaining gap has to be addressed. The University of Western Australia sent out an email this week saying that the next round of enterprise bargaining has lead to an agreement that academic salaries will increase by 17-21% over the next 2.5 years. I have no idea how

I am going to pay the staff on my NH&MRC project grants when this occurs. We had a very useful NARF coordinated meeting in WA in which a WA Fellow on the Fellowship Committee explained in more detail the lack of success in renewals over the last few years. This was extremely helpful. Perhaps there needs to be a greater flow of information as to exactly why the numbers are as they are to help current Fellows and hopeful Fellows understand the system.

It would be useful if there was a formula that applicants could use to assess their likelihood of success in the Fellowship Scheme. Are the categories of Outstanding and Excellent quantitative or subjective. If quantitative, what are the ratings for publications (and are these divided by the number of authors, order in the author list, $ value of grants giving rise to the publications), number of students, contribution to the discipline, overseas invitations to meetings etc.

Hold your nerve - either competition is open or it is not. Rank everyone and then fund till the money runs out.

Also I was staggered that the Chair of RFC stated in Melbourne that his committee was going to RC recommend abolishing SEOs because their committee had difficulties implementing the scheme. Wouldn't a sensible committee try to overcome the problems rather than recommend ditching the scheme???? The NHMRC has precious few ways of supporting scientists who are also doing clinical and commercial work - keep SEOs and appraise it after it has run for 5 to 10 years, perhaps it is time to get a competent Chair of RFC.

There does need to be some advantage for continuing Fellows (provided of course they meet a certain high standard) or there is limited career structure in the fellowship scheme. Overall I am in favour of model 1, but 10 year appointments with a 5 year performance review does have its appeal and a combination of the two models certainly has merit.

A viable career path needs both an adequate chance of entry (see below) and a reasonable chance of entrants not ending up on the dole in mid career (there are no real career alternatives for casualties). Without both of these features it will fail. Excellence must be reappointed. There must also be provision for excellent or outstanding young scientists to enter the scheme (although not necessarily for all of them every year). If these two imperatives mean that the scheme has to grow, so be it! It is a wonderful investment. As with an economy, planned growth is the best option.

I feel that 10-year fellowships are not appropriate. The 5-year review is unlikely to be rigorous enough to filter out those that are not maintaining a high standard - if it were, then it will be no different to the current 5-year cycle! I argue that fellows need to be reviewed rigorously on a 5-yearly basis.

The Australian NHMRC Research Fellowship Scheme has to be one of the most competitive in the world. In reality this is the only scheme providing suitable career support to senior medical researchers in this country.

1. It is recognised that in many cases highly respected, senior scientists who have made significant contributions in their fields remain on the lower rungs of the Fellowship Scheme as they are too terrified to risk their positions if they apply for promotion.
2. This does not provide a nurturing environment for the development of scientific careers and is unlikely to assist in “bringing out the best” for these highly experienced Research Fellows.
3. If career aspirations are not appropriately addressed, morale decreases and output ultimately suffers.
4. Significant resources and many years of training have been invested into each of these Fellows.
5. The current level of spillage means that almost half of the country’s top scientists (43% of renewing Fellows in 2003 were unsuccessful) will be unemployed after they apply for renewal of their fellowship contracts.

An important point to address is who will be around to train the next generation of Australian scientists?

Re-instate the career structure - make it equivalent or comparable to that of the career track non-clinical scientists employed by the United Kingdom Medical Research Council

The arguments for not having open competition every 5 years are no different at 10 years. If "excellence" is maintained, there is still no justification for not reappointing in a true career scheme.

Clearly if there was plenty of funding we would not be spending time on this questionnaire. Overseas, large groupings are falling out of favour and are being reduced. If this is confirmed and is the situation in Australia and if it could be shown that Fellows were more productive than Program Grant holders per dollar spent, clearly it would be time to transfer funds from the Program Grants to the Fellows' scheme.

Implementing model 2 together with some quarantining places for initial applicants would be ideal.

Two schemes- renewal based on performance review at 5 yearly intervals, with excellent ranked Fellows being renewed, an entry scheme, with competitive ranking and a cut-off according to budget

We need to guarantee current fellows who are ranked "excellent" continuing appointments. Otherwise this in no "career" scheme!

We need to make sure that initial appointments are mainly in the more junior levels so that current RD Wrights have some chance to enter this scheme.

It is inappropriate to have too many senior applicants entering the scheme in their later years.

All new successful applicants should be ranked as SRFA or SRFB, to enable younger applicants to have a chance.

There is a nasty reality in any of these attempts to rank, to draw lines, etc. whether we are talking initial appointments or re-appointments, those about which this debate is currently being held, are all actually extremely talented, productive people. The standards are very high and very demanding meaning that even small slips or dips in a 5 year period can see a ranking tumble very easily within a very tight banding. The lottery element that would seem to now be a feature of the Project Grant Scheme is also a real risk in the Fellowships process.

There should be separate funding for initial applicants who should be assessed separate to continuing applicants. This way, the nurturing career structure can be maintained. After 5 years, Fellows funded as in initial applicants should be grouped with the continuing applicants.

The current situation has made fellowships essentially into a one-off, 5-6 year contract, which is not a career structure. it is important to address this. In line with the other NHMRC funding schemes, fellowship applications that get ranked as excellent or above should be funded. To maintain funding for initial appointments, consideration could be given to quarantining a certain no. of these each year, providing they are scored as excellent or above. The 10 year model is somewhat dangerous, as it provides essentially 10 years of funding without the ability to terminate fellowships due to lack of performance. I do not support this.

More money would solve most of the current problems. If Australia wishes to support and nurture excellence in health research, and be proud of our achievements, then we must be prepared to pay for it. Fellows are in this system because they love the science - this should not be depended on or taken advantage of by the government to claim that there is an excellent standard of research and health in this country.

Allocate more of the NHMRC budget to Fellowships (divert some of the huge amounts going to a few senior researchers for Program grants).

All alternative models are to protect under performing fellows. If they are good and performing high quality research, they should not be afraid of open competition. I don't like to idea of 10 year fellowship. It is too long period to hold on to the dead wood.

I don't think there is much wrong with the current system. However, it is perhaps too early to tell. The key question is whether in practice, there are fellows who are ousted from the system that do not clearly deserve to be (viz. 90% of scientists would agree so). One suggestion that would help stabilise career structure would be to increase lengths of appointment after each successful re-apptmt: 5 yr, then 6yr, then 7 yr, up to a max of 8 yrs (in reality scientists would be in their 50's at that 8yr stage).

But still keep open competition.

Give open competition another 5 years then review it once the week performers have been "washed out". The numbers of unsuccessful renewals may decline after the system has been "washed out"

All career structures favour the incumbents. Academics are a primary example as once permanently appointed they have the position for life. Some weighting advantage for Research Fellows is an extremely poor cousin correlate to the career structure of an academic but remains better than the present system. Research Fellows have highs and lows like everybody. However, on balance they are major contributors and should be treated with appropriate dignity and respect. Further to this, initial appointees if entering on an open competition basis, would soon face the same dilemma confronted by incumbent Fellows. Clearly, open competition is not a way forward and is likely to have disastrous consequences on innovative Medical research in Australia.

See answer to 8 above. The existing system of 5 year renewals with 'safety' years works well, provided that the criteria for renewal are dependent on research excellence, and not on how many applicants there happen to be in a given year.

It is unfortunate when someone whose performance is judged to be 'very good' is not reappointed. I would probably not favour reappointment for those rated at 'good' or below.

First, it is essential to provide a career structure and not dismantle career aspirations as a result of open competition. Clearly those trying to enter the Scheme would favour open competition, but once in the scheme they would favour a career structure. The current situation is thus divisive. Without a reasonable career structure, why take all those risks of even getting into the scheme. Without the career structure and nurturing, the scheme degenerates into another “one-off” postdoc with all the disadvantages that holds.

To date, I have viewed the scheme as tough. And so it should be. Nurturing, as far as possible, was obtained from within one’s group or Institution, although just being in the scheme was sufficient in a sense to feel special, above the cut, and one does, by its very existence, feel extraordinarily nurtured. There are not many other career options in which one has the intellectual freedom to pursue the questions one wishes to pursue. Nevertheless, nurturing is a key issue. One runs the gauntlet of the Fellowship Interviews and one thing that I would strongly favour is good, strong honest feedback on interview performance. At the moment, despite mock interviews and so on, one can find oneself running from that 20 minutes, spending the whole time on the flight back thinking of all the things you should/could or shouldn’t have said and then the next few months in an unbelievable state of stress waiting for the phonecall / email. I would favour a system of the possibility of contact with your spokesperson for an honest, open appraisal without fear or favour. One is always mindful of the problems associated with confidentiality but nevertheless, if you are going to go down, it is important to know why. The current written reports are brief and uninformative and seem to be a reflection more of the potential for complaints to the Ombudsman rather than a constructive appraisal. Individual and detailed feedback could be given; it will of course take more time but also courage and commitment from the spokepersons as well as realistic expectations from the applicants. A real possibility would be for NARF to have a more active role as a professional body in providing more networking for Fellows who need a mock interview and who need to debrief. This does happen as a mater of course to some extent, but there is certainly room for improvement.

Ten years idea is ok but it actually defers the problem for another five years. The fellowship scheme should be a career structure so long as the performance of the fellow is judged excellent by his/her peers.

The Career Structure has worked well despite recent "shaking" - there have been relatively few RFs who has abused the system and many have been outstanding contributors to Australian biomedical science. In many institutions without them there would NO continued, focused research effort. Along as RFs remain productive AND continue to have raise monies to pursue their research they should be considered to have CAREERS within the RF Scheme.

The problem is getting people into the Scheme. My belief is that there should be more $$$ to allow

the entry of younger biomedical dollars in at the SRF level. These are often SRO/ROs who have held prestigious Research Fellowships as postdocs overseas and who have shown 5-10 yrs commitment to biomedical research. These people generally will not apply for Lectureships because of a commitment to full-time research. There definitely needs to be more funds in this pool!

Entry into the RF Scheme at the PRF/SPRF needs to be very thoroughly appraised. Case should be genuine and individual show a likely further lifetime commitment to biomedical research in Australia.

Do away with interviews - it should be clear on paper & from assessors/referees how to rank the applicants. How many applicants have their ranking changed at interview?

You should provide extensive constructive feedback as to why an applicant is ranked in a certain category and what they need to do to improve their track record & when be most appropriate for them to re-apply for initial entry or promotion - 1-2 years etc.I would not call this a '10 year' Fellowship. It isn't that - it is really a 5 year Fellowship with a reasonable prospect of one renewal if the performance is still excellent. That is a reasonable scheme. I do not support giving '10 year fellowships' where fellows have, or are seen to have, a position for 10 years regardless of performance.

The right balance is difficult to achieve. Losing a fellowship on the basis of temporary weakness is a greater tragedy than missing out on an initial appointment. A good initial applicant can apply again, but a fellow who loses his/her position has great difficulty "improving for next time".

I think open competition at the end of 5 years is making things too hard and the concept of a research "career" is lost. Open competition at the end of 10 years is fair enough, in my opinion. However do believe that in order to be reappointed after 5 years, established Fellows should be rated at least excellent, but I think the excellence should be in research itself, not in administration and in teaching etc. Being secretary of a society and doing excellent work is not of first importance for Fellows. It is their research originality, their productivity and the significance of their research output that should be the criterion.

The apparent clash between protecting renewals and allowing new entrants should not be as much of a problem as it is portrayed. There must be attrition of fellows at the higher levels in the scheme - we all know people who have moved into academic positions, moved to industry or left science altogether. This must make space for some new entrants. If the whole purpose of the scheme is undermined by turning renewals into a lottery, it will do great long-term damage.

Respondents: Hold a NHMRC Training Fellowship

Why does the career structure suddenly have to be nurturing when researchers get to the senior fellow level? It is anything but nurturing at the more junior stages. I hope this discrepancy doesn't merely reflect the career level occupied by the decision-makers.

Nurturing career structure would be the ideal solution but leaves the scheme 'top-heavy' with the 'underlings' fighting to establish their career and their independence. This is easier if you have a good mentor and are encouraged but having been in research for the last 15years, and doing my PhD after years as an RA I am well aware that this does not often happen.

Not presently being within the Fellowship system, I am unable to comment directly on what category is appropriate for renewal. My impression is that different recommendations for funding should be made dependent on whether the application is for a renewal or for an initial fellowship.

I am concerned that the more senior scientists there are being funded for longer without review will lead to less and less money available for initial applicants. If the 10 year fellowships did not have a negative effect on the initial applicants then I would agree that 10 year renewals is a good idea.

Respondents: Hold a Career Award or Fellowship other than NHMRC funded

The idea of a 10 year Fellowship for renewals may be feasible provided the five-year performance review is a highly critical process; ie if RFs are not performing at a high level at the five-year review, then they will not be funded for the remaining five years. This will ensure that RFs will not

automatically receive 10 years of funding regardless of their performance during the course of these 10 years, reducing the amount of money available to fund new coming researchers with more potential.

It would be detrimental to reduce new intake of young talent to support declining careers, because young talent will move overseas and it would be harder to attract researchers back to Australia.

Assessing 10 year renewals in open competition will not be fair to initial applicants as they would have to be competing against people with 10 years continuous, stable funding. Thus other criteria will have to be used to assess 10 year renewals.

Giving preference to ranking to only initial applicants and not ranking renewals within categories is not fair as it means that the selection process is much more difficult for initial applicants, but much easier for renewals.

Respondents: Hold a Career Award or Fellowship other than NHMRC funded and have applied for a NHMRC Research Fellowship

There is nothing nurturing about competition, and the term 'career structure' really means a system of incumbency instead of a meritocracy.

A major concern is senior scientists who "miss renewal", and may be forced to leave research. Why not allow such people to apply at a lower level if they are about to miss renewal? This way their career is not ended, and they maintain the potential to apply for promotion again in open competition? If they do not regain promotion relatively soon, then the choice not to renew was obviously the correct one.

Reduce Emphasis on career structure. Perhaps expand the safety net to 8 years to allow for a full and complete evaluation of their research capacity once funded.

Model 2 will only be fair if the performance review / reviewers is fair and has teeth (i.e. that non-performers will genuinely be penalised by losing their grants. Model 2 would need to have a "grace period" of e.g. 1 year for non-performers.

Question 14: Do you have additional comments on how to maintain a Scheme that attracts and encourages younger talented scientists?

Respondents: Hold a NHMRC Career Development Award

The relationship between SRF-level Research Fellowships and Career Development Awards is unclear and should be addressed. In public health, at least, many of the CDA recipients already had appointments at the Senior Lecturer or even Associate Professor level. This suggests to me that they were eligible for RFs but were perhaps not confident about applying, perhaps because there have been so few public health RFs in the past.

Maintaining just 274 fellows in the whole of Australia is hardly encouraging to anyone. I think that increasing the number of fellows would be the best way to attract people to a career in research.

Quarantining is important for the younger people not for the SPRFs of the world who have just left an institute

Lots of unis are encouraging very senior researchers to apply for these fellowships to save money for the uni. They do the same role as they were doing on core funding, but take away a possible position for junior researchers who can't compete with a lifetime of research. On the other hand, most CDAs in Public Health are AssocProfs or above, so they would not be likely to get a fellowship. Perhaps quarantine positions for SRF or for those moving from CDAs.

Maybe offer better more flexible support under the program grant scheme to start them off?

One option that may deal with the quarantine issue without affecting the number of renewing fellows is to provide a carry-over year for recipients of a CDA fellowship if they are unsuccessful getting onto the scheme. Presumably most of the initial applicants entering the Research Fellowship scheme are previous CDA Fellows. A carry-over year (or safety-net year)in the CDA Fellowship would provide another independently funded year of salary while the applicant considered applying for a RF the next year. This would provide a stepping stone onto the RF scheme (and meet criteria for a career structure).

The problem with setting aside positions is when applicants are not competitive the fellowships are still awarded. The advantage is that you don’t have to be better than those already in the system.

Attracting scientists is not really an issue- everyone knows of NH&MRC Fellowships and there are not many alternatives with the system of continuity afforded by the NH&MRC.

As long as this is to ensure a respectable minimum level of initial applicants are accepted, eg >50%. Otherwise scientists at earlier stages of their career who are highly promising will go back overseas where their research is welcomed with open arms (and bank balances).

Respondents: Hold a NHMRC Career Development Award and have applied for a NHMRC Research Fellowship

A number of positions set aside each year for initial appointments will ensure the scheme remains attractive to younger applicants and doesn't get too top-heavy.

If you make it too difficult to enter the scheme then some of your best young talents will either leave research or enter academic posts where their research contributions cannot be at the level of a full time researcher. At minimum everyone who reaches the category of excellent should be able to enter the scheme. The NHMRC has the numbers of people who reach this level each year but do not get funded. Can the budget be increased to accommodate this number? A longer term strategy looking at the age and departure rate of current fellows and projections of potential positions need to be determined in order to make useful suggestions re changes.

More positions and less insurmountable hurdles.

Consider reactivating the Research Fellow position. The gap from Training Fellowships to SRF is too great.

Provide more SRF positions

A reasonable likelihood of at least 15 years of fellowship support (as discussed above) would be exciting and wonderful, and providing salaries were appropriately high enough, this should be sufficient. By contrast, the present outlook is pretty worrying and demoralising.

Excellent scientists at both appointment and renewal levels miss out as there is insufficient funding. It is hard to see that changes in policy will necessarily help this situation until sufficient funds are in the scheme.

As outlined above, more money needs to be put into the scheme to encourage younger talented scientist. All applicants ranking in the top 10% internationally should be funded.

Scientists are frequently trying to enter the scheme at a time in their lives when they are having families. This added to the relatively poor salaries scientists get in comparison to the amount of training they undergo and the commitment to research, are already huge impediments to staying in science. The exclusion of very competent scientist from the fellowship scheme because of extreme competition is damaging to scientists and ultimately unproductive for the NHMRC and the country. Research will only be an attractive career option if the amount of money going into the fellowship scheme, and the number of younger scientist (in particular) is increases. The current system is likely to result in a lack of leaders in the next 15 years.

It is important that the scheme continues to provide a number of positions for the entry of initial applicants at SRF level.

Respondents: Do not hold a NHMRC People Support Award and have never applied for a Research or Practitioner Fellowship

Again this is too rigid a mechanism. Obviously in some years there will be better new applications than renewals & the system should be able to flexibly cope with this situation in a sensible if adhoc arrangement.

The keep our best young scientists in Australia, or attract them back from overseas, additional funding is required to support a reasonable number of the very best initial applications. This should be restricted to those at SRF levels who are seeking to establish a career path in medical research. Those at higher levels (and those with medical degrees) generally already have other options for funding and support and should be judged against others applying in the same category.

The barriers are very high - it is extremely competitive and many fine young scientists cannot get into the scheme. Also criteria must allow for explicit discussion of interruptions to career path, barriers to mobility and to development of an international profile - important for those with family responsibilities ie there must be an explicit place in the form to discuss these matters.

Provide a greater number of fellowships

More direct mentoring pre-application eg. from those who have served on fellowships committee, senior academics. Perhaps it should be made a requirement or strong suggestion that an applicant have discussed their application with potential (nominated) mentors prior to submission. Various grant organisations set up nominated individuals in each state.

Provide more money to the scheme, provide a real career path and some level of job security

The US has a big advantage over us in terms of research dollars. That's basically the bottom line.

I don't think there's anything basically wrong with the current system apart from that. If there was more money then outstanding and excellent people wouldn't be falling out of the system.

Open competition is the best thing to come along since I've been in science.

Additionally, I think that you have to cull SPRFs that aren't performing at the same level as the other SRFs. Just because Dr. Bloggs did something fantastic 20 years ago isn't a reason to keep paying them. This behaviour creates a logjam at the top that prevents younger SRFs moving up.

Competition is good. It will select for the best.

At the moment there is a large gap between "postdoc" and "fellow" where there are no career development options.

Quarantining is not necessary if real open competition exists, that is if more talented new applicants replace less productive, existing fellows.

Increase the funding to the scheme so that more people can get into the scheme

There is virtually no guidelines for younger investigators about what they really need to be successful. Examples on the web of successful CVs would be a useful start etc....

From my position in the career structure it seems that there is a gaping hole between RD Wright and SRF. The logic behind removing the old RF level of the scheme escapes me and it is now extremely difficult to enter the fellowship scheme - one has to compete at SRF level with people who have been in the scheme for a number of years. This is the time (5-9 years post doc)that many people, particularly those bright and talented, will opt to try alternative career paths that have more options.

Allocating a specific number of initial applications every year is a good idea, but the number of initial positions available should be based on the number of initial applications received that year, and potentially also on the number of people re-applying for fellowships that year, as well as the quality of applications in both categories.

Additional funds need to be provided for the scheme overall

More Money and a real career structure.

More money

Consider a separate entry level fellowship scheme equivalent to the ARC postdoctoral fellowships

NHMRC must make better efforts to "sell" its research output such that the research output of one set of fellowship holders can support the new entrants. There are companies in US and UK that evaluate university medical research on the basis of potential for commercialisation and that help university researchers set up companies to manage their own IP and translate it into profit (e.g. Merlin Bioscience in UK).

I agree that the scheme should allow a healthy influx of initial entrants each year. I think it also important to maintain productive researchers in the system, and I fear that sequestration of an arbitrary number of places for initial entrants may lead to an undesirable position whereby we are unable to maintain proven researchers.

It costs money! Ideally, there should be a reasonably stable minimum number of new appointments at SRF level, combined with a reasonably predictable and realistic career path.

I think the problem is that young scientists see little room to progress or establish independence in the current system. The money for research projects (and not just fellowships) should be more evenly spread, so that new researchers can have the opportunity to establish themselves independently.

Perhaps criteria should be in place to eliminate certain senior people from the SRF A & B levels, or to make it more favourable in judging say a more junior person for an SRF versus say a person who is far more experienced.

Respondents: Do not hold a NHMRC People Support Award and have applied for a Practitioner Fellowship

There are major gaps in eligibility criteria between the practitioner fellowship scheme and other more junior schemes for medical graduates: for example I am not eligible for any training or career

development scheme as I have a project grant and are less than 3 years post PhD: therefore i am forced to compete in the most senior category (Practitioner Fellowship) as it is the only scheme for which my application will be accepted: this is patently ridiculous!

Respondents: Do not hold a NHMRC People Support Award and have applied for a Research Fellowship

The current system discourages successful researchers from engaging in research careers. Many of our top researchers, who have commenced in clinical or academic posts, cannot enter the Fellowship scheme because they are considered too senior (although they may have 20 years of research ahead of them). Hence, they are forced to go overseas because there is no appropriate fellowship support in this country. This policy is highly detrimental to Australia's medical research. There appears to be a prejudice

There is insufficient numbers of fellowships. The bar for entry is too low, since the RF level was abolished.

It really does have to be seen as fair and objective - it is all too easy to create the perception that it is a lottery

There should be planned growth in the SRF range. Appointments at above that level really should be the exception and the reasons should be extra-ordinary.

If there are superbly gifted individuals, why not fund them? Why LIMIT the number of superb individuals in research, which is the outcome of the current scheme? Why "quarantine". If we are a nation of do-dos, this (apart from being fiscally useful for bean-counters) permits limiting, quarantining etc etc. If the government REALLY has a mandate to allow this country to be the world leader in research (in my opinion, the rightful place, when one considers the Australians leading research from overseas institutions and directing research in hospitals and universities overseas), the notion of limiting places is to immediately shrink our horizons. If there are 20 excellent candidates one year, why limit to the 10 nominal positions? One can see the Americans laugh at this short-sightedness. Excellence is mandatory, but to limit to the "most-excellent"? With this as ones future, should a "younger talented scientist" wish to stay here, especially if returning from a well-funded, supportive environment as one finds in the US or Europe?

Additional funding is clearly the key. Most importantly career support for scientists below NHMRC SRF level must be provided.

It has to be accessible

Certain number of places provided that a satisfactory level of assessment is attained.

Respondents: Hold a NHMRC Research Fellowship

A strong career structure will attract younger scientists to the system.

Initial applicants should be ranked, as the Discussion paper points out, with the knowledge that they are entering a highly competitive but career-nurturing Scheme.

Keep the competition open! The worst message to send to initial applicants is that they will be disadvantaged with respect to existing fellows. Presumably if the scheme is working then existing fellows will already have an advantage from simply having a stable position for the previous 5 years - if that is not enough for a fellow to compete with new applicants then nothing will save them. Also removing the clear COI of Fellows chairing and sitting on fellowship committee would also help make the system more transparent..

The main problem is that the Fellowship scheme has lost its previous equivalence with University scales. In terms of achievement an NHMRC RF is currently the equivalent of a University Senior Lecturer. The fact that a scheme that is supposed to reward excellence is actually having the reverse

effect is a major disincentive to attracting talented young scientists.

Funding for the fellowship scheme should allow for a reasonable prospect of career structure for existing fellows, but also allow for attracting younger, emerging scientists into the scheme. The balance of support between grants and fellowships may need to be re-evaluated to address this.

Young, talented researchers will be attracted to the scheme if it truly is seen as a career structure. To achieve this, highly productive researchers should have some expectation of continuity of tenure.

Additional funding so that the entry level is achievable to talented applicants. Also a clear career structure within the scheme would make it more attractive so that young scientists could see that the Fellowship scheme offered a viable and long-term career structure (with some level of security).

A realistic relationship between the numbers of awards offered at each level would manage expectations of younger scientists. For instance, the current numbers of CDAs will not be accommodated into the RF scheme on current projections. The best encouragement for younger scientists is a demonstrable and realistic expectation of a continuing career in a research fellow track.

I personally found the step from being a senior postdoc to the fellowship scheme to be a very high one because of its highly competitive nature. An expansion of the RD Wright scheme (with more awards and possibly renewal of awards for a second term) might provide a partial solution to this problem and give younger scientists more time to develop their CVs and thus competitiveness for the RF scheme.

There is little point in quarantining a number of positions for initial appointment to the scheme if the scheme itself does not offer a true opportunity for a career. Any quarantining must be done in conjunction with other changes to remove the "open competition" nature of the review process.

At present, successful funding of fellowship applications (renewal or initial) requires a score in the middle of "excellent" or better. This is in contrast with all other NHMRC funding schemes, where all scores of "excellent" are funded and many in the "very good" category too. This imbalance should be redressed, if necessary by transfer of funding between schemes, so that ALL fellowships applications rated as "excellent" get funded, whether initial or renewal. This would obviate the need for both ranking applicants within the "excellent" grade and quarantining a number of fellowships for initial appointments.

I think the idea of quarantining a specific number of positions each year will not work if the NHMRC is forced to keep the total budgetary allocation to "people support" to a defined maximum (say 300 fellows). I have a suspicion (unfounded at this point because I am not aware that the NHMRC have ever employed a mathematician to model the progression of current fellows through the system over the next 10-40 years) that very soon almost no new fellows will be able to be appointed to the scheme because not enough existing fellows are leaving it. I base this supposition purely on the knowledge that there are a large number of exceedingly good young investigators at all levels that are not expected to retire (literally) from the system over the next 20-40 years. Only under rare circumstances would any of these people be expected to be ousted from their fellowship by an initial appointment, hence the number of new appointments is likely to taper off dramatically over the next few years.

Proportional academic and research fellowship positions OR proportional fellowship position with proportional support from grants or other sources (industry?).

If viewed in a simplistic way the scheme has to achieve a balance between meeting the requirements of entry for young scientists and achieving for them a career structure in the longer term. This may mean a tougher entry requirement at the expense of career structure maintenance. This will be attractive to both categories because the entrant today is the career scientist tomorrow.

The young investigators that i know are put off the RF scheme as it is seen to be too volatile, exemplified by the numerous changes to the system over the last few years. Especially pertinent for young women. Unless the scheme is regarded as a career structure, rather than temporary position, it will not be attractive for young people seeking long term careers as research only staff.

As above, NH&MRC pay scales have to be increased and have to take account of the EB gaps, so that you are not left wondering how you are going to pay the staff on your awarded grants. The quality of

applicants varies from year to year. Some years there may be too many other years to few for the quota. It is best therefore not to have a quota that has to be filled each year.

It is simply a budgetary issue. What is the point of attracting new fellows into a scheme that cannot support them in a career path? There also needs to be some thought regarding promotion through the scheme - the parity between SRF / Senior Lecturer, PRF / Assoc Prof etc seems to have disappeared completely. There must be a way to ensure career progression within the system as well as new appointments.

It is a good idea to have some positions each year available for initial appointments. However, these positions should not be filled necessarily. In a year when the quality of initial applicants is not vert good, fewer or none of the potentially open slots should be filled. Otherwise, he system will be filled some years with scientists that unnecessarily clog the system.

Simple. Have a budget that can fund excellence, and then do it.

Ensure there is an attractive career structure with coupled funding with research work, so valuable research time is not spent worrying how staff members are to be kept on. Otherwise there is no incentive to be a Fellow.

Removal of the Research Fellow entry level has created a significant divide between training fellowships and Senior Research Fellowships with very little opportunity for salary funding in the intervening period outside academic appointments. This acts to drive promising scientists out of the research stream. The RF level should be replaced.

The issue of fellowship applicants having to guess their level of appointment requires revision. While applicants obviously need to address appointment criteria for the level of appointment that they think is suitable, it is unreasonable to demand of an applicant the necessary political connections or clairvoyant foresight to predict the committee's behaviour on a given day. To describe this expectation as the applicant having "made an error in judgment", as the discussion paper does, is inappropriate.

Need to estimate just how many fellows can be supported long term and encourage younger scientists on that basis. There is no point in giving lots of early career awards, only to have the bottleneck later on. In fact, from the point of view of young scientists, it is better to be unsuccessful at a younger age, and find another career, than to get stuck in 30s and 40s, when one is really to old to start again. The reason why there is support for an excess of early career awards is that these people do all the lab work for more senior people, who have a vested interest in maintaining the status quo. However, an excess of younger versus older scientists is socially irresponsible, especially as there are not enough non-academic (eg industry) positions in Australia to come anywhere near taking up all the unsuccessful middle level scientists.

I don't like the term "younger". It is possible for someone to embark on a career in research in middle age and this should be accommodated.

You won't attract the best young scientists to enter a scheme without a career structure. See comments above.

I think the Fellowship scheme should be getting a slightly bigger slice of the NHMRC pie, say raising it from 19% to 21%. I suspect that this would be fairer and not substantially damage the Project or Program Grant systems.

Should be seamlessly tied to other training award schemes, so that there is a natural progression.

Reintroduce more junior levels of fellowships

Since the previous RF level was removed, the goal posts seem to have become so high that this is very discouraging for our young scientists - most of those whom I know would previously have felt that RF was achievable, now feel that it is just too hard and that too much is expected of them. However, short of more money, it is difficult to envisage how another layer could be re-introduced.

May need more money into the scheme to achieve this.

Calling the entry level Senior Research Fellow is a disincentive for younger scientists to apply to the scheme. The career step from a post-doctoral award to a Senior Research Fellowship seems large. The reason for abolition of the Research Fellow level remains obscure.

The NHMRC Fellowship Scheme is no longer equivalent to the University Scheme. In terms of achievement an NHMRC RF is currently the equivalent of a University Senior Lecturer. The fact that a scheme that is supposed to reward excellence is actually having the reverse effect is a major disincentive to attracting young scientists. This disincentive would be removed by increasing Fellows' salaries.

Under the model proposed above, all Initial applicants achieving a category of Outstanding will automatically be appointed. The only applicants who should be ranked are those Initial applicants in the category "Excellent". No initial appointment should be made to an applicant who is categorised below this level. It is desirable that a reasonable proportion of New applicants in the category of Excellent be appointed. This needs to be addressed in the funding balance. Removal of 7th year funding (assuming a model where all Excellent renewals are funded) will provide some additional funds. The "Exit" strategy outlined below will free up additional funds to support new appointments at the bottom end of the scheme.

The continued escalation in success indicators (ie track record) for fellowships (and for that matter RDWrights and other CDAs) means that there are more applicants than positions. This, plus the fact that only 50% of excellent applications are funded clearly indicates that the fellowships scheme is significantly under funded. The best solution is to increase funding for this scheme so that all excellent applications are supported. This will then also overcome the problems at original entry allowing the scheme to both attract and retain younger scientists.

I think that the reality is that there should be some attempt to ensure a minimum entry quota into the Senior Research Fellow Scheme. It should be at the first or second level and should be a number that maintains the viability of the Scheme. Should it limit the number of new applicants at higher levels in a given year due to budgetary constraints, then that should be considered an acceptable risk in order to maintain the longer term viability of the Scheme. The reality is that entry standards are extremely high even at the lowest level and it is unlikely that many, if any, mistakes will be made in this process given the level of competition.

See above - new dollars here essential.

I personally have 3 SROs in my team with great O/S experience. There just are not enough postions for those who show the commitment. WE desperately need younger people entering the Scheme - if they stay at good labs overseas they are lost to the promotion of Australian science for ever. We need to be able to show these high fliers, who can bring the new technologies and latest advances back home, that there is a Scheme for them.

There is still a real problem with the bottom rung of the ladder. The gap between RD Wrights, etc and the SRFA is too big and funding a career in this gap can be extremely difficult

Overall the 'manpower' of Australian research needs to be analysed. I suspect that Australia does at best an average job of supporting its Fellow-type scientists. Funding should be more clearly identified for a career fellowship type scheme.

The whole interview process is currently biased against the new applicants. All existing fellows are guaranteed interview, while a stringent selection process is applied for new applicants whether they should be called for interview. If there are 100 application and only 50% of these to be interviewed, most of these positions are taken up by existing fellows. The new applicants don't even get chance to go to the interview!!!!!

It is inappropriate to have too many senior applicants entering the scheme in their later years.

All new successful applicants should be ranked as SRFA or SRFB, to enable younger applicants to have a chance.

With the dire state of funding, there is no need for encouragement; there is no where else to go. The

problem is earlier in the career with fewer students electing to do science in their undergraduate years.

Yes, re-instate a strong career structure! That would be the single strongest argument for having a career structure i.e. so that you can recruit and retain the brightest and the best from amongst younger talented scientists. That is, provide young scientists who are really talented with the security of becoming a Career Researcher (a phrase currently being adopted, after a lot of hard work, by my Institution and others to replace the somewhat demeaning DEST "Research Only" designation). Australia is very lucky to have had this remarkable scheme with its tough, but nevertheless if you were tough too, very real option of being able to pursue a career in top flight research. The scheme has to be tough to maintain excellence, but it should also provide continuity for development of career directions. I favour longer appointments, but with performance review at the halfway mark. Say 6 year Fellowships for Initial appointments with review at 3 years and 10 year appointments for Renewing Fellows with review at 5 years.

Nothing has been said about remuneration and I understand that we are all bending over backwards to make the budget go as far as possible and not make the situation any worse than it already is. The Prime Minister, in his latest speech to the Australian Academy, recognised that scientists work incredibly long hours for often relatively poor pay. If you want to attract young people into research, then we need a realistically competitive pay structure. Currently, a returning CJ Martin Fellow receives half the salary of someone, for example, emptying rubbish bins on an oil rig. Eventually, Australia will have to address this issue. Graeme Hugo (Federation Fellow, Professor of Geography, Adelaide) recently gave a talk to the NTEU Research Staff Conference in Melbourne. Australian scientists are already low in the global labour market and he is predicting that by the end of the decade we will need a further 75,000 trained research scientists. We need the resources to recruit them and to retain them; the parallel for the Fellowships scheme is to support sufficient excellent to outstanding Initial applicants as well as retain all excellent to outstanding applicants.

The answer is more funding. The funds will not just materialise. We as a scientific community need to learn about lobbying and do so much harder to secure appropriate funding. Perhaps one of the Selection Criteria for SPRFs should be a proven track record in lobbying successfully for federal and State Government funds.

I also wish to comment on the issue of promotion for renewing Fellows within the scheme. I do not know of another corporation or business that rewards it employees seeking promotion by effectively sacking them because they do not make the grade. The policy needs to be more flexible, as for entry level for initial Fellows below, to allow the PRAP and RFC to determine retention at their current levels should they fail to be promoted rather than letting them go not only down the snakes but completely off the board. It seems the most absurd and unbelievable situation that could be so easily remedied by good old flexibility and common sense.

You need to re-introduce an RF level or at least make the Wright CDA entry level between 4-7 years post doc only to give a better continuum between training fellowships, the CDA and the RF scheme. Too many more senior research fellows are gaining CDAs & this disadvantages many excellent younger postdocs. Hopefully this would also encourage the more senior postdocs who should be applying for SRFs to do so.

A separate funding scheme for initial applicants would ensure that a specific number of positions can be quarantined without disadvantaging the career structure of continuing Fellows.

Initial applicants with a score of less than excellent should not be appointed.

Excellence should still be required - ie no commitment to appointing to all quarantined positions - they should be a maximum

Young talented scientist should of course be attracted to the scheme. However, the previous value of the scheme should not be sacrificed to facilitate this, as this will help no one. Rather the root causes of the problems need to be addressed by government. Part of the problem is that University academics are now so overworked that they are applying for and succeeding in obtaining Fellowships and additionally there is less enthusiasm of Fellows to become academics. This is causing a bottleneck for

young talented scientists to enter the scheme. However, these problems must not be simply solved by ruining the scheme. Rather, the problems of higher education need to be systematically addressed.

It should not be a number of positions that is quarantined, but a percentage (this will be easier to manage with changing levels of funding).

Keep open competition

The Fellowship scheme may introduce a new level of appointment which connects with or incorporate the upper end of the Career Developmental Award Scheme. The perception (and practice) of a continuous personal support at all stages of the research career would be more appealing to the young investigators.

Find proper support for the whole scheme and fuel the bottom of the scheme. Narrow the gap between and RD Wright and a RF. Many people are now struggling in this period with much uncertainty. The RF scheme could easily absorb another 50% funds and not waste one dollar of that money on new appointments.

At the moment it is very difficult for younger scientists to enter the Fellowship scheme so quarantining a specific number of positions at the SRF levels will encourage younger scientists. By definition people wishing to enter the scheme at the higher levels will have more established careers and should be in a more competitive position.

Quarantining a number initial appointments is a good idea, but it must not compromise the reappointment of 'excellent' fellows. The logical answer is to fund these with additional funding that allows the scheme to grow. This needs a degree of budget flexibility and, above all, planning. This implies giving a higher priority to funding Fellows than other schemes. This is quite justifiable on the basis of the superior performance indicators attributable to Fellowships. To attract the best young scientists the scheme must have two factors: 1) a reasonable chance of entry; 2) a reasonable chance of not being thrown out in mid career. Last year's 40% knock-back rate for fellows seeking reappointment is well known, and is sending a strong negative message.

The RF scheme needs to have a career structure if it is to remain attractive. More attention needs to be paid to creating attractive exit options for Fellows so that a reasonable number of RF positions become free each year.

By creating a career structure that supports applicants once they enter the scheme.

Why was the RF level abolished? At present many scientists are having to wait until their late thirties to gain entrance into the scheme as an SRF.

Offer attractive salary packages to encourage talented scientists to stay in Australia and to stop them entering the private sector.

Offer stable career structure.

Again this requires the funding to achieve this outcome.

It needs more money.

The number of career development awards should relate to the number that can enter the scheme over the following years.

If a number of positions are quarantined for initial appointments, it should not be mandatory to fill all those positions if the standard of the applicants is low in a particular year.

I'm concerned that the quarantine system would lead to people entering the scheme who would struggle at their first renewal. If it was implemented then the quarantined positions should only be for those who are of the appropriate standard ie at least excellent category or above. This might mean that not all of the positions are used up in a particular year.

Efforts must be made to channel new money into the Fellowships scheme via a well argued case to the Minister.

"Sideways" movement of established scientists should be strongly discouraged, because it will be almost impossible to "police" the Institution to make sure that they are not simply using the NHMRC as an additional source of funds for scientists with effectively permanent positions.

The quarantine number can only be SMALL (e.g. 5 to 10), otherwise it will be unfair and could result in incumbent fellows losing their position irrespective of their performance level simply because there was inadequate money to fund both tem and the new fellows.

Younger researchers will only be attracted to the scheme if it offers some sort of career potential. The current trend for less secure, transient fellowship funding becomes too much of a risk for them to enter into knowing that they might be left without a job at a critical mid career point.

Make it a true career structure that encourages excellence. Much more funding should be provided to support individuals.

By definition, fellows are successful researchers who are judged, in part, on their ability to fund their research. Since research monies flowing into institutions attract additional funding (RTS and IGS), the institutions benefit substantially by hosting fellows. One way to ensure that there are funds available for new appointments would be to include a condition that after a second reappointment (ie: after 10+ years in the fellowships scheme), the host institution should contribute a percentage of the fellowship . If this was relatively small (10-20%) or on a sliding scale (increasing with each renewal), then the institution would not end up hugely out of pocket and funding would be available for new appointments

Respondents: Hold a NHMRC Practitioner Fellowship

Expand CDA scheme to provide 3 year senior post doctoral fellowships

Respondents: Hold a NHMRC Training Fellowship

I have spent 6years postdocing overseas and have recently arrived back with a Howard Florey Fellowship. It is alarming that really the only way for an Australian to return from overseas is with one of these fellowships - of which there are very few. With that, it gives only 2years funding, requiring you to apply for a grant or RD Wright within the first year to year and a half of funding - not leaving much time to establish yourself. Labs are full of Australians who have given up any thought of coming back. Its such a shame, we're encouraged to go and learn, but not to bring these new ideas, new techniques, and new collaborations, home.

Younger scientists would be encouraged to stay in research if there was more funding/support available for those scientists in between training fellowship level and entering the fellowship scheme.

It would be nice to consider the progression from CDA to SRF in the overall scheme. Maybe we should be including 5+ years post-doc in the RF scheme with 5 yearly progress reviews and 10 yearly open competition.... and a sensible exit strategy.

As an early career researcher on a second post-doc (my first post-doc was 3 years overseas) it is very discouraging to realise how large the bottle-necks are both in the progression from training fellow to CDA and from CDA to RF. A post-doc colleague recently jumped ship to the public service because he could no longer see the point of a (global Australian) system that seem to have any career structure.

The problem isn't attracting young talented scientists - supply doesn't come anywhere near meeting demand. If people aren't applying it's because they know their applications won't succeed. This will become even worse if the system favours incumbents rather than being merit-based.

Respondents: Hold a Career Award or Fellowship other than NHMRC funded

More entry level awards such as the Career Development Fellowships that are restricted to younger Scientists. This prepares them to compete on a level playing fields for full fellowships.

Initial Applicants must be judged on more than publication record and patents.

Wider contributions to Science such as publicity, education, professional society office and or editorial etc should be given more weight.

The quarantining of positions for initial applicants is a good idea, as long as they are not limited to only that prescribed number of places each year; ie if there are more outstanding initial applicants than renewals in one year, then more initial applicants should be accepted.

Quarantining initial applicant positions only for SRF means that people that did not have the opportunity or need to apply for the RF scheme at a junior level will find it much more difficult to enter the scheme at a higher level, although they may be performing at a higher level than their contemporaries. However, the number of quarantine positions for levels higher than SRF should be fewer than for those for SRF to reflect that reduced number of potential applicants.

Respondents: Hold a Career Award or Fellowship other than NHMRC funded and have applied for a NHMRC Research Fellowship

Peer review committees could perhaps be tougher on “foul play”. For example using program grants to invest in research buildings when existing facilities are adequate (e.g. no expansion in staff numbers) or state-of-the art equipment without equal accompaniment of trained staff or researchers to operate it. In addition, lack of sharing of expensive equipment between institutions may also restrict research technique flexibility. Such practises, or personality clashes with more senior scientists, might deter talented young scientists from continuing. The NHMRC plans for career structure and using tight funding appear to be well considered. Self-serving practises may be impossible to “police” by peers, of course. However, should any emerging scientists not feel powerless or driven to compete with contact driven networks, more may continue.

I don’t think that there should be a set number of positions that must be filled as it is possible, although unlikely that in any one year there may not be enough qualified applicants to fill the quota. As I said, this is doubtful and it is more than likely that every year, a number of excellent researchers are being left out of the scheme. The answer is a simple one...more money into the scheme. Without this, Australian science is doomed. This is a knock on effect of lack of funding in the University system. It would be interesting to know how many senior scientists from the University systems have entered the NHMRC Fellowship scheme in the last 5 years. There would seem to be a large number of such investigators entering the scheme at the higher levels, this would obviously put downward pressure on the lower levels. Given the recent ruling by the ARC not to allow ARC project grant funding to scientists who are not employed by a University, perhaps researchers "employed" by Universities should have restricted access to the NHMRC Fellowship scheme. Not ideal but this would certainly make a point about the inadequate system.

Avoid a system of incumbency where outsiders cannot enter except at the lowest levels

Provide other capacity via the Project Grants and Program Grants to support salaries for renewal fellows who are not funded in the fellow scheme for a period of time.

More funds.

Summary of Raw Comments
Impact of Open Competition

Question 8: Do you have any additional comments on mechanisms that could be adopted to address the conflict between “open competition” and maintaining a “career structure” within the Scheme?

Respondents: Hold a NHMRC Career Development Award

Project grants are funded to the very good level, whereas not even all of the fellowships at the excellent level are being funded - this needs to be addressed. Perhaps taking money out of program grants and putting it into fellowships is the best option.

There is obviously enormous financial pressure on the scheme and it is a vexed issue as to whether to support initial appointments versus reappointments. Either way a certain percentage miss out. Obviously it is important that there are always next entrants to the system.

There is insufficient chance for Initial applicants to get into the scheme in the first place. This is largely because of the abolition of the RF category. Scientists on CDA's are not given as many advantages as those still on the old RF classification and still struggle to get into the SRF scheme.

Perhaps there needs to be two mechanisms - and two pools of money so that existing fellows are not competing with new ones all the time to stay funded. Also, it would be good if there was more security for existing fellows and flexibility for women having children ie more acceptance of part-time work - it is possible to be a top international scientist and yet slow down for a few years to have children - currently it seems like women drop out when they have children or else are under incredible stress trying to maintain their careers.

Quite simple - we need more money. If all EXCELLENT researchers cannot be funded (themselves, but also their research projects too while we are about it), how can there ever be a significant body of continuing excellent research?

It's hard to strike a balance between a closed shop and providing some certainty for fellows. I think both suggestions in the document are good ideas.

While career interruptions and part time work due to maternity leave or other reasons are supposed to be taken into account, this does not seem to happen in reality and would have to be seen as a disadvantage in "open competition". In fact, I had an email recently from the NH&MRC recently stating that it took "a very dim view of ANY part-time work". Policy in these areas in not explicitly stated anywhere that I can find.

Respondents: Hold a NHMRC Career Development Award and have applied for a NHMRC Practitioner Fellowship

Open competition should be applied only every 10 years

Respondents: Hold a NHMRC Career Development Award and have applied for a NHMRC Research Fellowship

Assuming top 10% internationally is 'maintaining a high standard of research excellence' all applicant whether initial or existing should be funded at the appropriate level. This would allow for significantly greater efficiency for both the NHMRC and the applicants eg. funding of salaries through project grants would decrease, time wasted on unsuccessful applications, increased output, greater career security and attractiveness.

I believe a minimal number of positions should be set aside for initial appointments each year (which might not be filled, depending upon the quality of applicants) but that there should be longer contracts available to current Fellows, offering increased security and time to achieve long-term and ambitious research.

As suggested, a set number of SRF positions should be "quarantined" for initial appointment only

A separate fund needs to be quarantined for initial appointments who then compete with each other for entry at SRF level. However once a fellow is on the RF Scheme, consistent with the recommendations of the Will's Report the provision of a career structure is vital. A career structure not only provides a certain level of job security but also a means of rewarding the very best and brightest. In addition, scientists eligible for RF appointments do not have other financial "safety nets" such as income from clinical practice.

Changes to the scheme over the past few years with the removal of appointment at RF levels, means that initial appointment into the scheme is taking a longer and longer period of time.

The system needs to become one that can realistically sustain a scientist for their whole career, taking into account the natural ebbs and flows in productivity, so that they are not drastically de-valued or underrated due to temporary circumstances and ignoring a proven track record. The feelings of vulnerability and uncertainty about whether one will still have a job in the next few years should not occur at this level.

University lecturers with tenured positions should not be allowed to enter the scheme and maintain their current positions. It is common knowledge that Department or School heads are offering lecturers with tenured positions leaves of absence to take up Research Fellowships. This creates unfair competition.

Respondents: Do not hold a NHMRC People Support Award and have never applied for a Research or Practitioner Fellowship

The Walter and Eliza Hall Institute has funded heads of divisions on rolling 5 year contracts based on performance. I don't see why SRFs should be any different. It's true their jobs aren't open for competition but if people don't perform they will be removed.

Continuing appointments should be judged on whether they have maintained the required level of research for their appointment level relative to their opportunities over the previous period of their fellowship, not against all other applicants who can chose to apply at the optimum time of their careers. The only way to ensure that new applicants are not then disadvantaged is to continue to appoint outstanding and excellent researchers, which can only happen if more money is devoted to the scheme to make it a true career path for the best and brightest. This should be from additional funds, not redirection of the already ridiculously tight NHMRC budget.

The open ranking system has led to the situation where someone can get promoted one year but not another depending on the strength of the competition, not on ability & achievement. Maybe they could all be ranked initially together & then renewals assessed separately on criteria for reappointment, which surely are different from initial appointments.

The medical research performed by fellowship holders should give novel information that is of commercial value. If this can be effectively commercialised then that would give more money so the "pot of money" to support fellowship holders would continually expand and support both existing fellowship holders as well as new entrants. Big pharmaceutical companies such as Glaxo support university-based research teams in the UK and in Singapore.

Once one is in the scheme, maintaining a track record of research excellence should be sufficient to keep one in the scheme

New applicants should be treated in a separate category

No allowance is made in any fellowship applications for any women or men re-entering the workforce

after having worked part-time or taken time off research, for example while raising children, or after working in industry. This makes it very difficult for individuals re-entering full time research to compete as they may have a "a high standard of research excellence" but a low recent publication rate due to family commitments, or working in industrial research rather than traditional (eg public) scientific research.

Basically:
1) Too few positions are available
2) Not enough funding for the system.
3) A career structure should be considered to include all people with more than 2 consecutive contracts with the NHMRC

Success in an application is heavily influence by support provided. If one works in a department with a bias to qualitative research and is denied administrative and research support in preparing applications there is an identifiable discrimination.

Perhaps more attention should be paid to how the research will influence policy, enhance knowledge rather than furthering career. This means that even small RCT studies could be performed even if they cannot reach a suitable sample size they can be later pooled in a meta analysis.

As long as reappointments clearly are ranked as "excellent", they should be given priority over new appointments. Reappointments who are rated as less than excellent should be given an extra year as is currently the case. This maintains two aims of the scheme: excellent research AND a career structure. Overall productivity of the scheme will be enhanced, since there will be more certainty in the career structure of Fellows.

Need to keep some places each year for new entrants

Consider limited ability of women with families to change institutions and enter into FT fellowships shortly after PhD completion

Answer "Yes" to 5. above is simply to state that the no. of Fellowships available is inadequate.

There are different types of research careers - at the moment I think it is easier for someone with a straightforward (Hons to PhD) career to meet selection criteria. People who have worked in the public sector, held university jobs or who have completed a PhD at a mature age etc find it difficult to get in at SRFA/B (as they are seen to be too senior) however may not be outstanding (as required to enter at the PRF level) - senior in some aspects of career but more junior in research. - may typify Public health researchers.

Publish current criteria for maintaining a position based on calibre of past candidates to positions offered.

Even with "open competition" it will always be harder to enter the system than to be kicked out of it.

Researchers who have held a Research Fellowship for 5+ years have had enough opportunity to develop a profile or track record to make the attractive to an employer, thereby freeing up funds which could be used to give another researcher the opportunity to develop their track record/profile.

Concept of "expectation of renewal unless performance uncompetitive" rather than "expectation of failure of renewal unless performance excellent" is critical if you want bright young scientists to stay in the field of biomedical research full time.

Open competition should be strongly maintained for applications at all levels. Those who hold a fellowship are devoting all of their time to research. New applicants often will have had other duties (e.g. teaching) which will have prevented them reaching their full research potential. If those who hold current fellowships cannot compete successfully in open competition with new applicants, they should not have continuing support.

It is critical to maintain a career structure. If "open competition" is an impediment to this, then such open competition MUST be removed, IRRESPECTIVE of whether it conflicts with any recommendation of the Wills Report.

With a current re-appointment rate of only 60% the nation is losing some of it's most brilliant researchers due to undue bureaucratic/management interference.

I think more dollars should be available for people starting out in the NHMRC. Too many dollars are going towards large research programs. I think a flatter, broader research structure would encourage talented young people to remain in research science.

We believe that the “open competition” system needs to be allowed to run for a longer period of time to enable the changing of the guard to occur. What we are now seeing is the removal of less competitive applicants which is the aim of the open competition system. If this is short-circuited by returning to a “career structure” then we will only replicate the previous system in which it is far harder to get out of the system than get in. The result is that the system then ends up supporting senior people with moderate performance rather than give a more junior person the chance of support. The low turnover rate of fellows in the previous model shows that clearly. We must allow this change of policy to take its course (another 3-4 years) before further changes are made.

Respondents: Do not hold a NHMRC People Support Award and have applied for a Research Fellowship

Some more thought needs to be given to supporting a real body of dedicated researchers within this country. I have seen the cost shifting exercises that have been associated with ARC fellowships and fear that this mentality may come to bring down what seems to have been a very productive part of NHMRC.

With limited resources the primary aim is to attract and maintain the best people. Therefore continuing support a lower quality renewal while excluding a better new applicant is hard to defend. Loss of a fellowship should be a real option. However, as continuity is also important, mechanisms such as renewal based on category (ie Excellent) is reasonable. Perhaps a better and more quantitative reflection of performance would be to allow demotion rather than loss of fellowship.

There are simply too few fellowships and hence the competition is too intense. This means that the fellowship, once seen as a semi-tenured position for established excellent researchers is now extremely uncertain.

Ideally there would be sufficient funds for everyone in the excellent category to be appointed, in which case there would be no problem. Given that we are unlikely to achieve that sort of funding level, I think it is essential to make sure that the initial appointment and reappointments require about the same level of achievement. I think the potential for resentment by people who are not appointed but see reappointment of colleagues with lesser achievements is a greater danger than some nervousness about reappointment

The Scheme potentially offers one of the few genuine career paths for biomedical researchers in Australia. This unique feature should be restored. Open competition is fine for maintaining an appearance of equity but the most important thing is to support quality research. Given that there is no lack of excellent deserving candidates for research fellowships, not having completely open competition at all stages of the scheme will not harm research in this country as much as destruction of a career path is doing.

Five years is long enough for a full-time researcher to prove their productivity, especially in relation to others who have clinical, administration, or teaching responsibilities. If the push in NHMRC is to increase value for money, productive researchers should be rewarded and non-productive researchers should not. Providing career security can become a proxy for allowing non-productive researchers to be protected from the competition of other researchers. There is a view that NHMRC does not want to fund researchers' salaries who are currently funded by universities. This position limits top researchers because of teaching and administration commitments. NHMRC should consider an ARC-style approach of offering 50% Fellowships, so that it buys people out of teaching and administration. This is a cost-effective and sensible way of advancing our medical research.

Peaks and troughs during a Fellow's career needs to be recognised. In "open competition" comparison between a Fellow's trough and a non-Fellow's peak could end up with dire consequences for the Fellow's career.

What a wonderful place we live, Australia, birthplace and ex-home to so many excellent clinicians and scientist, forced to leave because the "competitive environment" means that funded places are limited, those that are "less competitive" don't find funding and move overseas, where they make great leaps forwards for the Americans or Europeans!!

The "competitive edge" that means researchers can not get on with their research work, but spend perhaps 30% of the year (conservatively estimated) applying for funding in this scheme that permits them and their family to have security for only the next 5 years. Compare that to positions overseas, tenure offered, a retinue of staff, academic titles etc etc. Why should one participate in research in this country, especially if one is talented and the overtures made from overseas, the research environment in Australia harsh and not conducive to augmenting the potential of individuals, more in effect constraining.

Can the NHMRC sensibly think it can link "career structure" and "open competition"? Research, unlike neo-"rationalist" economic models, can not easily fit into the paradigms usually imposed upon business and financial market management. Human resources, likewise can not. Is it sensible to think that the most intellectually gifted and altruistic of minds (why choose clinical or scientific research otherwise; the pay is considerably less than any in the business sector; less altruistic but equally gifted minds have never entered the paradigm of research and wouldn't in a pink fit) accept conditions of job insecurity in perpetuity? Do they not eventually form these 2.1 child units like the rest of society and have to live in accommodation not 3 hours commuting time away from their work places, which are always situated in the inner city regions? Where, in the current structure, can one settle into a career that will last 30 years?

Continuing fellows already have advantages over initial appointments. They get a 6th year of funding and possibly a 7th if they are not competitive. This Scheme has to fund the best people, full stop.

Seems reasonable to support all those renewing ranked as excellent and fund some new entrants each year. Is the ranking of excellent sufficiently robust/reproducible

There is a perception that the Fellowships scheme is too tough and this may put off high standard junior scientists. The reality is that most of those who have been ejected from the scheme have a significant problem of some sort - most commonly with productivity.

Respondents: Hold a NHMRC Research Fellowship

It is crucial that a strong career structure is maintained in order to attract and keep the best scientists. Without a strong career path, young scientists would be forced to choose occupations with better future prospects. There should be special consideration to scientists that have provided may years of good service to the NHMRC. There should be some loyalty rather than antagonism to the scientists. The current system is very adversarial in nature and therefore counterproductive. Furthermore, there is little or no room for creative science or long-term science. Most science has to be relatively pedestrian in order to guarantee publishable outcomes.

1. Open competition is not consistent with a career structure. Imagine if the principle of open competition was applied across the entire tertiary education sector?

2. Existing Fellows should be evaluated on the basis of the established performance descriptions. Reappointment requires demonstration of continued performance at the appropriate level.

3.Promotion is awarded on the basis of clear evidence of enhanced performance.

Above all the Scheme must support research excellence and provide long term career structure consistent with the original recommendations of the Wills Report. This can be achieved via a refined version of Model 2 whereby Fellows ranked in the Excellent category and above after open

competition in the 10th year are funded and that the 5th year performance review determine whether they meet the relevant classification. Initial applicants should be ranked. New entrants would be supported by a Scheme that is based on excellence and nurtured career structure.

Open competition is entirely appropriate at the entry stage of the career path. Training fellowships, and research fellowships (which should be reinstated) should involve open competition. Similarly, there should be opportunities for repatriated senior researchers or academics who wish to refocus on research objectives to enter the scheme, and it is perfectly reasonable for these entry opportunities to be in open competition, with each applicant for entry being in a position to make their best possible case. The relative proportions of these intakes could be varied year-to-year to accommodate national objectives.

It is also reasonable to drop from the scheme the least productive applicants for renewal - perhaps a figure ranging from 10% to one third might be reasonable. Again, this figure could be independently revised from time to time, providing a reasonable level of control in times of rapid technological change. If a strong case can be made that the new entry applicants outclass the incumbents, an increased turnover rate is appropriate.

“Open competition” as currently applied has resulted in a strong stochastic element being involved in the process of securing continuation of a fellowship. As a consequence, there is no longer any career path. Because it is possible to hold multiple project grants, similar problems with other granting programs are not as pernicious. Nothing is more likely to destroy the career of a scientist than removal of their personal income. In addition to a few individuals who can claim “national hero” status, two classes of individuals will be created. A pool of individuals with strong institutional support will be able to drift in and out of the scheme, essentially providing their institutions with a mechanism of cost shifting their staff bill for teacher/researchers. A second group of people who are unable to secure such support on failure of renewal will be forced to leave science or Australia in order to maintain an income stream. Note that these two outcomes are not distinguished by scientific excellence, but by administrative insight.

It is also important to point out that the changes in renewal criteria were applied to fellows already within the scheme. That is, those who channelled their energies into the development of novel scientific resources, on the expectation of a reasonably stable career platform, have been placed at a relative disadvantage.

Increase funding for the fellowship scheme so that all excellent researchers can be supported regardless of whether they are new or not.

The overall goal must be to attract the best researchers into the RF scheme. This requires a careful balance between new appointment and renewal, because if the scheme looses its career structure, then it will also loose much of its attraction to the best new researchers. Policies should be developed that clearly satisfy both issues.

Competition for elite fellowships can be healthy, but not when it is so tough that the system can not support excellent researchers. Make additional monies available to support the system so that performing fellows are not competed out simply due to a shortfall in funds.

One of the biggest problems is that the international scientific standing of fellows seems to vary rather significantly between different disciplines. In some disciplines NHMRC fellows are internationally amongst the top 1-3% while in other disciplines this appears not to be the case.

The view that Fellowship awards are made through "open competition" is, in reality, a fallacy, when the number of superlative applicants for new OR ongoing positions far exceeds the number of positions available. Peer review for selection of Fellows is probably done as fairly as possible, but I have never heard anyone on a Fellowship Selection Committee claim there was sufficient funding for the number of outstanding applicants they interviewed. The obvious solution is to provide adequate funding to support the individuals who are providing consistently excellent research outcomes.

These two strategies for selecting Fellows could be COMBINED to improve the capacity of NHMRC

Research Fellows to deliver consistently outstanding research outcomes by providing support in addition to the Fellowship itself. Currently, NHMRC Fellows receive only salary support and a small amount of travel funding. There is no mechanism for enrichment within the scheme beyond that afforded by the Fellows' personal research base circumstances. These can vary widely across the Australian scene for geographical and field-of-research related reasons. There is no additional professional development offered to individuals that have been already selected to represent those research scientists with the greatest impact on biomedical research. Other international-based research fellowship programs (e.g. Hughes, Wellcome) provide opportunities for Fellows from disparate sights and in different research areas to link up by running conferences and workshops and by calling for research grant applications in priority areas, all with the outcome of capitalising on the expertise of these elite groups of researchers. Given the financial limitations imposed by current federal funding priorities, I would also suggest that increasing the travel allowance to a level which at least covers the cost of one international economy airfare per annum, would be sensible. Better support for existing Fellows would facilitate their ability to sustain the high level of productivity for which they were awarded a Fellowship in the first place.

It seems to me that the government is potentially wasting a lot of money investing in research fellowships to establish the careers of researchers who may then lose their fellowship at the next renewal, only to take all of their expertise overseas or to leave research. Clearly, renewing fellows should be required to demonstrate that they are performing at a level equivalent to applicants seeking initial appointment in open competition, but perhaps ranking the two groups separately would be the most reasonable approach. This would also limit the potential for large turnover of established fellowships in years where there might be an unusually strong pool of applicants, say as a result of all the fellows from several previous program grants in similar fields being up for renewal in the same year.

Clearly, it is important to ensure that only the highest quality fellows are retained in the scheme. However, the present system provides little or no 'slack' for scientists who have even the slightest and most transient lull in their research productivity. To provide some slight advantage for existing fellows, would have a number of positive effects. Firstly, it would ensure that the fellowship scheme is attractive to the best researchers. The lack of expectation of continuity has made the system rather unattractive. Secondly, it would avoid the wasted recourse of gifted and productive fellows who's careers are cut short by being 'discarded' from the scheme.

The best and brightest will only be attracted to medical research by money AND security

I don't pretend this is an easy issue to deal with, but a consultative process is the first step!

I do mind the concept of open competition, but it appears that there are insufficient funds to re-appoint Excellent Fellows. This does not fit with the idea of a career path. The ultimate outcome will be a failure to attract & keep the best young scientists.

It is imperative for existing fellows and initial appointees that some career structure be maintained. This should not include a "spill' of all positions at each renewal cycle. Continued excellent and outstanding progress should be rewarded with job security and opportunity for promotion. A quarantined number of initial applicant positions would ensure new blood, but maintain the career pathway for those achieving.

To support the number of highly deserving and highly rated research fellows, either more money has to be devoted to the fellowship scheme or the money within the scheme has to be differently distributed. One way of achieving the latter is to encourage joint paid appointments (not just honorary) with university departments. These are not to be administrative positions but true, part-time academic appointments. At present, such proportional appointments are not possible within the Fellowship scheme.

Perhaps existing Fellows could be given some advantage for their first reapplication, but after that would be expected to compete openly. If they cannot compete openly after a decade in the scheme, they are not the best people to hold a Fellowship.

I think that there should be adequate review of all Fellows. Presently there is a 1/2 term report, and individuals close to or below an acceptable standard need to be monitored and briefed asap. I do not believe the current process of extending Fellowships through bridging appropriate if worthy applicants are excluded from Fellowship support.

I do not have a problem with the idea that there has to be some consistency in the criteria applied to people who want to get into the scheme and those that are already in it. This makes sense.

I think whether or not the term "open competition" is removed from the document depends upon how the term is interpreted and also whether removal of the term places amendments in jeopardy of rejection by the government because it no longer follows the Wills recommendations. "Open competition" could still be used to describe a scheme amended as per model 1 below (if the wording was appropriate).

Open competition is fine, as long as the time frames for review are realistic. Five years is not very long between competitions, given that in that interval, the candidate is expected to have won new grants, conducted the research, and written and published the papers. There is little margin for innovative, high-risk research or developing new methods in such an environment.

Based on the number of new fellows entering into the system over the last 5 years, perhaps quarantine a fixed number of new positions that should compete with each other at a given standard. Successful fellows will then enter the established pool and rejuvenate the internal standard which should then be applied for fellows applying for future renewals. Over the years, the two "standards" should equalise.

The changes to the Fellowships scheme were part of the Wills review. However, the changes which negatively impacted on career structure were not actually proposed by Wills, but were an interpretation of a select group of RC at that time.

In any scheme, when success is based on merit, people are happy. However, when luck features too heavily, then there are problems. At present, it is a travesty that we can fund about 80% of project grants rated very good (and thus 100% of excellent and 100% of outstanding) but only fund 50% of excellent research fellows. The clear message is to at the very least fund all fellows who are judged as excellent, possibly even some of the very good. But more than this, a fellowship scheme that claims to have a career structure must have a demonstrable pathway by which performers are able to have some job security.

More fellowships to enable initial applicants to join the scheme and a ten year appointment term with five year (Career structure performance review), would overcome this problem substantially.

In my view, true "open competition" is incompatible with any form of true "career structure". The concept that all fellowship positions are spilled every 5 years and a new bunch of fellows appointed based on ranking in open competition of all applicants is foreign to the employment practices for comparable staff in similar work locations. For the latter, "satisfactory performance" is normally adequate for continuing in the job. In the fellowship scheme, even "excellent" performance following regular stringent external review is not adequate to ensure continuance.

The key issue should be performance at a level deemed to be "excellent". The fellowship scheme needs to be revised so that ALL applicants (initial or renewal) assessed as "excellent" get appointed/reappointed. Applicants assessed as "very good" should not be appointed/reappointed. Ideally this should be achieved by transfer of funds from other NHMRC schemes in which funding currently occurs with a score of "very good". In addition, the criteria for "excellent" might need to be revised. For example, applicants might be rated in five or six criteria (research performance, national/international reputation, leadership, contribution to the profession, research training, translation into health practice, industry interaction, and others) and be required to be rated as "excellent" in three or four or five of these criteria, to achieve an overall score of "excellent".

This also removes the artificial system of ranking applicants within grades. There are currently no systematic guidelines by which performance under various headings (publications, leadership, impact, standing, etc) can be prioritised when considering the

ranking within a grade. Consequently, the ranking's by the individual RF panel members are unlikely to have a high level of agreement. With a cut-off currently in the "excellent" grade, this is a serious problem. If the cut-off were in the "very good" grade, I would accept the imperfection of the ranking within this grade, since at least all "excellent" candidates were supported.

I believe fellows should be required to serve their 5 year term at the level decided at their last review. Fellows should at maximum be permitted one go at applying for accelerated promotion within their 5 year term but this should be conditional on their previous renewal application being for renewal-with-promotion and the promotion was not supported. Fellows who sought and got a renewal at their existing level or a promotion to a higher level should be precluded from applying for another promotion within their new 5 year term. This would prevent unnecessary repeat applications mid-term, which are a lot of excess work for reviewers and the panels.

Open competition of was a key recommendation of the Wills report. There was a general perception that there was "dead-wood" among the existing fellows and that this dead wood arose because there was not open competition between existing fellows and new applicants. The open competition policy should be let run for 5 to 10 years and then assessed rather than abandoned half way through. NHMRC should hold its nerve and pay little heed to the bleating of the self-interested existing fellows who seem to have strong advocates on Fellowship Committee and NARF. I find it outrageous given the NHMRC's preoccupation with conflict of interest that the head of Fellowships Committee, himself an existing Fellow, should be advocating so strongly in a Public Consultation process for a leg-up to existing fellows. Compared with the presentations on Programs and SIPG his performance in setting the scene was biased in the upmost. The NHMRC and RC needs to fix up this actual and very obvious COI before it comes back to bite its collective bottom. I would imagine new applicants would have a very good case to take the commissioner of complaint that the Fellowships committee were perverting the process to benefit themselves.

A difficulty has arisen in the selection of NHMRC fellows in recent years. The removal of 5 year funding from Fellows grants plus appointment of a number of questionable 'lateral' appointees has contributed to a perception that excellence within the scheme is not rewarded appropriately. Failure to give a proper modicum of security to Fellows will not help attract the best.

Research fellows should have no privilege compared to others to compete for fellowship position but it is not fair for fellows to compete with other academics who have had permanent positions backing up. If these academics risk loss of their permanent positions to compete with research fellows for the "open positions", it will be fair but career structure is lost and it is the structure that ARC takes. Thus, NHMRC should make a decision of maintenance of career structure or "open competition" fellowship.

There should be a preference for maintaining existing fellows, but it is ridiculous to have a system that excludes potential fellows who are more competitive than existing fellows. The government should realise that extremely high calibre research scientists are effectively being denied reasonable access to support. This is inhibiting their careers and the innovative science for which this country is well recognised. This stance is effectively denying the research potential and the advantages associated with medical research. The scheme clearly needs additional funding to stop wasting the time of researchers and their assessors.

A career structure is paramount to the success of the scheme and critical for Australian research and researchers. The Fellowship Scheme currently is not a career scheme. Either move to fixed term appointments openly and stop the nonsense of pretending to be a career scheme or fix it. If jobs for all academics, university administrators and NHMRC staff were subject to open competition every 5 years, how would the University and research facilities in Australia run? It is fatuous to think that research can start and stop every 5 years or that people can move in and out of the Fellowship scheme when there are very few alternatives (eg academic positions, industry, University administrators).

The current system is not 'Open competition'. It is mandated when a Fellow has to be renewed whereas new applicants can determine their own timing for applying. There is also little consideration taken of the long-standing contribution made by existing fellows when it is the last 1-3 (supposedly 5)

years that is compared with new-comers.

Open Competition is totally destabilising for the research career structure for fellows.

The scheme has to have new entrants and also has to be a career structure for it to attract the best scientists and encourage them to remain in Australia or return from overseas.

A review of the Fellowship Scheme addressing the long-term funding of the Scheme, the estimated numbers leaving the scheme and the number of new applicants is required. This is essential to determine how many Fellows are in the scheme at any time and to determine the funds that should be allocated to new entrants each year.

This response reflects the common views held by members at a meeting the Victorian division of the National Association of Research Fellows. Most of the participants were regular Fellows, with a minority of Practitioner Fellows, Training Fellows and ex-Fellows. All recognise the current crisis caused by the removal of career structure and its replacement by short term contracts. The agreed view was that the problem must be fixed such that 'excellent' fellows are reappointed as a priority, but this must not be done in such a way as to eliminate openings for new entrants. A failure on either count will wreck the system. We consider question 7 poorly put. Even without 'open' competition, renewal can still be competitive.

Supporting all renewals at Excellent would maintain standards and re-establish a career structure. Open competition is equivalent to contract research and if open competition is continued, then the RF scheme should be abandoned as it is not achieving its goal of having a career structure for the best and brightest.

As an entrant to the fellowship scheme at PRF, I believe I should have had an equal chance of success to those in the system. I have made a significant contribution to biomedical research in this country for several decades, and would not want to be penalised for the fact that I have done so without NHMRC fellowship support in the past. As a way to cushion the exit of those whose performance ceases to be competitive, consider allowing researchers to draw their salary from grants at levels above RO6. Perhaps with a proviso that this would only be open to those who had been in the fellowship scheme for a certain time. As a way of freeing up some salary $ at the top end of the scale, maybe NHMRC should consider 50% appointments, which seems to work well for ARC APF holders, who can then devote half their time to university duties. The 50% of their salary paid from the fellowship should provide a large part of the salary for a junior faculty member.

Any existing fellow who gets a score of excellence should be maintained in the system. The message that gets through to a young hopeful if he or she is confronted with the thought of dismissal at every 5 yr juncture can not be all that encouraging. In fact it may dissuade many of the better applicants who may seek a safer level of appointment at University. The best researchers should be drawn to the scheme.

NO. However, I wonder if the "lack of funds" is that real. If an applicant is not successful in entering the scheme, then a salary would presumably come from a project grant (although this would be lower as PSP5 is below an SRFA). So is the problem more the time commitment for a salary (5yrs versus 3yrs)than the salary itself?

I have personal experience of a NH&MRC Fellow who was renewed then almost immediately had mid-life crisis, deciding that science was not the answer and doing very little for a large number of years. Ten and five is therefore a scary concept to me.

The major criteria should be excellence at all times but within the context of providing a career structure

I would suggest a weighting factor (based on a combination of track record relative to opportunity and length of time in the fellowship scheme) should be applied to recognise the fact that scientists who have performed consistently at an excellent standard over many years are likely to continue to perform to the highest standards in the future. The same factor should be applied to new applicants to ensure that they are not disadvantaged.

A weighting factor (based on a combination of track record relative to opportunity, and length of service in the Fellowship scheme) should be introduced to recognise the fact that long-serving Fellows have maintained consistently excellent standards over many years.

Thank you for recognising that there is a serious problem and asking for input. 'Open competition' as applied now is incompatible with a career structure. Modification to a category-based system as suggested in Question 10 below, might work. The scheme as currently run does not offer a career structure, merely a system of short-term contracts. (A history of employment as a fellow counts for nothing, and is actually a disadvantage because of inability to choose the timing of an application.) This violates the second stated aim of the scheme in the NHMRC policy document and is against the recommendations of the Wills report.

From the national perspective, we MUST hang on to our intellectual capital. Fellows are a key part of this, and each has been the recipient of substantial investment (conservatively a million dollars each, but perhaps much more). From a national perspective it is stupid and wasteful to dismiss fellows performing excellently, as is currently happening. This has to be fixed. Obviously unlimited funding could fix the problem, but budget limitations bring it down to a question of priorities. Assembling a rank order and then chopping where the budget runs out may be OK for grants, but is a lousy way to manage people. For a career scheme to work there has to be rational forward planning and a degree of flexibility to handle fluctuations in demand, not just passive application of the budgetary axe. In other words, when needed, money will have to be made available from other pots (but please try not to squeeze project grants any further). Fellowships are probably the most effective way to invest NHMRC money, as the indicators attest. It makes sense to give top priority to reappointing excellence. Research scientists need continuity to flourish, which is why the NHMRC Fellowship scheme used to be the envy of the world. News has got around about last year’s 40% failure rate of Fellows seeking reappointment. This sends a very clear message to bright young scientists with families, mortgages etc: do not trust your livelihood to this career path. The smart ones will seek alternate careers or pursue science in another country. Issues of opportunities for entry vs. maintenance will be addressed below.

At the moment, there is no real career structure, the fellowships are operated like a "prize". It is difficult to plan long term projects with the uncertain 5 year tenure hanging over our heads. I would like a more structured career plan so that we have a longer tenure term or a more realistic appreciation that careers in research are not always a continuous upward flight to honours and Nobel Prizes. At present a period of consolidation could end a career in science and is therefore a discouragement to us doing risky, longer term projects, which in genetics, means that we cannot be internationally competitive.

I feel the system is currently working well and that it is far too early to say whether the "open competition" policy will have any long term detrimental effects on the scheme. I think the NHMRC must have a rigorous open and accountable system for judging applicants in any given round. I see no rationale to legislate a system of favouritism for existing fellows over new applicants. In effect, this happens to some degree by the interviewing panels, that do take into consideration the impact of "losing" an existing fellow from the scheme. Any outstanding and competitive scheme would be expected to have a degree of attrition. A fellow cannot be expected to be appointed for life - they must remain competitive against others that could rightfully take their place. Fellows should be reminded that they get 2 opportunities for renewal and then can receive bridging funds if unsuccessful. Additionally, for those that may drop out of the system (temporarily), there is nothing to stop them from reapplying, if they are truly competitive.

1. The Australian NHMRC Research Fellowship Scheme has to be one of the most competitive in the world. In reality this is the only scheme providing suitable career support to senior medical researchers in this country.
2. It is recognised that in many cases highly respected, senior scientists who have made significant contributions in their fields remain on the lower rungs of the Fellowship Scheme as they are too terrified to risk their positions if they apply for promotion.
3. This does not provide a nurturing environment for the development of scientific careers and is

unlikely to assist in “bringing out the best” for these highly experienced Research Fellows.
4. If career aspirations are not appropriately addressed, morale decreases and output ultimately suffers.
5. Significant resources and many years of training have been invested into each of these Fellows.
6. The current level of spillage means that almost half of the country’s top scientists (43% of renewing Fellows in 2003 were unsuccessful) will be unemployed after they apply for renewal of their fellowship contracts.

An important point to address is who will be around to train the next generation of Australian scientists?

Making it open competition has devalued this system and will have inevitable consequences for the future of scientific research in this country.

Re-instate the career structure - make it equivalent or comparable to that of the career track non-clinical scientists employed by the United Kingdom Medical Research Council

Re-instating a strong career structure will ensure that the brightest talent stay here and don’t go and give it away overseas (Australian scientists are not regarded as having great opportunities here by our overseas colleagues)

If existing fellows achieve a rating of "excellent" there can be no justification from excluding them from the scheme. To reappoint excellent fellows is the only way to truly achieve a career scheme. If a fellows' rating falls to very good, they should not be reappointed in preference to new applicants ie. they should be in open competition.

In considering applicants, the panels should be instructed to take the full career into consideration. That should give an appropriate slight edge to those already in the system, to deal with the problem that everyone's research has some peaks and troughs.

Coordination of fellowship renewal with major funding (eg Programs) might help. it is currently possible to have to renew right in the middle of program funding, when long term work has not come to fruition. This puts the renewing fellow at a disadvantage with new applicants and also renewing fellows whose funding cycle is synchronous with their fellowship cycle.

I think the performance of the renewing RF should be judged strictly against their own performance in renewal applications. If they have 2 or 3 years of declining performance without adequate reason, it is time to exit. This fits in with the 2 years’ grace. The question then is will this allow adequate places for those moving into and upwards in the scheme?

The 'open competition' aspect of the scheme acts to the detriment of the overall productivity of fellows, through introducing considerable and undue stress during the period around renewal, and by encouraging researchers to 'play the game' to keep their CV up to scratch, rather than focussing on the research itself.

The current scheme is not really a career structure if after 20 years of maintaining excellent research the applicant has to compete with young excellent scientists. Reward should be given to excellent scientist that are in the system for many years.

Consider initial and renewal separately. If a renewing applicant has excelled in all they set out to do when originally appointed (or at previous re-appointment) it seems crazy that they might not be re-appointed. I have great difficulty in reconciling the potential loss of the research momentum in a particular field if a fellow is not reappointed - it implies that the work that has been done, although excellent, is of less value than other work, very likely in a completely different field of endeavour.

While I have nothing against the 'open competition' I do feel that some distinction between the initial appointments and renewals/promotions should be made. It is important to have new stream of fellows coming in to the scheme, but it would also be good to see that the scheme is also supportive of the existing fellows especially as there are very few other research career structures around.

Open competition completely removes any stability from the fellowship position; it is counterproductive to research in that it removes incentive to chase high risk or long term research

ideas, puts emphasis on obtaining the 'quick fix' from experiments to maintain a track record and removes essential career stability from the country's selected force of committed researchers who should be concentrating on their research not on 'dotting the is and crossing the ts' in their track records.

The concept of open competition as it is currently applied is anyway a misnomer. There is competition only between the cohort up for renewal in that year. If you happen to be in an outstanding group or a weak group, your career prospects will be quite different irrespective of your performance. Similarly the current rate of non-renewal is astonishing. How can such a high rate of failure be compatible with any concept of career structure? While it may be good for the initial applicants in the short term, it is turning the system into a cannibalistic process.

I don't understand why anyone should be worried by "open competition", as long as clear criteria differentiate lower from higher levels and competition is within, not across, levels

Too many existing Research Fellows are preforming below the expected levels and are still being given renewal of fellowships (not promotion). This is not appropriate as new/young upcoming researchers don't get opportunity to get into the system as it is clogged up by inefficient and under performing fellows who know that the NHMRC is unlikely to say no to them.

"Open competition" is not a normal industry standard and is only appropriate for tendering processes and some specialist occupations such as politicians. Once in a job or position, renewal is based on performance and not on an open competition to all comers. The degree of uncertainty is completely undermining the fellowship scheme to a point that it would not be considered a career choice by up and coming researchers. The long term productivity of research fellows is second to none and to undermine this is seriously jeopardising the value of the research funds invested.

The reason that I said "no" to problems for initial appointments is that this is a really tough scheme to be employed in. If there is any doubt that the initial applicant is good enough, then this person may fail down the track and have to find another permanent job at short notice, when they are older. Better not to be a fellow than to be known as a fellow who was not renewed. If you apply as initial appointment and are unsuccessful, then this is not widely known amongst peers. But existing fellows who are thrown out of this scheme are more or less publicly humiliated. Therefore, only let in the best to start with.

Initial applicants can choose when to apply - i.e. when the cv is looking its best. But renewals have no choice about when to apply for renewal.

All fellows rated "excellent" should be funded. The initial appointment application and renewal application should be rated separately.

The principle of competition for the award of Research Fellowship should always be upheld. The practice of opening up the position held by current fellows when the chance of renewal is affected significantly by the budget constraint has inadvertently jeopardised the career feature of the appointment.

The policy should declare the transparent nature of the competition of the fellowship award, not the technicality of how this is implemented.

It is important to recognise the inherently political nature of this question. It is self-evident that existing Fellows (myself included), would like to see some security in their career path. Equally clearly, those not in the Scheme but aspiring to a Fellowship would wish their chances to be maximised at least for their entry. Other apparently independent arbiters may be driven consciously or subconsciously by their own agendas. Thus for tenured senior university academics running departments or schools, there is probably a vested interest in a less stable scheme in which they can attempt to move people in and out and to exploit the potential uncertainty. Achieving a truly objective assessment of the situation is challenging.

Ideally, schemes such as this work best if they are dynamic, i.e. if there is a flux. This was envisaged by Wills. It is in reality not the case. Equally true, but not stated here, is the “zero sum game”

associated with the finite level of funding. Within those constraints, it would seem important to provide people with an opportunity to see the potential for a career in research. There is no doubt that even the best people do not enjoy insecurity and will tempted away from research either overseas or into potentially less research-productive environments to achieve that security. Those currently entering the Fellowship Scheme, particularly those in the SRF band, are often confronting the very real issues of mortgages, children, etc. in an environment in which relative to their peers, they are still completely inadequately remunerated.

The ranking of top 5% internationally or top 10% internationally would seem somewhat at variance of the statement on page 4 that the Wills Review felt reappointment should be based on “research performance, leadership, international/national standing, publication record and contributions to the discipline”. The term “international standing” would seem a superficial way of encapsulating the complexities of this assessment. It would seem to potentially undervalue the other components of that matrix.

I favour Model 1 as proposed, as it is still maintaining open competition, but providing a slight advantage to those fellows renewing, to counteract the disadvantages of being an incumbent fellow ie not being able to chose when one renews the fellowship. Overall I see that model 1 gives no advantage to either initial or renewing fellows, but takes away the disadvantage of renewing fellows.

The standards requirement for renewals over initial appointments must be made easier if the Fellowship scheme is to be seen as a career path

Open competition destroys the concept of a career. Such criteria are not applied to academics, who also "potentially" impede job opportunities for young graduates. Academics hold their jobs for life unless they are totally remiss. The original career structure of Fellows never gave such permanence but was definitely more weighted to providing a career structure than the present system. Renewal should be judged on CV on set criteria and not on an open competition basis. This automatically accounts for non performers while maintaining a solid core of functional scientists who can contribute with longer term major research goals.

Keep open Competition - Do not change current policy

The reality of the current Australian medical research environment is that there are few viable alternatives for career researchers outside of the Fellowship scheme. Positions in academia are limited, and place enormous teaching and administration burdens on researchers who then must compete with "full-time" researchers for the research cake, but at least there is a career structure of sorts in place. It has to be recognised that the current lack of a career structure within the fellowship scheme is demoralising and ultimately unsustainable. The idea that the Fellowship Scheme is just another pot of money for University Departments and Institutes to direct their best and brightest towards creates damaging pressure on the system. Within the limits of maintaining research excellence the scheme should set its priorities in the following order: (1) to recognise and protect its investment in excellent research personnel, and (2) create opportunities for excellent full-time researchers at an appropriate stage of their career. Access by all others should be carefully scrutinised and should proceed only if clear benefits will then flow on to the fellowship scheme, and not just to the applicant's host institution.

The initial appointments and the renewals should be considered under separate criteria, ie. to ensure a career structure the existing Fellows should be given feedback on their competitiveness and opportunity to remain competitive.

The Research Fellowship scheme is highly competitive and is aimed at the research elite in this country. However, with the present budgetary constraints, many fellows who are ranked internationally as excellent are missing out on reappointment to the Fellowships scheme. Australia cannot afford to be losing such talent from the system. If the scheme is there to support our outstanding and excellent researchers it should do so. A balance needs to be struck between a highly competitive system and one which is seen as a genuine career path for our best researchers. It is already being seen by many young researchers as an unattractive option because there is an imbalance between remuneration and security. At present it is a poorly paid high risk career. Many of our best

students are now rejecting the research career option as just too hard.

Our up-coming research talent is equally demoralised because the career path ahead is not at all clear. The jump from career development awards to the NHMRC Fellowship scheme is now huge so that the majority will fail this first hurdle. These younger researchers are in desperate need of support at this critical time in their careers. Perhaps a base level Research Fellow needs to be introduced as the entry point to the Fellowship scheme for this rising talent.

First, I thank the NH&MRC for the large amount of hard work and genuine concern that has gone into the preparation of the excellent Discussion papers and the also the very thorough Questionnaire. I see that we are having to do all this soul-searching because we have a relatively low budget, which currently is fixed, and we are now agonising about how best to spend it. The Australian budget for medical research is 1.53% of GDP (2000-2001), ranking 14th in the OECD (OECD average 2.25%).

The NH&MRC Fellowship scheme, until recently, provided a real opportunity for long term funding of excellent to outstanding individuals in biomedical research. One was heartened and inspired that it existed, tried ones absolute best to get into it and, once there, continued within its highly competitive and prestigious atmosphere to stay there for as long as one was still able to be highly productive within the remit of undertaking excellent research. It allowed sufficient "security" within a 4 year rolling time frame to really take the risk, live on the edge and work your heart out to try and make a difference.

I do not know what the realistic answer is to solving the conflict between open competition and maintaining a career structure. The ideal answer is sufficient funding to ensure appointment for all Initial and Renewing Fellows that fall within the outstanding to excellent category; currently funding constraints result in a proportion of those in the excellent category not being funded. My recent enquires have revealed that in 2003, 43% of Fellows renewing for 2004 did not make it. It will already have been pointed out to you by other respondents that Fellows are unusual in having stricter criteria applied to them than within the Project grant scheme which funds all outstanding, all excellent and some very good projects. Furthermore, Fellows have to sustain exceptionally stringent 4 year peer review for little security whilst our colleagues in Academic positions have considerably less stringent review but far more security.

The conflict is absolutely vital to address since the change to open competition has had a serious demoralising effect already. Either Australia is going to continue in its proud tradition of being able to hit above the mark, to which the scheme has contributed significantly, by undertaking outstanding biomedical research, with all the benefits that that accrues, or it is not. I suspect the latter. I have heard it said from the highest echelons of my Institution that changing to open competition within the Fellowship Scheme is one of the biggest mistakes that NH&MRC has made.

The career structure of the fellowship scheme is vital for retaining our scientists in the profession. Fellows must continue to perform at the level compatible with their appointment and career security should not be seen as accepting lower standards. However, I do think it reasonable to rank initial appointments and renewals separately rather than together. This will effectively result in a somewhat higher standard for initial appointments, but that is OK

Open competition itself removes the perceived meaning of 'career' and hence extremely detrimental to the aims of the Fellowship since such applicants would now feel unsafe and move to other fields/positions rather than stay as a successful researcher.

Applications need to be thoroughly vetted to ascertain if they are "genuine". They should not be form individuals seeking a "retirement vehicle " or just not be essentially a cost-shuffling mechanism by Universities. For example, Academic professor applying for PRF. Appropriate screening of all applications is needed to ascertain genuine intent - teaching positions for junior faculty are so unattractive these days so it is important to ascertain for younger investigators a commitment to full-time research.

Excellence should be maintained at the highest level, despite giving more weight to existing RFs

Open competition sounds good, but has disastrous implications. It means that no matter how well a

fellow performs, there is a chance that they may fail to be renewed if the competition that year is abnormally intense. This has happened previously due to the bulge in numbers of fellows caused by expansion of the scheme in the past. This will effectively destroy the perception that there is a career structure for highly successful researchers.

Respondents: Hold a NHMRC Training Fellowship

The stress of 5 yearly open competition could be eased by increasing the increment of open competition to a longer time period (eg 10 years) or only at times when progression to the next level of the scheme is required. Presumably most applicants of the scheme are applying at SRFA level and aspiring to rise through the ranks of the scheme?

If we do not have open competition how can investigators trying to break into the scheme ever get the opportunity?

Everything else in the NHMRC is merit based - fellowships should be too. Existing fellows should be permitted to reapply at any time. That would remove the only advantage held by non-fellows (ie picking their application time based on their peak publication year).

Respondents: Hold a Career Award or Fellowship other than NHMRC funded

There should be a degree of open competition in the RF Scheme to ensure that only the best researchers are being supported and that new, up-coming researchers are given opportunities to receive secure support and that people who are RFs, but are not performing at the same high level as initial applicants will not continue to receive support. A career structure should not mean that once someone has obtained a RF, they will continue to receive one without maintaining standards. Open competition can also be disadvantageous to initial applicants who have not received 5 years of continuous funding and may not be able to compete with people in established RF positions.

I came to Australia as an ARC Australian Senior Research Fellow, i.e. in a scheme that supports open competition at all phases; I have since been supported by other Fellowships in a variety of schemes. My experience is that with a 5-year renewal timetable, one's attention is very highly focussed on renewal; this means that it is not possible to commit significant time to research that has a payoff greater than about 2-3 years. There are periods on ones research career where a succession of short-term goals like this can work effectively - but for long term productivity in research, there are times when one needs long-term strategic goals, which may stretch over several years. Further, by taking Fellows on 5-year contracts, one is positively selecting for people who already have an exit strategy from research, should that be necessary, and hence potentially have a lower commitment to research.

Respondents: Hold a Career Award or Fellowship other than NHMRC funded and have applied for a NHMRC Research Fellowship

It is suggested in the paper that the flaw with open competition is that new entries can choose when to apply but incumbents cannot (and may be forced to apply in a weak year).

If this is the concern, then why not simply allow renewals earlier in the five year cycle? (ie: you can apply early for promotion, why not renewal?)

It is likely that incumbents are slightly favoured anyway in the (subconscious) views of the committee. Any attempt to revert to a system that explicitly favours incumbents is to say that the NHMRC would prefer to support a system based on seniority rather than one based on merit.

It appears that most applicants for SRF level A (bottom of the scale) actually have NO CHANCE of gaining an SRFA fellowship UNLESS they have qualifications and experience equivalent to at least an SRF level B (or greater).

Why not be realistic and say that NH&MRC does not fund (genuine) SRF level-A applicants. OR put in the amount of money that is needed allowing more of the (genuine) SRF level-A applicants to be funded!

Obviously, open competition may discourage to continuation of research projects. Sometimes projects are “high risk”, meaning that results or publications may not be obtained for a long time. Of course, “Wills” review-based initiatives wish to maintain such projects. However, care could be taken to ensure that institutions do not use outcomes of research (e.g. results or publications) as incentives to researchers to force them to undertake tasks not strictly relevant to the research applied for, such as creation of reagent stocks lasting many years beyond their appointment. One way of detecting such practises, if not yet in force, may be to track institutions having outstanding NHMRC initial applicants who consistently perform poorly upon successive applications.

I would keep the open competition component high and try NOT to use it as a long term career structure.

Summary of Raw Comments
Entry Level of Initial Appointment

Question 17: Do you have any additional comments relating to the entry level of appointment requested by Initial Applicants?

Respondents: Hold a NHMRC Career Development Award

I am not aware of any useful guidance regarding the appropriate level to which a person should apply. Perhaps this could be developed?

Inexperience applicants may misunderstand the categories for application. The current process is time-wasting for those individuals applying at the inappropriate level.

If there is a change in appointment, can there be a discussion with (or feedback to) the applicant about why, so that this can be a learning process?

Respondents: Hold a NHMRC Career Development Award and have applied for a NHMRC Research Fellowship

The overall extreme competitiveness of the scheme (lack of funds to support excellent scientists) means that applicants apply a number of times before they get their initial appointment, by which stage they are operating at the top level of that appointment - this perpetuates the continued extreme competitiveness of the scheme and the difficulty of getting an initial appointment.

The committees should definitely have the power to set the level of appointment of the applicant.

The current very high quality of NHMRC Fellows means it may be difficult for initial applicants to judge their appropriate level of appointment, unless they a lucky enough to have advice from within the system which is not readily available to everyone, especially for researchers hoping to return from overseas to Australia.

As long as the entry level is not so low for highly qualified investigators that it makes it impossible for highly talented junior investigators to achieve an appointment.

Respondents: Do not hold a NHMRC People Support Award and have never applied for a Research or Practitioner Fellowship

It is crazy for the applicants to be expected to pick the correct level when there is little concrete info out there as to how to choose levels. The c'tee needs to have the power, in consultation, with the applicant to move them as appropriate. if the applicant chooses to stay in a specific category, so be it.

I think it most important that we do not create a structure that allows researchers to enter the scheme at an inappropriately low level (because they judge their application has a high probability of success). They might then have an extended period (maybe 10 years if the period of appointment is changed) as a research fellow with every likelihood of being able to be rapidly promoted during that time. This would be an easy way into the system, with a low risk of failure, particularly appealing for someone who has other sources of salary funding available.

The assessment (by spokespersons, referees, assessors, head of department) will have been undertaken with a particular level of appointment in mind. Indeed, the application will be shaped with a particular level of appointment in mind. For the interview committee to decide to appoint to another level after a few minutes deliberation is to make it likely that the appointment will not be well considered.

There should be some discretion in appointment levels to allow movement both up and down from the entry level sought. Where an applicant has sought an entry level above that considered appropriate,

but they are nonetheless worthy of a fellowship, they should be offered a lower level appointment. On the other hand, there should also be the discretion to move someone to a higher level for ranking at this level where it is clear appointment has been sought at too low an entry level to try to make sure they get in to the system from where they can seek promotion to the level that they should have applied for in the first place.

This is tricky - there are excellent applicants who apply at PRF (an appropriate level given their experience) who are not appointed as they are not outstanding. They would be appointable at SRF but are seen as too senior..

Must be appropriate for their stage of career - obviously inappropriate for someone who has had a university professorial appointment to apply below SPRF.

In principle, a successful applicant should be able to predict the appropriate level of appointment sought. However, the PRAP/RFC could change that if an otherwise excellent individual would miss out on being competitive for a new appointment. In practice, this could get very messy, especially with regard to the interpretation of assessors reports. So any over-riding of the entry level requested would have to be done very carefully. Still, this is often done with academic appointments.

Any system that relies on having extensive knowledge of the "application system" to be successful could fail to achieve its original task of appointing the best and most productive scientists to these fellowships. The panels should be allowed to shift somebody if it increases their chance of getting a fellowship. However this is where it is vitally important to have the correct criteria in place to ensure that in the end you do not end up with Full Professors at all levels of the fellowship scales.

Respondents: Do not hold a NHMRC People Support Award and have applied for a Research Fellowship

16. Only on Entry

To qualify Q15/16:

1. Appointment should not be possible at a level higher than that requested, RFC should be able to offer appointment at a lower level if appropriate.
2. Applications that are CLEARLY at an inappropriately low level should be rejected.
3. The practice of relatively well-funded institutions expecting their senior researchers (PRF/SPRF levels) to all be funded by the NHMRC must be stopped. If an institution can support initial salaries for these people than it should continue to support them. Using the fellowship scheme to save the institution's own funds is a serious abdication of their responsibilities. The Scheme should be ONE career path, not the ONLY one. If this practice were stopped, competition for PRF/SPRF fellowships would decrease and thus more researchers could progress through the scheme.

The appointment process should be as flexible as possible, based on high performance for career stage and opportunity. If applicants are offered a lower level appointment, it is up to them whether they accept it. Very high performers should be moved up if they are highly competitive.

New applicants, especially those coming or returning from other countries, are less comparable to those in the scheme. Thus the level of initial appointment should be assessed and varied up or down for initial applications.

Respondents: Hold a NHMRC Research Fellowship

Discretionary power defeats the purpose of transparency. Rank all initial applicants.

Recent changes to the Fellowship system has made application for promotion a precarious proposition. RFC should be have to the power to determine, that despite application for reappointment, that a particular candidate is evidently operating at a higher level.

Over the last few years we have seen a significant rise in the number of appointments at inappropriate level of entry - this has been a cost shifting exercise that has provided an unexpected windfall for a number of universities. This alone has destabilised the RF scheme and make a mockery of it, no wonder the younger investigators are finding it so difficult to gain initial appointments

Personally I do not agree with entry at PRF (,and especially SPRF,) level. This is one clear area where cost savings can be made. I also think Universities etc could be encouraged to provide some matching/top up funding so that if a case is sufficiently strong for initial appt at e.g. PRF, perhaps the Uni could make up the salary difference.

I think that a number of appointments at SPRF have not helped the system.

Initial applicants must be encouraged to seek advice from University / Institute Grants Officers and existing Fellows.

Some initial applicants may not have access to suitable advice on appropriate level for application. They should not be penalised for this, and the committee should have some discretion in dealing with this issue. However, steps MUST be taken to ensure that well established scientists cannot apply at inappropriately junior levels. For example, a full professor with 25 years of research experience should not be applying at SRF level.

The current conditions appear reasonable. For initial application at SRF level, the PRAP and RC have discretionary power to appoint at either level A or B (and they should consider moving people up, as well as down). People applying for initial appointment at PRF or SPRF (who would need to have exceptional circumstances to apply at this level) should have sufficient experience to know what level is appropriate and suitable. It is reasonable to expect them to know this.

The RFC should have the discretionary power to appoint individuals at the most appropriate level. After all, they SHOULD be in the best position to compare across levels. If this is unacceptable to the applicant then he/she may reapply.

Assess the applicant openly. Rank the applicant where appropriate. Stop the applicant guessing where they should apply. It's an insult.

Having reviewed many fellowships applications at different levels I am appalled that the scheme has left itself open to abuse by vastly over qualified applicants securing junior level fellowships. We have 'Directors'' with career development awards and SRF level fellowships. This really is contrary to the intended nature of these schemes and has done many worthy junior people an injustice as well as jeopardising established fellows at all levels.

It might be risky to assess an applicant at a higher level than that requested as ultimately they might not be successful in the final ranking. However if someone applies for an initial appointment at PRF when SRF is clearly more appropriate then it should be possible to assess them at the lower level. Although this might make ranking more convoluted it avoids having to go through the process again the next year.

The policy should be about developing and supporting the best scientists and achieving the best outcome for Australian science with limited funds, not using administrative arguments to block appointments.

PRAP and RFC should have discretionary power to appoint at a lower level, but not at a higher level.

This would mostly apply to SRFA and B levels I assume.

The system is broken. My experience as a mentor this year is that everyone I have spoken to is deliberately applying for a level lower than they think they should be applying at to increase their chances. The decision on appropriate level should be made by the Panels with the possibility that the applicant could suggest a level.

In previous Fellowship Committees, the committee decided upon the level of appointment. I believe that this process was fair, and ranked applicants against each other. This is the process for Project, Program, Training Awards, Career Awards. So why be different for Fellowships?

The scheme should be flexible and able to support applicants of high calibre at an appropriate level for their career.

It is crazy to reject an outstanding person because of a technicality, due to unfamiliarity with the system. It is a waste of time, money and talent for all.

While this will make more work for the committee, it is surely the only reasonable alternative. However, it is important not to allow older mediocre applicants to move to relatively junior fellowship levels and thus to deprive junior applicants whose track record may not be as solid but who have a lot more potential in the long run.

For Initial appointment only, the panels should have the power to at least make a one-step down appointment. An overseas applicant is severely disadvantaged by the present system, as he/she will not have a complete understanding of the system.

Yes, be flexible.

The answer to question 16 refers only to the levels of SRFA and SRFB (as is currently the case). Applicants should be coached/mentored into applying at the correct level. Furthermore, once appointed, there are mechanisms already in place for fellows to apply for promotion out of synchrony.

The same discretionary power should also be applied to Renewing Fellows.

One way to address this issue would be for a small committee to provide preliminary advice to potential applicants before they submit their applications. To a large extent this already happens as applicants seek advice from colleagues already in the scheme. Perhaps this could be a job for the state branches of NARF?

The same discretionary power should also apply to renewing fellows.

A consulting committee should be set up to advice the candidate on initial level of appointment.

The difficulty here is distinguishing between competition and appointment. Appointing an applicant at a level he or she did not apply for is possible if the committee so determines. However, if the committee move the applicant to a category where they were less competitive and failed would present difficulties.

I think this only viable in exceptional circumstances. Most applicants would prefer a definite offer at their chosen level than to be thrown into competition with more senior applicants at the discretion of a committee. Perhaps there should be clearer guidelines/criteria for who is allowed to apply at each level, in order to prevent senior researchers applying at the lower levels at the expense of younger applicants.

There would be practical problems if the Committee juggle the entry levels. e.g. Referees will have commented on the applicant based on the requested level so that adjusting the level after assessment would be difficult. The Committee don't know how many places will be funded so they could rank someone at a promoted level and the person might then not be funded.

Many of these apply at a level lower than they should

Applicants should most certainly be prevented from applying well below the level they are currently employed by their institutes as this totally negates the idea of fair and open competition. On the flip side if someone has erroneously applied at the wrong level (either too high or too low) the committee should have the power to re-direct the application to the appropriate level.

I understand that the current practice is not to offer an alternative level of appointment if the applicant is deemed under-qualified (and therefore regarded as non-competitive) for the requested level. On the principle of parity, it would not be acceptable to adjust to a higher entry level of appointment if the applicant is deemed over-qualified for the request level. The application should be rejected as inappropriate though not "non-competitive". The Fellowship Committee should not taken away the right of the applicant to decide on the intended level of appointment. To overcome the difficulty with assessment of applications that are inappropriate, a preliminary screen of the fellowship applications may be performed prior to peer-review. The applicant may then be advised of the outcome and be

offered the opportunity to request a different entry level. It is unlikely that the number of inappropriate application would be significant to create problems of manageability.

My comments above on applicants being aware of a formula for a quantitative assessment of their performance would be useful in this context.

The power should be to offer appointment at a lower level, but not at a level higher than the applicant seeks.

This is difficult.

If an applicant clearly places themselves in a lower entry level just to ensure they get in - that is inappropriate eg a professor applying for PRF and not SPRF or an associate professor applying for SRF and not PRF. But if some-one appears to be genuinely naive & applies for a PRF when they are clearly still at SRF level and would be competitive at that level then the PRAP/RFC should have discretionary power to appoint at that level.

I think it would be disastrous to reject an application based on inappropriate selection of the entry level. If the researcher is excellent or outstanding, the committee should decide where the appointment should start from.

There has been clear evidence of manipulation of the entry level, eg Full University professor of considerable seniority applying for entry at PRF level in order to top the rankings and ensure appointment. Applicants must not be able to "apply down" and go for promotion later

Applicants should not be penalised for not understanding the system.

Applicants should only be able to enter scheme as SRF A or B.

Some additional mechanism is needed to monitor movement of entry levels that is more than 1 level eg PRF to SRFA or vice-versa. the applicant also should be notified that the level considered was altered.

Q16: if discretionary powers to revise levels of appointment are granted, then it should be in both directions (i.e. that applicants also be considered and appointed at higher levels than requested). The difficulty with this whole approach is that because the system operates on rankings, there is always very strong pressure on applicants to "aim low". This is not healthy for the system, as it makes it exceedingly difficult for new comers to gain entry.

The reality is that where people are either stupid or completely egotistical, they will effectively select against themselves; clearly an application at SPRF for an SRF level entry is going to struggle! It would seem that in part, a little better wording around the process, perhaps a little better guidance about applications: words like “it is advantageous to select a level appropriate to this application” rather than “mandatory” would discourage flippant, ambit claims, but also not penalise the genuine misunderstanding.

Clearly, strict guidelines on initial entry into PRF or SPRF will result in the majority of entries at the SRF A/B level and therefore the Committee should be able to appoint those at their appropriate level.

PRAP should be able to change the level up or down

Naivete or greed should not be punished by automatic rejection - that is too severe a response. While I am aware of the need to avoid cost-shifting by established, tenured individuals joining the scheme, this should be readily identifiable and dealt with at interview.

Respondents: Hold a NHMRC Practitioner Fellowship

Alter by mutual agreement. Important to provide mentoring for initial applicants.

Respondents: Hold a NHMRC Training Fellowship

It seems to me that the appointment levels should be brought more in line with academic scales.

Respondents: Hold a Career Award or Fellowship other than NHMRC funded

Initial applicants should be given the choice of whether they wish their application to be processed if their chosen level is inappropriate - this will mean that they can withdraw their application if they are not being considered for the higher level they think they should be appointed at and reduce the amount of work for the NHMRC.

Respondents: Hold a Career Award or Fellowship other than NHMRC funded and have applied for a NHMRC Research Fellowship

The current system forces everyone to "play safe" and enter at the lowest level. Why stymie ambition? It is unclear why the application cannot be open to all levels.

Currently applicants for SRF level A (bottom of the scale) appear to actually have NO CHANCE of gaining an SRFA fellowship UNLESS they have qualifications and experience equivalent to at least an SRF level B (or greater).

Why not be realistic and say that NH&MRC does not fund (genuine) SRF level-A applicants. OR put in the amount of money that is needed allowing more of the (genuine) SRF level-A applicants to be funded!

Summary of Raw Comments

Balance Between the Objectives of Providing a Career Structure for Existing Fellows and Ensuring Equity for Initial Applicants

Question 19: To what extent do you value the ratio between them?

Respondents: Hold a NHMRC Career Development Award

In public health, there are few existing RFs to worry about, so my interest is in initial appointments. As this changes (which I expect it slowly will over the next decade, especially as the existing CDA fellows begin to apply for RFs), then the my desired balance would shift.

Evidence that a career structure is present should encourage new applicants. No one wants to enter a system, no matter how hardworking they are, that they think will only support them for 5 years (and then get rid of them).

60:40 career structure vs initial application

BOTH are critical (a 50:50 split)

25% initial 75% career structure

There has to be new blood, but there also has to be some support for those in the system. I think that since NHMRC is really stuck for money these days that it is probably better not to encourage people to start on such a doomed route. Just keep the ones going who already are there.

Really difficult issue - I think there must be a career structure for people to aim for - I would rather it be harder to get into, but know that once I am in, that there is some security. IF I don't get in then I will change my career path.

80:20. But this really needs to depend on the quality of the applicants, and how much “new” funding is given to fellowships!

See comments above: success rates for initial applicants should be set at > 50%

Respondents: Hold a NHMRC Career Development Award and have applied for a NHMRC Research Fellowship

There must be a mechanism to allow entry of initial applicants, otherwise the system will "wither and die". Yet those in the scheme must also see a clear career structure.

I think a 50:50 ratio.

This is a difficult choice. I support a career structure but I am concerned about reducing numbers of initial appointments. Many Fellows are called upon, contribute and provide leadership roles in the scientific community. All this while maintaining excellent to outstanding research programs. Some consideration needs to be given in supporting this career structure.

Without a career structure the scheme will not be attractive to young scientists, however we must beware of it becoming top-heavy so emphasis on attracting quality initial application is also very important, say of a ratio of 65:35.

This is an unproductive choice

The ratio should be 50/50. Clearly more money needs to be committed to the Fellowship scheme. The research Institutes are expanding with greater numbers of Fellows and the competition from University based researchers is putting too much pressure on the scheme. It is essential to support Research Fellows to maintain the standard of Australian Research.

Pretty much equal. I have to declare that I have a vested interest in having initial appointments protected as I do not currently have an appointment at a RF level.

The career structure is much more important, despite the fact that I am currently applying to enter the scheme at SRF level. If one thought that there was a large chance of being ejected from the "career scheme" after only one 5-year term, one would seriously consider not bothering to apply.

50:50

Respondents: Hold a NHMRC Career Development Award and have applied for a NHMRC Practitioner Fellowship

I value them equally but am biased since initial applications are more relevant to me

Respondents: Do not hold a NHMRC People Support Award and have never applied for a Research or Practitioner Fellowship

Greatly favour the support of initial applicants who will then come under the NHMRC umbrella though they may no necessarily stay under it all the way through their career span.

Both of these are equally important I couldn't choose between them. Everybody wants a career structure but that shouldn't mean any person is disadvantaged because a ration I applied to those quarantined.

40:60

50:50 Without a career structure, it is hard to attract good researchers to stay in Australia. Without initial appointment, people will look for jobs overseas.

Both are equally important

Ideally you would want to be able to do both and NHMRC should push strongly for additional funds to be able to do this. Given the current climate in Australia, this is not likely to happen in the short term. I can see no point in having a so-called 'career structure' if you can still miss out on renewal even though you are considered an 'excellent' researcher. This will only discourage people in pursuing this path in the future - a 5 year, one-off fellowship, or even a renewal after that, is hardly a long-term career. The priority should be to continue to support productive, excellent or outstanding people where possible. However, there should always be some funds set aside for the very best young new applicants each year to try to keep them from loosing interest in a career in medical research and pursuing other options.

New blood & ideas are the life force of research

I find this very difficult to answer - I support both.

I object to double dipping for those with more established careers eg taking $ from universities or hospitals for salaries and using the fellowship funds as pin money or building salary into NIH grants and taking fellowship - these examples often disadvantage initial applicants.

Without a career structure, the scheme is going to be less attractive, therefore, quarantining initial appointments may not be necessary

Seriously I don't think you can quarantine initial applicants. They have to compete on their merits.

I think it is most important that we encourage medical researchers, and one way to do this is to give them some increase in the probability that they will be able to conduct a successful career in medical research, i.e. provide increased support for a career structure.

Equal value

60:40 == Support Career Structure:Quarantine initial applicants

Younger researchers need to be given an opportunity to proved themselves in an independent setting

If you don't support career structure you'll have only poor quality initial applicants - a career in biomedical research is badly paid, badly nurtured, and regarded as unattractive enough as it is. If you want to get the best and brightest you MUST look after them (within reason) down the track (lives are ruined by the current scheme, marriages break up, kids suffer)

2:3

Career structure support is much more important

A lot. Protecting an individual's career structure for at least 5 years is a luxury in any industry. Investment should be made in providing opportunities for new researchers and broadening the critical mass of quality researchers in Australia rather than protecting the ongoing careers of a selected few.

We need more Fellowships - researchers aged between about 35 and 45 are really in between schemes and suffer badly

Those already holding a fellowship have an advantage of protected research time, which may not be the case for new applicants. New applicants should be judged by how productive they have been in research taking into account what proportion of their time has been available for research.

What a shocking question - impossible to answer and impossible to get the balance right while there are so few other career options for medical researchers. The NHMRC really needs to work on exit strategies for senior fellows. They need to convince the universities and institutes that once someone has had a fellowship for 10-15 years they have proved their worth and should be supported - it could be argued that the infrastructure money in effect could fund salaries for these people.

If there is a problem doing both, why are we training so many people. it is a very poor situation if we train people for whom we ultimately have no hope of providing a decent career structure

quarantine:support = 3:1

Both are equally important. The failure of researchers to reach their initial fellowship appointment is tragically common place, but not re-employing senior research fellows with years, or often decades of research experience is equally tragic.

Car must be taken to avoid a scenario that flips between alternating periods of "no entry available" and periods with numerous initial places yet the prospect that the successful applicants will not have a proper career structure.

Career structure 100%

There must be possibilities for new applicants - otherwise young people will not choose careers in medical research.

There always will be people leaving the scheme for whatever reason. If the funding becomes so short that there is in practice little room for any new appointments, then we are in deep trouble no matter what! What makes the scheme pretty much unique internationally and so attractive is that there is a long-term career structure built into it. In the end this will attract and retain the best quality researchers.

The numbers have to be sustainable and need modelling. New fellows are essential, but no use having too many new fellows who all get kicked out in the next renewal.

Career structure should be secondary. Perhaps a way to compensate for this is to allow more loading on the overall career versus the previous five years. A slight rebalancing here may be a better option.

Respondents: Do not hold a NHMRC People Support Award and have applied for a Research Fellowship

Q 18 is Hobson's choice. Of course there should be support for a career structure and support for new applicants. Both are necessary. It is not possible to give a meaningful ratio between these aims.

Very highly - I think its essential that the cutoff be similar for both

I actually support neither extreme position (but we have to answer every question in order to submit!) - it is not "either/or" - leave the system as it is based on performance. I think the major problem with the current system is that it is heavily weighted to biomed science and has only small numbers of clinical and public health fellows. The Practitioner Fellowships are going some way to addressing this

Highly

Now what life issues would engage the minds of researchers?

Paradigm One: support career structure: once having earned a position for ones excellence and assuming one continues to work well and remain productive, one has financial security, can plan to have a mortgage, children (perhaps more than one, assuming not living in a small flat) even think about private education for their high school. Gifted initials wait a year or go overseas.

Paradigm 2: Quarantine Initial Applicants: Excellent researchers with a life devoted to science, in a year with many excellent others, may not be funded. Good-bye career, good-bye aspirations, good-bye work, because that researcher leaves or spends the next year writing earnest and fervent grant applications. An excellent initial get funded and starts their career. Economic rationalism gone mad in a paradigm it does not belong.

All applicants should be rated together but a small bias to renewals could be appropriate.

Obviously, both renewals and initial appointments are important, but I think that the alternate career options for a exiting fellow are probably greater than for a more junior scientist who has yet to be given the chance to prove themselves in the NHMRC scheme. This opinion, of course, is coloured by my being someone attempting to enter the scheme!

Q 18 is Hobson's choice. Of course there should be support for a career structure and support for new applicants. Both are necessary. It is not possible to give a meaningful ratio between these aims.

See comments above re importance of a career structure. It must be possible to do both - the only issue is how many initial applications are "quarantined". Restricting quarantined entry to SRF level will help.

Again the two key issues will always be total funding for the scheme alternative career support

If the goal is to keep people who happen to enter the scheme early comfortable, career protection should be the priority. If the goal is to enhance Australian medical research and has a system that is MERIT BASED, the priority should clearly be on initial appointments that are based on performance.

Respondents: Hold a NHMRC Research Fellowship

This is a very difficult call, but it seems that a fellowship renewal, ranked as having had excellent performance, should not be put in the position of having to find a new career path after 5 or more years of commitment to the research fellowship scheme. Initial applicants will still have the opportunity to enter the scheme, but it may be limited to those who receive an outstanding rating. The question posed in this section does not seem to make sense, (what is the ratio between them? what type of value?) so I am not sure how to answer it directly....70:30?

Without a strong career structure the system will collapse.

I believe that the system will not survive effectively without growth. The RF system can then only be viewed as a temporary diversion before doing something else. Australia's population grows, research expenditure grows, the number of graduating PhDs grows: the RF system must also respond or else our young scientists will choose to stay overseas or we will see a downward trend in young people who choose biomedical scientific careers.

95:5; once applicants enter the Scheme, they should be supported by a Scheme that fosters excellence and provides career structure.

3:1 ratio.

I support a model where all Outstanding Renewal and Initial applicants are appointed and where all Excellent renewals are appointed. It is desirable that most, if not all, Initial "Excellent" applicants are appointed. If funding was not sufficient to cover all "Outstanding" and renewal "Excellent", funds would need to be moved from one of the other schemes (eg. programs). Model 1 only works (as a competition model) if all Excellent renewals are considered equal.

If there is little career structure then there is limited value in new people entering the scheme. It would be best to support both initiatives. If this is not possible, I would favour the career structure option 2:1 (or perhaps 60:40).

Both are vital. However, the scheme will be less attractive without a career structure and the quarantining of initial appointments may then not be an issue.

They are equally important

This is a stupid question - it is not one or the other. the current system certainly provides a career structure for researchers that continue to perform at the highest level (cf their peers - ie they are ranked highly) as well as providing a level playing field for new applicants. Again - stop listening to the bleating of fossilised fellows and create a Committee that is not so blatantly self-interested.

Both are important. As stated above, excessive turnover of fellows is a waste of the investment that the government has made in educating, training and then supporting the initial career of fellows, if they are inappropriately terminated despite excellent research performance. However, funding must be made available for new fellows also, especially as current fellows progress through the scheme. The proportion of NHMRC funding available to the fellowship scheme may need to be changed to address this adequately.

This needs to be a balance, but the present system has greatly devalued the attractiveness of the scheme.

Question 18 is impossible! BOTH renewing and new applicants are necessary to sustain a vibrant scheme.

This is an impossible question! Both are important and to place a greater importance on one at the expense of the other is fraught with danger!

Career structure has to be supported for applicants who are judged to have performed at a level of excellence. This should also apply to new entrants. When it comes to competition for these places with the category of excellence then the career fellow should be ranked higher.

The guidelines for filling in this webpage give various possibilities for comment on how the Fellowship Scheme is faring. When I got as far as Question 18 I felt it would be wrong to answer it, as I had had enough of validating robbing Peter to pay Paul, when both are necessary for the existence of the Scheme. Quotas, reserved places, and balancing cut-offs between new and existing applicants will not help the health of the Scheme, merely shift the damage zone. Crisis management within the present budget is of course needed, but only those with the full data, unavailable to those who are putting in submissions such as this, can make a responsible decision on these operational issues. Why ask the research population at large?

Clearly, the NHMRC's research personnel schemes are in crisis. The evidence is there to see within the on-line document we are asked to respond to. For instance, the Practitioner Fellowship Scheme talks of "open competition" between cycles as a definition of a non-career scheme, while the Research Fellowship Scheme uses the same descriptor to characterise a career scheme. Clearly, the funding crisis for its research personnel is so severe that NHMRC has been driven to Orwellian doublespeak. The below paragraphs summarise a major broad issue that has not been discussed. It is the only way out of the mire, and provoking discussion on it is necessary.

The fundamental cause of this crisis is an unwillingness to accept that the fulltime medical research job market is like any other, requiring the entire pipeline to be taken into account to make it work. It has, however, been ruined by piecemeal planning at government level, so that the balance between

funding for trainees and experienced workers is now quite out of kilter. To use the traditional term, Manpower Planning is quite lacking. If a reasonable balance is not the restored, the current trends will worsen, and the Fellowship Scheme will have largely degenerated into another one-off Post-Doc possibility, of little use for the career aspirations of even the best.

There are three obvious ways balance could be restored. Partial success in all three would achieve better results than setting unrealistic goals in any one of them.

1. Reduce the number of PhD Scholars universities accept in the biomedical sciences until funding for research careers further along the pipeline is in place. The number of PhD graduates to come out of Australian universities has grown exponentially, yet funding for research positions, government or non-government funded, has not. This is the fundamental driver of the wish in many quarters to have a faster throughput of Research Fellows. The likelihood of a reduction in PhD graduates is of course remote, since university funding policies would need to be overhauled. In any event, Item 2 is much preferable.
2. Put more money into the merit-based NHMRC personnel schemes so that there is a recognisable link with the size of the PhD output. Thus the potential achievements of the excellent-and-above researchers generated by this exponential expansion of PhD graduates would be realised, and their legitimate career aspirations would be met. This, we are told, will not happen. If so, act on Item 1, and give hard thought to Item 3.
3. Make the other major route of academic employment for excellent PhD students and Post-Docs contestable. This is the least mentionable or likely of the three, but we all know it is a large part of what drives the present financial crisis for NHMRC, since academic positions are the largest part of the relevant job market. At present all the contestability falls on the numerically much smaller Research Fellowship Scheme.

I have recently witnessed a real-life example of why Item 3 should be brought out into the open. The university department that houses me had 41 applicants for a lecturer's job late last year, and the committee was "very impressed" by the high standard of applicant. It would of course been unthinkable to throw the CV's of the present 10 lecturing staff into the same pot, and pick the best 10 from the resultant 51 on the grounds of the university being merit-based. Yet this, of course, is how NHMRC now treats its Research Fellows. It is, unfortunately, no more acceptable by this or any other university to replace even the least productive incumbent lecturer with the second top-ranked applicant from the 41 aspirants, many of whom were medical researchers at Post-Doc or Research Fellow level trying to get out of what to them has become an unacceptably risky way of earning a living. So they struggle on, knowing they are viewed as "clogging up" the NHMRC system for the nextcrop to graduate. Thus it has to be admitted that an important part of the overall equation of supply and demand in biomedical research is the tenure, or "continuing" system run by universities. Universities gladly accept the extra income that the Government's exponential increase in PhD scholars gives them, yet, by retaining the principle that academic positions are non-contestable, protect themselves from the oversupply problem of their making. Within the large biomedical field, this excess supply they generate is forced to set its sights upon the NHMRC's research personnel schemes.

The present gross imbalance in government funding along the career pipeline means that much training money is wasted, and the reasonable aspirations of very few medical researchers at any level of experience or expertise can be met. The few well-endowed Institutes with many of the characteristics of private enterprise organisations are a special case, and can absorb few more staff. If this gross imbalance along the pipeline is not corrected, the career Fellowship Scheme will continue to collapse into another Post-Doc scheme, its funds being used to satisfy the immediate demands of researchers who, while aware it is no solution to their career aspirations, nevertheless prefer a stay of execution to being unemployed.

To do less than state clearly that this funding imbalance along the pipeline is the problem, and that addressing it is all that can rectify matters, is akin to believing that if only someone could have come up with a highly original way to rearrange the chairs on the deck of the Titanic it would not have

sunk. This survey will generate many well-intentioned proposals about deckchairs, because in my view these are what are requested.

Finally, having pride in more and more stringent competitiveness is no solution. NHMRC is not about running a Sydney Piano Competition, but generating the best medical research. To do so it must organise ways to convince Government that this cannot occur without people who are exceptional, and prepared to gamble their careers on making it happen. See Items 1, 2 and 3 if they ask how this could be done. I fear they will not ask, because they know it would cost them money, and upset current university funding patterns.

This is a nonsense question. If there is no career structure (as at present), then the number of initial applications will decline because the scheme will increasingly be seen as an unattractive option. Failure to address the career structure will solve the problem of needing to quarantine positions for initial applicants.

The key issue is the fellowship scheme is having to cull a substantial number of candidates who score in the "excellent" category. This is not happening in any other NHMRC-funded scheme, where funding cuts out in the "very good" category. Funding should be shifted to the fellowship scheme to give parity with the other schemes to ensure all "excellent" candidates can be supported, whether initial or renewal.

The Fellowship scheme cannot be a closed shop but there seems to be no good information on what the turnover rate actually is. If the Scheme stops growing, then 20% of appointments per year equals an average of 11 appointments. This seems a reasonable level for initial appointments.

The Fellowship Scheme will not work if the career structure support fails. Equally, there is a huge gap in available funding in Australia after the initial post-doctoral phase. Consideration should be given to moving a large proportion of funds going to Program Grants into support at Fellowship level, across the board (SRF-A to PRF).

It is vital that some room is made for initial appointments, but this should really be for those applicants in the "Outstanding" category only.

It is of utmost important to have a career for scientists otherwise we are going to lose excellent scientists. On the other hand we should give a chance to new scientist to enter the scheme. There is no point in initial appointment if career structure is not maintained.

50:50

90% renewals. 10% initial

A ratio may be 80:20

Maintenance of career structure is paramount, however it is also essential that excellence in incumbents is maintained, and opportunity for turnover in the scheme and room for new appointments.

Ideally, both goals should be achieved. However, looking after the future is the more important of the two goals.

There should be no quarantining for initial applicants; all that are

Judged to be excellent should be funded. All fellows that maintain a very good rating should have their funding maintained.

Ratio is important but throwing out experienced people because of a couple of bad years just does not make sense.

60/40 initial:career

Both are critical really.

The question makes no sense. It is the bureaucratic equivalent of asking "Who would you have me murder? Your wife or your mother?"

This is a ridiculous question, both are needed for the scheme to survive beyond a few years. If only one of these is funded the scheme will collapse. It is hard to understand the logic in the question.

Supporting a career structure includes having a minimum number of new appointments at junior levels.

3:1

Independent bibliometric review has demonstrated the value of the fellowship scheme. If forced, make the scheme harder to get into, and give some greater career security.

If not, we will return to the old scheme where fellows lost their fellowship because a single project grant (that had their fellowship attached) was not successful.

70/30

Fellows trying to enter the Scheme will opt for open competition, while those already in the scheme will opt for a career structure - this results in a hopelessly divisive situation.

10 year appointments for Renewing Fellows with review at 5 years.

Most respondents will have some level of self-interest in their responses to these questions. However, it seems of dubious social benefit to invest may years and thousands of dollars in developing the skills of researchers, only to have a highly insecure career system with high rates of turnover. Having said that, I have no knowledge of the actual rates of turnover or loss, so am arguing from principle.

Question 18 is really like 'Solomon's choice' - mandating either is not the right answer, but I do favour stability of existing fellows marginally over that of new applicants. I feel the problem with the latter is not that of open competition, but rather the capacity of the scheme (i.e. 300 fellow cap).

60:40

This is an artificial question, but would value them equally.

If no career structure abandon the scheme, and put the money into more project grants. This would be an absolute disaster for medical research in Australia but at least the pretence of a scheme would go.

This invidious question implies failure. The system will not work without both.

60:40

I refuse to answer question 18. You need both a career structure and some quarantine for initial applicants. Likewise the comment relating to the extent of valuing the ratio between the sides of the coin will depend on the nature (all outstanding/excellent? Some outstanding excellent? Etc) of the Initial and Renewing applicants. If one assumes they are all outstanding excellent, then possibly 20% Initial : 80% Renewing. The issue would probably need to be addressed with mathematical modelling to take into account the duration of the appointments, the natural loss from the system, the likelihood of new applicants, etc, etc.

The "career" should be for 10 years. After this open competition is reasonable - but not easy to apply,

I actually think that they are both equally important, and the NHMRC might consider re-allocation of budget across other areas of funding to ensure that we do not have to make a choice between these two fundamental strategies.

Support career structure is very important but not at the cost of initial appointments. Moreover, career structure should not promote substandard performance.

This is a difficult question. However, the career structure element should be maintained first but I also do not have a problem if a number of positions were quarantined for initial applicants at the SRF level.

10-20% initial applicants - at SRF level

This is difficult. From the output of science perspective, a career structure is essential.

I would support a 2:1 ratio

This question is a very poor one!

We need the career structure otherwise people will NOT return to Australia for a 5 yr position that might go nowhere - some prospect or degree of certainty is needed.

We need money to keep adding the bright "younger" faces.

There is no point in having a fellowship scheme if it does not offer a career structure. I do, however, favour the quarantining of some initial appointments but ONLY at the SRFA level. Initial appointments should definitely not be made at SPRF level and usually not made at PRF level.

The support for a career structure is paramount, as this is represents a long term investment in individuals with a proven track record.

60:40

Stability of funding for excellent category fellows is absolutely mandatory for this scheme to be viable; ultimately it is also more important for new applicants too and therefore must take priority.

How long is a piece of string? This question cannot be answered in isolation. There needs to be some careful modelling against total throughput and also in regard to workforce needs. The fact that the Career Development Awards are currently funding over 30 people each year should produce some indicative numbers against which a judgement can be made. I suspect that a number of positions between 5 and 10 should be quarantined at SRF A for initial entry.

Both strategies have the same aim of protecting the career structure.

While both are important, a respectable career structure for Research Fellows has to be in place - otherwise we'll lose good Australian scientists to other countries.

Very difficult decision, almost 50:50

80 career structure/20 quarantine initial applicants

Unreasonable to choose

Modelling of the appointments, career path, and fellow exits needs to be undertaken to provide a formula that allows both. This would provide both those gaining entry into the scheme and those in the scheme a clear picture of the career structure, and government with a basis for funding to maintain the system.

This is a nonsense question, since it is obviously possible to have both and neither. The value placed on one or the other will be determined by whether one is inside or outside the scheme. The challenge for the NHMRC is to create a scheme that is viable and deals with both imperatives in an equitable manner.

75% Career Structure and 25% Initial Applicants

The need to support a career structure should only slightly modify the use of funds - it equally important to attract new applicants.

I consider them to be equally important. The NHMRC invests in its RFs and getting in is no mean feat. A system that readily tosses them out, blocks promotion or makes it exceedingly difficult to renew, is simply inefficient use of its investment.

Support of career structure for those who have met the criteria for entry AND who meet the criteria for renewal must take precedence.

50:50

While I believe it is important to provide secure career structure this is a very close call as it is also extremely important to encourage dynamic entry into the system and to ensure that a high level of excellence is maintained.

There must be a balance. Either one without the other would be a failure.

If this is not to be a career structure, but rather something that one can lose as easily as one can lose a project grant, the upcoming young scientists will not even see it as a career structure. For it to remain a career structure, it would be important that there is at least 10years of support (provided of course that productivity is maintained: review during this period is critical if we are to maintain standards). While I value the importance of always making initial appointments, unless there is some incentive in terms of security, then there will not be initial applicants. They will go overseas.

Question 18 is inappropriate. The failure to do either stops a viable fellowship scheme.

90%career:10%initial.

It would be unthinkable that there should be no new fellows appointed in a given year, but it should not be expected to be a large number or that will ruin the scheme for all.

Question 18 is pointless. There have to be new entrants and there has to be a career structure to make the Fellowship Scheme attractive. The balance between the two will ultimately depend on the funding that NHMRC devotes to the scheme.

Initial applicants could be reviewed in open competition at 5 years, but once past this point could be reviewed in open competition 10 years later (ie 15 total) with a performance review mid term.

30:70. In the interest of science it is vital that promising candidates get a chance to prove themselves even at the risk that excellent scientists that are quite at the highest international level may drop out of the scheme later in their careers.

70:30

These are both important but a long-standing contribution to Australian science and teaching from a researcher should count for more than it currently does.

The career structure people have had millions invested in them already. To not protect them would be a very wasteful exercise and most will not recover momentum and leave research or Australia, with their teams of people also unsettled. Initial applicants will tend to be younger with smaller teams more flexible and able to adapt. That said neither should be ignored if they meet a standard of excellence. Judging people against a reasonable standard and funding all that make that standard should be the aim of this scheme. No type of competition is fair if there are not enough funds.

The scheme has to support continuity, provided that a reasonable standard is maintained.

The career structure offered by the fellowship scheme ultimately affects the career progress of more junior scientists anyway, since if someone loses their fellowship there are negative repercussions for the fellow's students, postdocs etc. Consequently the ratio is probably 70:30 in favour of career structure.

Both are important. The question is very negative. If both are important then the NHMRC should be able to provide a compelling case to the Minister for new funding.

Very difficult and hard to answer. I would support career structure.

As mentioned above, attrition must guarantee some new places in each round. The scheme proposed above, would also supplement this. Overall, the scheme will not be credible or attractive to top researchers if the career structure becomes a lottery

I'd put 70% emphasis on career structure, 30% on protecting new applications

It is nonsense to say it is 'not financially possible'. If the priority is high enough both can be achieved.

Respondents: Hold a NHMRC Practitioner Fellowship

The NHMRC needs to support BOTH. It would be foolish to put in a position where NHMRC had to choose between one or the other, because of lack of funding.

System has been ossified at the higher levels and too difficult to get in at entry level. Perhaps the number of levels part of the problem - maybe reduce to RF and SRF. Higher levels get lots of recognition, and sometimes financial support, in other ways.

Respondents: Hold a NHMRC Training Fellowship

Everyone should compete with researchers of comparable career stage, regardless of whether they have previously held fellowships or not.

80% support of career structure - it appears pointless to support applicants initially if there is almost no possibility of them being able to continue in the system.

Us initial applicants don't ask to be handed our career on a silver platter. But I think we need a reasonable timeframe to get established and show our independence.

I think in reality they need to be fairly even but as an early career researcher I have a vested interest to ensure that initial applicants are protected so that I have some hope of actually entering the scheme!

This question is going to depend very much on the level of the person answering the questionnaire - are they initial applicants or are they already in the scheme?! As a training fellow who will sometime in the future want to be getting into the scheme I would say Quarantine Initial Applicants, however supporting a career structure for renewals is vital. If there is no career structure for renewals I hesitate to continue my research career anyway, but if I cannot get into the scheme - so what?!

Respondents: Hold a Career Award or Fellowship other than NHMRC funded

60/30

I think there should be a higher bias towards quarantine for initial applicants to prevent the establishment of the system where senior researcher are continued to be supported despite the fact that they are not performing to an outstanding level, limiting opportunities for junior researchers.

Hard to put a number to this, but its important that renewal candidates are not sheltered at the expense of initial applicants.

I am currently applying at the entry level, but I still support career structure because the scheme is not useful if it cant provide SOME security to established heads of laboratories. This has a trickle down effect because these individuals can then stop defending their own career position and spend mentoring the advancement of more junior scientists around them. Success as a mentor (demonstrable career advancement of their students and post docs) could be one criteria used to assess future renewals and promotion of Senior Fellows.

Respondents: Hold a Career Award or Fellowship other than NHMRC funded and have applied for a Research Fellowship

Helping persons get started and then having no continued support can generate a social type problem in that the loss is more likely to occur when job-security is most needed (kids/ mortgages etc).

More support of the initial applicants to help people enter the profession. I suspect that other mechanisms need to be provided to fund the senior section, and those who need to find alternative areas for employment.

This is a trick question. Both answers imply abandoning the system of open competition. I suspect this will be used to imply that X% of researchers support quarantining etc, where many may prefer the current system.

Why isn’t it financially viable. Just accepting that government won’t fund this isn’t the right approach. If government truly values medical research then they should be made to put their money where their mouth is. It might be better for the scheme to collapse and have the Government deal with it that continually making stop gap measures to keep a system going that clearly is unsustainable.

Summary of Raw Comments
Exit Strategies

Question 20: Do you have any suggestions regarding “exit strategies” from the upper levels (PRF and SPRF) of the Research Fellowship Scheme?

Respondents: Hold a NHMRC Career Development Award

If the PRF and SPRF were available for part timers (40% upwards), then this may be an attractive exit strategy for them. Certainly when I reach 55 I aim to be semi-retired, and being able to undertake research part time would be ideal. There are currently few (if any) options available for scientists who want to keep on with their research part time.

Get industry and NGOs and philanthropic organisations to support high level fellowships. Based perhaps on the model by which the Heart Foundation support CDAs. That way the NHMRC money goes further. Also make the fellows retire at 60.

No - only thing I can think of is for people to have their salary on a program grant. Otherwise they will have to find positions within industry or universities.

Respondents: Hold a NHMRC Career Development Award and have applied for a NHMRC Research Fellowship

Is there a nursing home for ex-Fellows in the pipeline?

This question is a little open-ended and its purpose not entirely clear. Firstly, appointment at the PRF and SPRF level should only be made to extra-ordinary candidates. One method of "exiting" senior level scientists is to find an alternative source of salary. However, unless bequests of endowed funds for personal Chairs becomes a normal part of Australian Universities (eg as it is in the USA) is would appear difficult to find alternative salary sources for PRF and SPRFs. If the question means giving PRFs and SPRF a "bridging" year before "exit" - then this is appropriate.

Perhaps encourage older researchers to become part-time but NOT for an unlimited time.

Respondents: Do not hold a NHMRC People Support Award and have never applied for a Research or Practitioner Fellowship

Can ask the fellow at application and at review to identify possible exit strategies eg with their university, with collaborating industry partners, with Foundations or other bodies and then these can be actively pursued over the 5 year period. The NHMRC could put the onus on the administering institution to pursue solutions in the signature page. However, I would not go so far as to make the lack of solution a reason for non-reappointment. Currently, an NHMRC fellow can successfully apply for a University or other position and not relinquish their fellowship. This loophole could be tightened up, although some bridging funds might be needed esp if the alternative positions paid less. NHMRC could also work more collaboratively with Universities etc to provide part funds for fellowships ie. leverage money to expand the scheme.

The current system of 'tailing off' support works well; it allows a significant number of researchers to recover their performance and re-enter the scheme after a sixth year of funding, and it supplies a softer landing (e.g. an opportunity to disband their laboratory in an orderly way) for those who do not make it back into the scheme.

Retirement! However, more seriously, the universities now all have research institutes within their walls which can (and have) take over from the block funded institutes in providing senior tenured research positions for the very best of the best.

Some organisations now allow people to gradually reduce their full time positions. This is often an attractive pathway for older staff allowing them time to develop alternative interests & financial support

Consideration should be given to long-term fellows who are winding down their research efforts but who have maintained a high standard throughout their careers. This could take the form of perhaps part-time fellowships or reduced-term fellowships.

At the "outstanding" level I assume many people gain PRF, SPRF positions in their early to mid 40's, giving them 20 years at these final levels. As they become more and more senior in this scheme I think they should be encouraged to seek alternative funding for their salaries through their institution or elsewhere outside this career scheme. I assume very senior researchers would often get their salaries supplemented by their institutions anyway for administrative work or just excellence in their field. NHMRC could help this transition by providing part of their salary over say 5 years as they move out of the fellowship scheme.

Just answered this question above. A system similar to the one in the UK could work here. I understand that after a period of time on a fellowship (Wellcome, MRC etc) researchers move on to University appointments. There are funding issues here for the Universities and Institutes but they need to be faced and worked through

You cannot force people to leave the scheme! The ability to reach the highest level of a scheme like this is one of its real benefits. If there is a problem with the scheme becoming too top heavy, then perhaps the reappointment criteria should be tightened even more, so that SPRF are not mostly office-bound administrators (as important as this may be...). You could make the SPRF level "fixed-term" eg 10 years, but then what would productive, senior, full-time researchers do?? There is nothing else out there. So we have to make the present scheme work.

With good commercialisation strategies there need not be exit strategies. If big pharmaceutical companies in Europe can support over 50,000 employees world-wide (e.g. Novartis) and still make after tax profits of 200-300 million $A equivalent per year from sales of only 5 or so profitable drugs, surely NHMRC can commercialise its research sufficiently to support its existing fellowship holders plus some new entrants. In the 1990's one Swiss Pharmaceutical giant (Sandoz - now part of Novartis) offered the Scripps Research Institute in La Jolla, CA, USA $US 250mill/yr (i.e. more than current NHMRC total annual budget) in exchange for exclusive rights to commercialise IP from that institute.

Criteria for non performance should be clearly stated.

A 2- yr stop gap

The NHMRC could take it on itself to solicit funds from industry to create a few named personal chairs, every year, to which highly selected high achievers, at the top of the scheme could move. These would be prestigious to the company, the individual and the institution

NHMRC should be committed to supporting – and only supporting upper levels who are research-productive

Universities (and Institutes to a lesser extent) benefit from substantial infrastructure funding that they receive directly as a result of the Fellows they administer. Here I am specifically referring to the funding that comes as a result of the fellowship itself, not the other grants held by the fellow. This funding "windfall" should be hedged by the Universities against providing chairs and other appropriate appointments in the future as exit strategies for fellows.

This relies to a large degree on the health of the general industry. Jobs in biotechnology, government, industry, education etc need to be encouraged by lobbying governments about their role in developing this industry. The Support Enhancement Options are a positive way to encourage NHMRC Fellows to contribute to development of industry and hence to development of alternative career paths that would function as exit options for Fellows.

Respondents: Do not hold a NHMRC People Support Award and have applied for a Research Fellowship

I do not support continuing to fund fellows beyond retirement age at this time - they should take up their superannuation (while they still can) and free up places for young researchers. Another possibility is to encourage part-time fellowships (like the practitioner fellowships). The only alternative is to put more funding into this or another scheme.

There should be more joint fellowships. Some could be funded by hospitals, universities, industry etc.

There should be more joint fellowships. Some could be funded by hospitals, universities, industry etc.

PRF/SPRF appointments have to be productive and competitive and should be judged on their performance.

There should be an exit strategy based on productivity and nature of the research contribution. This is as varied as the individuals who are part of the scheme. However, at the upper levels, there should be a mechanism to reduce the NH&MRC contribution to salary if the senior appointee undertakes less direct research and more administration.

Respondents: Hold a NHMRC Research Fellowship

Encourage part-time Fellowships at the senior levels.

Possibly, a company could be set up to match the higher level fellows with business in order to facilitate the movement of the fellows to appropriate positions in the commercial world. Another possibility would be to give the senior fellows a special grant, based on years of service and quality of research, to cover salary and research for the final years in the system.

Maybe age should be a limit somewhere between 65-70.

One possibility is to allow for senior fellows (RPF/SPRF) to take part-time fellowships, so that they could undertake research management or other senior administrative roles. Even partial commercial appointments or other types of professional consulting and advisory roles could be allowed in the proportion of a senior fellow's time not funded by NHMRC. This latter suggestion has potential benefits for increased commercialisation of research and research transfer. Another possibility is to allow more senior fellows to go part time in the later parts of their careers, in similar fashion to older academics nearing retirement.

Get rid of comparatively non-performing existing fellows.

It is now very difficult to obtain academic or industry positions at a senior level without appropriate career experience in those areas, which by virtue of being research-only, RFs seldom have. The concept of the RF scheme as a vehicle for movement from research-only into academia, industry or other areas is now outdated and non-viable. Moreover, it is not a desirable step to lose the NHMRC investment in the RF at a stage when they may be highly effective, but due to their seniority, less demonstrably competitive in publication output than younger RFs making fewer or no external contributions. Negotiation of jointly-funded positions for research-only fellows within institutions would be one option, or brokering research-only positions funded by other sources.

Genuine, joint appointments with academic departments at Professorial level should be encouraged.

One thing I think which would encourage or facilitate movement would be for the NHMRC to fund training for more senior fellows to undertake courses such as an MBA, accounting qualifications, personnel management, and allied management areas, etc. These could provide senior fellows with necessary skills (and confidence) to consider a move into management positions in the private sector, tertiary education sector or hospital sector.

There are two types of "exit" that need strategies. First, exits for fellows rated as "excellent" but unable to be supported due to inadequate funding of the fellowship scheme (ie: involuntary exits). And second, options to encourage continuing fellows to get out of the scheme, to free up spots

(voluntary exits). Again, without some numbers, it is hard to gauge how great these needs are. The NHMRC has statistics on current fellows that would tell us the age spread of fellows at every level and, probably, how long they have been in the scheme. Since the scheme has been operating for many many years, it seems reasonable to believe that within a very short time the scheme will have reached almost steady-state with respect to the age of fellows at various grades. There is already natural attrition due to promotion out of the scheme to other positions (voluntary exits). The clear problem we now face is significant numbers of involuntary exits due to the "open competition" system. It is hard to consider "exit strategies" for involuntary exits from the scheme.

Fellows entering the 6th year of contract should be permitted to apply for their salary (at levels equivalent to PRF or SPRF) in a standard NHMRC Project grant. This means that the criteria for success will be based on merit of the project grant application but this has worked well in the past.

I believe that pressure to remove people at the top should be applied to many of the Universities in which these appointments are held. In many instances, the RF may have been there for more than a decade, often 2-3 cycles of RF - the senior RFa usually have considerable positions within the Faculty eg Assos Dean Research/ Biotech. How can the Unis take on these staff as Professors. RFC should consider provide part-time RFs as a prelude to full time Uni professorial appointments The infrastructure they bring into the Unis through grants, publications students more than covers the costs of their appointments. At the senior levels the Unis would be taking them on for 10-15 years - and would gain high quality appointments with proven track records etc.

Funds that are at present given to fellows for industry interaction could be quarantined and set aside to support the fellows. Alternatively industry might be persuaded to have input. Since Universities benefit very well from having Fellows they might be requested to consider setting aside funds to meet the tough times when an exit strategy was required for one of their fellows. The fellow who just missed out could still be a very good performer in the research arena and help to attract funds from other sources to the University. After all the universities give incentives to existing fellows why not extend this for the long term welfare of their fellows who have rewarded them with productivity over the years and may not be worn out even though they just missed out at NMHRC.

It is a real pity to need to consider this question, given what a superb investment Fellows are. The last thing we want is to stop them doing what they do best.

NHMRC could be open to shared funding of Fellowships with other organisations, and maybe to part-time (half-time or more) fellowships, should this be deemed appropriate in any one case. Negotiation with host institutions could provide proleptic appointments (e.g. research chairs) to be taken up if necessary at the end of fellowship tenure. This would need guarantees (negotiated according to a formula and agreed between NHMRC and host institution) and money. The money to fund this could be generated in a manner similar to superannuation, by long-term investment of pooled funds (e.g. a proportion of infrastructure funding attracted by Fellow, a bit on top of Fellows' package, a contribution from the host institution.). The take-up might not be universal, and access could be according to need, period of service, ability to raise matching funding or whatever. Fellows are valuable to host institutions, by their intellectual input, the spin-off from their work for employment and facilities, the money that they attract and the way they raise the institution's profile. NHMRC should expect institutions to recognise this, and those which fail to do so (by making some contribution) do not deserve to host Fellows.(There could be a black list).

Do you want to have exit strategies? Is an exit strategy promotion into administration? All universities are seeking NHMRC fellowships to cut costs.

The principal "problem" is at the SPRF level. I personally do not believe the PRF level position should be included in the strategy outlined below. I do not endorse a strategy that totally removes SPRF level appointments from NHMRC funding. The model I propose is as follows:

Promotion to SPRF should have 2 criteria. The first being to meet the standards required for appointment at this level (as per the current system). The second criteria being that the host Institution must agree to provide 50% of the SPRF package. This will serve 2 purposes. 1) it will most likely reduce the rate at which people progress into the SPRF level and 2) it will reduce the financial burden

of the NHMRC and release funds that can support Entry level appointment into the Fellowships scheme. It does this while maintaining the best researchers in the NHMRC scheme and allows the NHMRC to regulate to prevent Institutions from requiring SPRF fellows to perform (further additional) work that would detrimentally affect research productivity. By restricting this to the SPRF level it should not be difficult to defend the cost to the Institution. Most of the criteria for promotion to SPRF (above eg. PRF) relate to higher level administration that directly benefits the host Institution. In addition, these fellows are the cream of the crop with long standing evidence of high level grant support and productivity, both of which contribute directly to the Infrastructure of the Institution over the many years that the Fellow has worked (not to mention the reputation of Institutes/Universities as centres for research excellence). Management of existing SPRFs is probably slightly more complex. One model would be to have a 5 year moratorium, followed by requirement of Institutions to meet 50% cost coinciding with the timing of renewal. Renewal at SPRF would be contingent on both "Excellence (or above)" in the scheme and agreement from Host Institution to meet the cost. Existing SPRFs who cannot get support from their Institution should be allowed to apply for renewal at the level of PRF.

Create a new part-time non-renewable prestigious 10y fellowship that requires at least 50% salary support from industry and/or health/educational institutions.

Why should successful fellows need to exit a system unless by choice?

The relatively small Australian biotech sector and consequent shortage of industry positions makes it difficult to exit into industry. This option is increasingly available to our overseas colleagues in the USA or in the UK.

Transfer from the Fellowship scheme to a salaried position on a program or project should be possible. This would entail the creation of PSP10+ categories for grants

Australia is performing well in biotechnology etc, but we are not yet at a level where there are large numbers of exit options. These will develop over time.

One point that was forcefully put to the Wills review, but never really appreciated was the need to properly model the dynamics of the fellowship scheme. Eg an SRFA will be appointed in their 30s and be promoted being a PRF in their 40s and an SPRF say by 50 (some have gone thru in much shorter time periods). While having done one appointment term at each level, and clearly being a top applicant because of these successful promotions, they would then have 3 full terms at SPRF, ie they will spend as long as an SPRF as they did at all the other levels. And similarly if only ever promoted to PRF level and then at that grade for say 20 years. Clearly, there will always be an excess of high performing individuals at these higher levels. This is a good outcome but the current need to have a pyramidal scheme is again forcing artificial pressures on these positions. It is important to model the current size of the scheme based on real performance levels and tenure of scheme members.

Double the funding to the scheme, and you won't need an exit strategy, which in any case logically falls outside the scope of the fellowship scheme.

Perhaps part time fellowships, as in the ARC, are worth considering.

Compulsory retirement at 65

Make available from the Commonwealth or State Governments long-term chairs for scientists who have produced a huge amount of good science over many years (e.g. Chris Goodnow, David Vaux), who are very likely to stay highly productive, so that they can then work in peace without needing to write fellowship applications for a substantial number of years, perhaps until they choose to retire.

Not sure what is meant by this? Are the NHMRC considering 'golden handshakes' or a cessation of renewals after x years at the PRF level or above?

This is a major problem. I don't think that there are any viable exit positions in Australia. The idea that throughput in the scheme can be managed by lots of exit strategies is not tenable. The only solution is to create a stable scheme in which entry is balanced by natural attrition (ie retirement, leaving science altogether), not exit. This means that labs will have to have a better balance of

younger and older scientists, just as the aging of the Australian population will also shift the demographics of all our workplaces. The idea that students and postdocs are cheap labour and the more the merrier is ultimately unsustainable. Yet how many senior researches have considered the fact that in a fully sustainable structure, only a single PhD student throughout their career will be trained to replace them, and only a few others will have long-term careers in research!,

An accurate analysis needs to be undertaken to determine the number of fellows who have left the scheme in the past, and for what reasons to assist in both modelling and assisting in determining exit strategies.

Co-funding arrangements/requirements with institutions that have housed the fellows, perhaps similar to the ARC fellows scheme. Perhaps it should be accepted that in Australia the dearth of such possible exit strategies means that fellows will not be able to exit easily. Part-time fellowships with part-time university positions could be achieved if universities would also become more flexible about part-time teaching. I favour the USA systems of part-tenure.

The exit strategy has to be based on merit and productivity.

I strongly support the raising of this issue. As noted above, the Wills Scheme assumed a flux through the Scheme with a range of exciting exit opportunities: industry, academia, hospitals, public health, government, etc., etc. Little of this if any has in reality materialised. I agree that novel solutions are needed for this. Certainly simply acknowledging the importance of this aspect of the issue is valuable. It is far from clear that positions are going to suddenly materialise in universities and the health services, (particularly in Victoria where the State Hospitals, as part of the 1990's cost shifting have heavily bought out of any support of research). Hospital clinical departments and indeed laboratory departments provide no encouragement or support. Although as correctly noted in the briefing, one does not want to lose outstanding medical researchers at a senior level, it is also true that many of our senior researchers make a breadth of contribution, leadership, etc. that involves very actively supporting various other enterprises, university, hospital, public health, independent medical research institutes, etc. There is a one way cross-subsidisation going on here. In the area that I am familiar, the hospitals, the cross-subsidisation of research from the state public hospital system was quite extensive but since the unbundling process of the nineties, this has largely disappeared to be replaced to some extent by the NHMRC providing a cross-subsidisation of the health service. This is not necessarily detrimental to the Research Fellowship Scheme in that the embedding of research into the health care sector is clearly one of the remits of the NHMRC. It is just that the budgeting may not be entirely appropriate. Perhaps novel "partnership" or "co-funding" type strategies might be considered with these other institutions. In a sense this is the Practitioner Fellow model but perhaps this could be extended at a higher level. The obvious catch is that if one party in a co-funding arrangement is unhappy with the recipient's performance, the whole thing tends to unravel. In the non-university sector, there is potential for government leverage through Medibank agreements and other schemes which might force state health services, for instance, to contribute to such support. The university sector is arguably more difficult, although it is curious to see many Fellows hold really quite senior leadership and administrative roles as research Deans, research officers, etc. It will be sensible to focus such strategies on the PRF and SPRF level as they are the costly end of the scheme and therefore any successful initiative will have more impact.

The University sector needs more funding. This would make academic positions more attractive making it much more likely for research Fellows of all ranks to move to academic positions.

An exit strategy may be created by limiting the total tenure period of the two most senior appointments to a maximum of 20 years (= two terms of 10-year fellowship)or to the normal retirement age (which ever is earlier). During this tenure, the fellow will be subject to a 5-year performance review in the first term, the competitive renewal at the 10th year, and another 5-year performance review in the second term. This model will provide a predictable and long-term career path for successful and competitive researchers and a sufficient lead time to plan for the exit from Fellowship scheme.

One way to provide exit strategies for those at the top of the scheme is as follows: An NH&MRC

Fellow's salary package attracts 48 cents in the dollar from the Federal government that go to the host institution as infrastructure funds. For a senior fellow that amounts to approximately $60,000/ year and over a 17-year career this amounts to almost a million dollars. If those funds could be quarantined this would extend the life of that fellowship for another eight years. Alternately, those quarantined funds could be used to leverage state, private, federal monies to create an endowed Professorial chair. Either way this would provide exit strategies for people at the top of the scheme. In doing so it would free up funds to support younger NHMRC fellows.

The entire "exit strategy" concept is offensive.

Exit is rather like a failure of the researcher to perform up to a standard. Although it is not easy to put good researchers in this position, it is essential that they are given long enough notice and some form of security during their exit. In the UK, the Universities are asked to undertake the salaries of the fellows after seven years of support by various external sources. May be the Universities could be encouraged to participate actively in the exit procedure by initial undertaking of such a commitment.

Co-funding schemes seem lie a logical solution - especially if the scientists are predominantly administrators. If they are, let those for whom they are administrating pay!

This needs somewhere to exit to. This will be primarily biotech or university appointments. Therefore, until our biotech industry grows or our universities are better funded, there are few opportunities for fellows to exit.

If renewal is 5-yearly, and if criteria are understood by applicants and impartially applied for that level, applicants take responsibility for their 'exit', with say up to 2 years grace.

Presume this is to entice those who are performing less well to leave before they are pushed. Hard to believe that many universities would be willing or able to adopt less successful fellows, as part of an exit strategy.

Any scheme whereby Universities or Research Institutes could be involved to contribute 50% of RF/SPRF salary after say 2 cycles of PRF or 1 cycle of SPRF would be a useful step forward.

These RFs frequently become team leaders making institutional decisions and directing the efforts of SRFs, SRO/ROs and students. They should not be lost to the Scheme but the Universities need to be made aware that these senior researchers bring in so much money through government infrastructure schemes, student completions and publications that 50% of a salary is in reality "peanuts".

Clearly a policy committee liaising with Unis is needed here.

Performance based appraisal at the excellent level and ability to preform as a research fellow should be judged on the basis of other responsibilities incurred by senior researchers. eg Institute or Centre Directors should not be fellows - they have clear and incompatible expectations of them as directors for which they should be paid by their institutes. It should be a natural evolution for SPRFs to exit out of the scheme, as they assume roles not solely concerned with primary performance of research.

Exit strategies are an issue because sideways movement back to University/Hospital positions has been difficult in the last 10 years or so. Perhaps with the growth of new Medical Schools etc the problem will become less acute of its own accord. There is merit in the idea of encouraging Institutions to support Fellows who might not be reappointed after 10 years - the Fellow might even be glad to return to teaching/administration duties combined with research - ie they might be glad to do this in return for Institutional salary support.

Very few options are available at the moment.

If someone continues to maintain a high standard of research excellence, then they should be allowed to remain within the scheme.

Exit strategies are clearly a good idea. Why doesn't the government recognise these senior scientists are worth supporting after all of the reviews and performance appraisal and set aside secure group funding for applicants that reach such a high standard.

Directors and Lecturers at Universities should not be eligible to apply or hold RF. Exit strategies are

unfair in general. Why should the scheme not support someone their entire career if they are excellent? Who will?

How about 50% support for SPRFs and PRFs who get 50% support from elsewhere?

Administering Institutions could quarantine a proportion of the infrastructure money they get for fellows, and after say, 10 or 15 years of fellowship funding, make that quarantined money available to fund the Fellow's exit.

Yes. Establish a scheme with Universities and Institutes where upon initial appointment an agreement is entered into that if the Fellow remains successfully funded by the NH&MRC RF scheme for 10 (or longer?) years then the administering institution will create a salary and position for them. At present there is no incentive for institutions to create positions for Fellows, even though they are high performers that bring in considerable performance based DEST funding.

Yes: 50% fellowships; one-off fellowships (i.e. no renewal) etc. There are many possibilities here.

A partial exit strategy is suggested below:

By definition, fellows are successful researchers who are judged, in part, on their ability to fund their research. Since research monies flowing into institutions attract additional funding (RTS and IGS), the institutions benefit substantially by hosting fellows. This is in addition to the unpaid duties that fellows voluntarily take on in administration and teaching. One way to ensure that there are funds available for new appointments would be to include a condition that after a second reappointment (ie: after 10+ years in the fellowships scheme), the host institution should contribute a percentage of the fellowship . If this was relatively small (10-20%) or on a sliding scale (increasing with each renewal), then the institution would not end up hugely out of pocket and funding would be available for new appointments

Respondents: Hold a NHMRC Practitioner Fellowship

NHMRC and Federal Dept Health could promote in the community the possibility of making an endowment for an "insert name of donor" chair in field xxx/disease xxx to maximise world-class research in the disease of interest. NHMRC could use its open, transparent processes to facilitate the creation of such chairs and an open peer-reviewed process for making appointments to such chairs. While certain diseases will be favoured by this than others, at least it will ease the pressure on SPRFs, increasing the likelihood that a greater number of fellowships in all areas can be funded

Allow honorary title.

Respondents: Hold a NHMRC Training Fellowship

Possibly capping the number of years able to be a fellow at any one level (eg 15 total for SRF levels and 5 years each for PRF levels?)- this would encourage application for promotions.

Or a limit on number of years that you can be a full time fellow (eg 20 years)... if fellows are entering the scheme at 9+ years post-doc then after 20 years on the scheme they will be close to early retirement ages of 55-60. After this time there might be part-time fellowship options.

This could be complimented by part-time fellowships available at any level (and without a time limit) similar to the ARC scheme where the university provides 25-50% salary. Some salary provision by the university could be easily justified if the fellow already has students and in many cases the universities are already committed to topping up the NHMRC salaries to levels closer to academic scales. Although part-time fellows could be seen as being distracted from a research career - similar to the Practitioner Fellowships it would actually provide researchers with protected research time. Many fellows are already engaging in teaching activities in order to be competitive for academic promotions.

Respondents: Hold a Career Award or Fellowship other than NHMRC funded

The development of strategies to create tenured personal chairs at universities and medical research institutes would be good.

Respondents: Hold a Career Award or Fellowship other than NHMRC funded and have applied for a Research Fellowship

Some research projects may have genuine marketable commercial potential. If so, prospective businesses and / or business owners should be able to provide mentoring assistance to fellows. This would bring more money from outside the NHMRC into research. It would reduce the chance of failure as about 70% of start-up businesses may not succeed beyond the first year. Centrelink have a year long mentoring programme for self-employment (not research related, of course). The government is perhaps already thinking along these lines, as there are applications available for "centres of excellence" funding. More use could perhaps be made of concepts such as the "technology park" (e.g. near Curtain University for Technology, WA). This can allow synergy between research and commercial interests. Exit from government to commercial funding would make more places available for initial scholarship and fellowship applicants.

Researchers with senior appointments within Universities and are "employees of Universities" should not be eligible. If the ARC is to quarantine funds for University researchers only then the NHMRC should respond in turn.

Need better government/commercial funding for universities/institutes to underpin their senior positions. This is the fundamental problem that puts pressure on these types of schemes.