Question 14 – Do you have any other suggestions relating to the allocation of the budget for the SIPG scheme?
Click here to view the Raw Comments to this open question.

Outcome

The issues regarding funding of the Scheme will be considered by the Research Committee when the Committee evaluates the budget forecast in the next financial year. The allocation of funds will be considered with respect to implications on Program and Project grant funding. The Program Grants Committee will make recommendations to the Research Committee, utilising the responses received from the above questions.

Issue 3

Scoring matrix for SIPGs

Question 15 – Should SIPG applications only be assessed for RORA and Research Plan?
44% of respondents (54 out of 122 that responded to this question) agreed that SIPG applications should only be assessed for RORA and Research Plan.

Question 15a – If Yes, what percentage of the total score should be allocated to RORA, 80%, 70% or 60%?
44% of respondents (34 out of 77 that responded to this question) thought 60% of the total score should be allocated to RORA, 27% (21) supported 70%, and 29% (22) believed 80% was most appropriate.

Question 15b – If No, should the additional category of Team and Cooperation be replaced with:

- *Quality of Collaborative Interactions*
- *Breadth of Program and Technical Resources*
- *Other*

45% of respondents (41 out of 91 that responded to this question) thought that the additional category of Team and Cooperation should be replaced with the Quality of Collaborative Interactions, 30% (27) preferred the Breadth of Program and Technical Resources option, and 11% (10) thought both could be used to replace Team and Cooperation.

Question 15c – If no, what weighting should the three categories be given? The following ratios represent RORA : Research Plan : 3rd Category, 60:20:20 or 60:30:10?
48% of respondents (42 out of 88 that responded to this question) preferred the 60:20:20 option compared to 52% support for the 60:30:10 option.

Question 16 – Do you have any other comments relating to the scoring matrix for SIPGs?
Click here to view the Raw Comments to this open question.

Outcome

During the process of developing the funding policy, the above responses will be considered by the sub-committee.

Summary of Raw Comments
Expansion of the Program Grant Scheme to Include Single-Investigators

Question 10: Do you have any general comments regarding the proposed SIPG Scheme?

Respondents: Researchers > 9 years post-doc

SIPGs, if properly set-up, should enhance the research output of established individual working in small groups with an excellent / outstanding track record. Many Fellows would fit in this category. It would help restore the idea of 5-year funding for Fellows, which would be a great boon to the current Fellowship scheme.

I am generally supportive of this idea as it would provide more stable funding for established investigators but remove some of the distortion of the current Program Grant Scheme such as encouraging CI's into collaborations in order to receive funding which is not necessarily based on performing the highest quality research.

This is an important addition as there are many excellent scientists, with research that does not fit well into current program grant models. e.g. people working in the genomics area investigate molecules that often act in many systems and they need larger numbers of small scale collaboration and overseas collaborators.

Project grant applications are very expensive on research $'s, resources and investigator time. The time spend on preparing, reviewing and responding to grants is very large but uncounted because no $'s change hands. The aim should be to have all researchers with an excellent track record on more secure long term funding. This will save time and money and improve productivity

The major aim should be to find those with a high level of achievement and proven track record, and provide resources for them to do what they want with minimum administrative interference/load/cost

To my understanding SIPGs were well within the initial philosophy of the Program Grants. A "team" was to be understood broadly, from single laboratory research (with multiple investigators), to close collaboration between two or three labs, to multidisciplinary teams.

It is about time to address the imbalance, which currently favours large teams.

The name "single investigator" is a bit misleading. It could create a false impression. Perhaps "Small Team Program Grant", or "Single Laboratory Program Grant" would be best. It leaves open the possibility of having not one, but two or three co-CIs.

Since Program Grants are intended for team research, it would much more sense if 5-year, single-investigator project grants were developed under the Project Grant scheme. This already has the opportunity for 5-year Project Grants and the conditions for these could be re-moulded to suit the aims currently canvassed here for a SIPG.

I do not consider the reasons offered for wanting a SIPG under the Program grant scheme are adequate to subvert the intention of the scheme which is to fund substantive teams.

A good idea. Program grants tend to reward the status quo and one style of larger scale, collaborative research. Prog Gs can also become restrictive and bureaucratic. Proj Gs too restrictive and time consuming for small, productive groups with demonstrated ability to consistently do novel work with high impact, trouble shoot etc. SIPG should attract high performing individuals from Project as well as Program schemes.

This is a positive step forward as the current system creates a vicious cycle of remaining in a program because one has longstanding collaborations that are viewed favourable by the NHMRC, but really it is time to move on to new ventures. The current program criteria prevent new

collaborations/partnerships

Many of us have a network of collaborations with overseas and Australian groups which do not fit the current Program model. The award of a 5 yr program grant would ease the burden of applying for grants every year and provide flexibility.

This is an excellent idea. I certainly fit into this category as my senior collaborators are all internationally based. I was advised two years ago NOT to apply for a Program grant because of this and because my Australian based collaborators were too junior. I would certainly apply for this in 2005 if it becomes available. I currently hold an ICRGS award and I assume it would be readily straight forward to combine some of the NHMRC components into a single award?

There are some cases in which researchers are quite successful in making significant medical research advances by long-term programs of work, but have little chance of developing a Program under the current Program rules. In these cases it is desirable to provide the flexibility and longer-term funding afforded by Program grants. Some reasons have been listed in the discussion paper. Another reason is that there just may not be collaborators in Australia with sufficiently good track records to include in the team. This even applies to collaborators whose involvement is essential, for example because of their technical expertise, or access to patient samples.

I think the answer to Q9 is somewhere between yes and no. Some program groupings may be threatened by an individual deciding to apply for an SIPG

SIPG grants could produce major career problems for post-docs etc working on the projects, for example how to demonstrate independence, track record in obtaining grants etc. These issues need to be worked through - maybe also needs to be a major culture change amongst career reviewers so that team work and intellectual independence are not seen as mutually exclusive

I am supportive of the scheme as at present, there are people who run very successful research teams in areas in which there are not a lot of Australian investigators and therefore most collaborations are with overseas scientists or groups. In this circumstance, it is difficult to become part of a program grant as this is assessed on the CVs of a number of senior investigators.

A good idea, provided that it isn't another nail in the coffin of the funding available for Project Grants.

The current limitations identified within discussion paper are real and very significant. The current funding model significantly distort research goals to the detriment of Australian science. Is is a major incentive to seek opportunities outside Australia. The SIPG if suitably funded would be a major advance over current models.

In my view an effective team will always be stronger than an single investigator, so given competitiveness in relation to RORA, teams will predominate. In some cases a single investigator may not be able to form a team initially, so it would be useful to have the option of SIPG. NHMRC could also provide incentives for each SIPG to eventually develop into a normal PG (e.g. by limiting the number of renewals under SIPG, but not under PG), and in this way encourage SIPG recipients to develop teams over time.

I think this is a terrific initiative and would fill the biggest hole in the NHMRC funding mechanisms.

SIPGs will be especially well suited to individuals with a broad range of research interests and collaborators. The high threshold that already applies for quanta will not make it attractive for true Program teams to desegregate, as weaker members are unlikely to be successful as SIPGs.

It must be set up in such a way as not to encourage teams to apply as individuals.

I believe that the introduction of an SIPG is an excellent initiative catering for investigators with international or evolving collaborators.

An excellent idea for small group research which has been shown time and time again to give the best value for each dollar spent.

If there's no advantage to an investigator to apply as part of a program cf as a single investigator, program grants will cease to be. If the rating criteria are the same, the advantage will be to the weaker

members of a program, and stronger investigators will be better funded by being single investigator program holders. So there will be no strong investigators on programs.....!

This scheme should not have a special name. People will still apply for program grants because it will reduce their paperwork.

This seems like an idea worth pursuing.

A great concept that would assist clinical researchers in particular, given that they usually have different sets of collaborators.

An excellent initiative that will materially assist the training of emerging senior scientists not currently formal CI collaborators.

This is an excellent initiative which covers the gap that exists between team researchers who are eligible for program grants and excellent individual researchers who are currently collaborating with overseas researchers or could not find partner collaborators in their home institutions. The scheme will cultivate potential development of a large team which will be evolved from a leading individual researchers with single investigator program grant, which is otherwise impossible to develop.

Long overdue, research career development (perhaps maintenance) style award for mature investigators would be very worthwhile

I cannot see how this is different from giving a single investigator a 5 year project grant. In fact with the current rules one is better off with the 5 year project grant.

It is the only way I'm likely to obtain substantial NHMRC funding to develop work in a new field that is underdeveloped in Australia. There are no other senior investigators to make up a convincing program grant application and project grants are not worth applying for because there is too much work for a small and uncertain return. In general the NHMRC system is extremely conservative in encouraging successful researcher to do more of the same. Researchers who want to develop new fields are given little or no credit for previous track-record unless it is directly relevant to the new area of research.

This seems like a very positive step forward for researchers particularly those in new research areas where track record is difficult to develop because of the nature of the discipline and where collaborators change over time or are overseas

If this SIPG system is not introduced then a 5 year Project Grant should be. Researchers in the USA and Europe work predominantly off 5 year grants. There is a good reason for this. Coming back from overseas I've found it extremely difficult to generate enough results to hopefully renew my current 3 year project grant funding. Realistically, I only have 2.5 years max to do so. If a PI is tackling a significant problem then this 2.5 years will never be enough to generate decent data. I realise there are people already successfully competing with the current system. I take my hat off to them. It's very impressive but how many people are functioning at that level?

I am a mid-career, successful clinical researcher who has held years of project grant funding. I cannot obtain program funding due to my preference for working alone (with a lab under my control). It would be highly advantageous for the many researchers such as myself to be able to compete in the program grant arena and hopefully avoid the rollercoaster ride of project grant funding for a few years. This innovation would significantly enhance Australia's research productivity and diversity.

The Wills Report and the CRC initiative were important in promoting team approaches and the resulting benefits. The SIPG proposal dilutes this movement. Also if some researchers can fare better on their own important collaboration opportunities will be lost. SIPGs will have a deleterious effect on researcher behaviour if no significant collaborative carrot is offered. However it maybe that the collaborators are overseas or in other funding streams.

Increase the flexibility of the scheme. Prevent the marriages of convenience that occur now just to enable eligibility for a program grant, increased the areas of research that could be part of a program grant.

The issue identified by the Committee, of different styles of research from that expected for teams, is a very important one, and I believe that the proposed scheme will provide a more equitable research environment for senior researchers.

I strongly support the introduction of the SIPG Scheme, since it recognises outstanding individual research that does not have to nor necessarily fit into the current team-based Program system, which can sometimes be artificial.

It would strengthen high quality research of individual fellows rather than forcing them to join in teams that may not be beneficial for the researcher.

During the consultation session it became obvious that there was some confusion about the single investigator. Some people felt that it would be confined to a single investigator which was obviously not the intention. To make it plainer I would suggest that the scheme be re-named "Single Chief Investigator Program Grants" This will offset such confusion.

It might be supportive for early career researchers collaborating with CIs.

I consider the SIPG Scheme is merely a replacement for fixing problems with the distribution of funds between different NHMRC schemes. More funding should go to Project Grants scheme, and funding longer than 3 years should be provided if relevant. This would eliminate the need for SIPG scheme.

The current team program grant scheme has created some valuable synergies. More time is needed to see how they develop. It would be a pity to lose these synergies to a host of SIPG's. I think the number of SIPG's has to be kept small, but that some are needed to capture highly capable individuals whose work doesn't fit the normal mould. In assessing SPIG's there must be a contribution to the overall score that makes up for the fact that these individuals will not be contributing to the synergies and broad-based efforts a strong team can provide.

SIPG would substantially decrease the disadvantage imaginative single investigators have compared to less imaginative investigators carried by larger research teams.

I think that it is an excellent idea because it is based on past achievements and the capacity of the scientist to conduct his research rather than on the project alone and avoid the necessity to write grant applications every 3 years.

Great Idea - it will not broaden the type of research but will broaden accessibility. There may be some possibility of teams devolving into separate single investigator grants and this would be an issue vis-avis the Wills impetus to fund programs. The solution to this would be to provide a monetary incentive to teams - a Synergy bonus (eg. Quanta 4 on a Program get $500,000 but as a single investigator get $400,000) etc.

I am a strong supporter of this concept. One of the problems with the new Program Grants Scheme as conceptualised was that the heavy emphasis on teams and on multi-disciplinary excluded a number of outstanding investigators, particularly in the biomedical area. One senior academic observed warily that he could not see the next Nobel Laureate coming from the Program Grants Scheme! I think this was fair comment. Consideration was given to simply reintroducing the more substantive 5 year Project Grants that existed several years previously and which were based on track record rather than the current 5 year Project Grants which are fundamentally related to the type of investigation, (e.g. clinical trials, etc.). It matters not how it is done but clearly there are outstanding investigators who work in small groups who are highly internationally competitive and productive but who don’t have a collection of potential CI’s around them who are at the same level. Making them compete for 3 year project-style grants ties highly productive and successful people up in endless rounds of non-productive grant writing. Within my own discipline, I am conscious of several people who are regarded as outstanding to the extent that they are of much higher calibre than the majority of people currently holding Program Grants. This proposal, if developed properly, should address that concern.

I can see why the name was chosen - presumably because many of the criteria and guidelines will be the same or very similar to multi-investigator programs - but to an external observer "single investigator program" sounds like an oxymoron. Its already weird having a system where there are

both chief and principal investigators [very confusing for anyone who is involved with NIH!]

There are some high quality researchers who do not fit neatly into the constraints imposed by a Program Grant. They often have many junior researchers working with them or have diverse interests or overseas collaborators.

Adds more flexibility for those outside the current program box

The attraction of the SIPG should be a substantial improvement of the level of funding above the total project grant support of the CI the flexibility in the scope of the research

I think that the (multidisciplinary) research conducted by a team under one chief investigator under SIPG may be equally, if not more, productive than by several teams often in several different locations. Moreover, a great advantage of this scheme is that it allows for including international collaboration

I think it gives the flexibility that is needed to encourage collaboration without insisting on artificial groups. It also allows for changes in research direction with time.

My understanding of the Program Grant Scheme is that it has been established to encourage innovative research by high performing teams - and particularly to address complex problems that require collaboration across disciplines, research that would be difficult to support with Project Grants. So I think SIPGs are a bit of a contradiction in terms. Very little high level research can be conducted without high level input of more than one person.

These should perhaps be looked at and funded more appropriately as large 5 year project grants (similar to the 10 year Merit awards given by NIH) rather than putting them under the auspices of programs which have a different stated objective and different criteria for success.

With regards to Q7, I would apply subject to the rules associated with the scheme. I currently hold project grants with other CIs (from within my group) which would require revaluation. The overall budget with respect to holding 3-4 project grants would need to be evaluated. With regards to Q9 I wouldn't imagine many would be offered due to being highly competitive and restrictive (ie. clear reasons why applicants can't apply for multi-investigator program grants).

I see these are no different to grants which were previously tied to a fellowship.

It will provide a similar mechanism to the RO1 in the US. Senior Investigators receiving large funding for conducting high quality research. It will allow these quality individuals to maintain their international collaborators and their labs without having to force together collaborations in Australia.

This must be introduced. It is clear that there are examples of multi-investigator teams for whom the current Program Grant scheme is appropriate, but there are also high-calibre investigators in Australia who consistently hold multiple Project Grants who would strongly benefit from the SIPG scheme.

The idea of providing single researchers with 5 year funding is good. The problem is with the way it is proposed to do it. Instead, I suggest the simple expedient of offering longer funding periods to the top scoring project grants (as is done by NIH). This would ensure that it is done on the basis of proper peer review rather than by box ticking. Like democracy, peer review has many defects; but the other systems are worse. I see this initiative as an attempt to deflect criticism from the way program grants are assessed, the RORA, by suggesting a way around their other main defect - 'marriages of convenience'.

As the discussion paper points out the reason for the existence of the Program grant scheme is to foster productive and synergistic collaboration. This sort of work is epitomised by the best 'team' research as carried out in Institutes. The structure and criteria of the program grants scheme was obviously built around funding such successful groups in institutes with the possibility of funding strong and ongoing collaborative efforts that might not be contained within one institution. To provide program grant funding to individuals without requiring substantiated cooperation would be to wimp out on the original idea (everyone has overseas collaborators). Put extra money into project grants for God sake and motivate success that way.

Single investigator Program grants will complement the existing multiple investigator Program grants. The SPIG will, in my view, enhance further the quality of medical research especially with the added flexibility.

Respondents: Researchers < 9 years post-doc

I think limiting the number of SIPGs will still preserve viable team research, but also give the opportunity for the few individuals deserving of this type of grant the opportunity to broaden their research.

It has nothing to do with team work and synergies in research. It is not forward thinking to believe that single investigators can continue to compete at world-class level in the future. It is likely to REDUCE collaboration between our very best single investigators and others, as they change what they do to meet criteria for the SIPGs.

Often new investigators are the newly appointed academics who have had to move away from their training institution (PhD or post doc) to obtain their first job only to find there are no like-minded research colleagues and minimal opportunity to collaborate on research in their new position. Building their own research critical mass is a very slow process and requires funding. The proposed SIPG scheme should not exclude applications from researchers with conservative track records and exclusively fund those with ample track records. The latter scenario creates a frustrating vicious cycle of funding to the haves and funds-withholding to the have nots. No funding = no productivity = no funding...

As long as it was a minor component it would not threaten the viability of the program scheme

The introduction of 5 year grants is a great idea especially for long term projects (like epidemiology studies). There should, however, still be a selective advantage to being part of a team.

There are anecdotal reports that the program grant scheme has fostered 'artificial' research teams that do not have a strong track record of collaboration. Some of these associations have worked well although others appear to have been less successful. In a relatively small research community like Australia flexibility and choice is essential as many Australian investigators have a predominance of international collaborators and the current program grants scheme does not assist these individuals.

The degree to which people operate in teams is mainly dictated by their personalities, the nature of their research and the availability of suitable collaborators. SIPGs would enhance the productivity of a number of outstanding researchers who don't fit into the program grants structure.

EXCELLENT IDEA - will solve a lot of problems relating to the current program grant scheme, and I don't think will threaten viable team research because a lot of researchers know that they work best as a team, and so will have a higher chance of success if they apply as a team.

Need to be careful to keep schemes comparable so that teams do not break up for financial benefit.

CIs on viable teams must be dissuaded from each applying as individual SIPG applicants. This would subvert the original aim of the Program scheme and induce a huge workload for the NHMRC and reviewers in managing a SIPG scheme. It might be a criterion that SIPG applicants must demonstrate lack of appropriate co-CIs (eg. geographic or similar), or another convincing reason for not applying for a team-based program.

As a young Australian scientist I am very concerned by the "career trends" of the NHMRC. As funding gets harder to get, the NHMRC appears to be looking for ways to slice a cake that is already too small. However, it appears that funding is falling more and more in favour of the "big boys", and little fish like myself are forced more and more to attach oneself to one of these seniors and in doing so suffer a loss of independence. It seems to me that this (the SPIGs) is just another means by which the big-boys are able to manipulate the system to suit themselves. However, the long and the short of it is that the NHRMC does not have enough funds to realistically fund the research. Indeed I have come to resent such reviews as the present one, since from the point of view of one "at the bench" they appear to be a waste of time and money.

Respondents: Unanswered

There needs to be some planning in place to ensure that the proportion of SIPG remains at an appropriate % of total program grants. It would not be desirable if major groups split up so as to obtain multiple SIPGs if this served no constructive purpose.

Summary of Raw Comments
Budget Allocation Between Schemes

Question 13biii: Other suggestions to inform the allocation of the budget between Schemes.

Respondents: Researchers > 9 years post-doc

Funding for SIPGs should come from a pot of money allocated from both program and project schemes but administered by projects.

RORA score of the PI of the traditional program applications versus RORA score of the applicants to the SIPG

Should be open ended without fixed constraints

Decisions made to invest in under-researched areas in need of development.

Both the current program system and the proposed SIPGs have merit. It seems likely that if the SIPG is introduced now, there might be a spurt of applications. Thus the ratio of Program Grants: SPIG awarded may have an initial peak (favouring SPIG). Also, there is likely to be year to year variation. I would therefore suggest a band in which the ratio falls. My suggestion is that SPIGs should take 20-30% of the Program grant Scheme funding.

? a mixture

RORA plus the research quality of the application

SIPG and team applications should compete for the funding under the scheme in open competition, using the same final criteria currently used for determining success for team Program applications, with the distinction of team and cooperation criteria.

I do not agree with the introduction of the scheme

This does not make sense, but I am writing in the box so I can submit the questionnaire!

I don't think the current way of calculating RORA is equitable across research areas.

Total score, but considering the factors mentioned in 11, with international collaboration largely contributing to the 'total score'

As the Wills Review pointed to the benefits of collaborative research the SIPG should have a cap and be seen as an adjunct to the Program grants scheme for some cases that do not fit the original concept

The trend to formularise assessment is superficially transparent but in reality blunt and naïve. Clearly the single investigator scheme will be different. Whilst it would be handy to leave some of the assessment tools at least similar so that comparisons can be made, ultimately judgements will clearly depend on criteria that differ between the two schemes.

Primarily by RORA scores. But with review by the research Committee over the first several years, to ensure that the scheme works equitably.

The single investigator grant budget should come out of Programs and Projects. One might expect that many of the investigators that apply for SIPGs will have multiple projects so it makes little sense to quarantine project funding from contributing to the SIPG scheme.

Determine what the rough split is after one or two rounds, basing the decision on the quality of the science and the RORA score. presumably this scheme would utilise much less than the Program grant quantum, and maybe somewhere in the order of 10% may be required. If however, over time the quality was maintained and the split needed to be increased to 70%:30%, then RC should be happy to move in that direction, as the RO1 system in the US underpins the US strength in research, not their

Program grant system.

I think that SIPG should be judged independently from the normal program grant. Obviously RORA and research plan should be the main way of assessing the application.

Thus there should be a fluid distribution of SIPGs and Program grants each year. It shouldn't be a fixed ratio each year. (Disregard 13a above)

Some years you may have better SIPG applications than others

Respondents: Researchers < 9 years post-doc

I think the assessment would just need to be changes slightly to give some brownie points for multidisciplinary research, but SIPG applicants could still earn these through their own skills of those of their AIs

Respondents: Not answered

The ratio should be determined by need and the standard of the applicants, using the RORA scores would be the best way to standardise

Summary of Raw Comments
Budget Allocation Between Schemes

Question 14: Do you have any other suggestions relating to the allocation of the budget for the SIPG Scheme?

Respondents: Researchers > 9 years post-doc

As indicated perhaps the NHMRC component of an ICRGS award could be included in an SIPG. I would be quite happy with such an arrangement although Wellcome Trust might not agree to such an arrangement.

The SIPG applicants should compete with PG applicants for the same budget and based on equal assessment of RORA, proposal, and broadness of approach.

Some people are particularly successful in commercialising research and others are not - the fixed weighting of the RORA indices attempts to homogenise our successes. The weighting of the RORA indices should be flexible and based on the type/ nature of the SPIG content.

If the SPIG project has a particular link to commercial outcomes - for example it may be for proof of concept or pre clinical outcomes - then the RORA should be based on the CIs track record to deliver on this. This type of application could not be funded through a one year development grant of less than 200K which is the only NHMRC option at the moment. It leads investigators like myself to seek VC funding in exchange for IP. Not a good outcome for the NHMRC/Australia. A SPIG grant for a person like me would be of enormous benefit in retaining the IP in Australia

Some project grant funding could be used as well.

Similar basis as current Programs

Initial allocation of funds to the SIPG should be low to assess the success/failure of the scheme during this trial period.

There is insufficient funding in the Program, Projects and Fellowships grant scheme to viably introduce this option

Fairest option is to keep it comparable with conventional Porgram Grants

Provided that the assessment of SIPG emphasises collaborations then I don't believe any funding stipulation’s should be made.

Program grant funding should be proportional to the summed RORAs of the applicants, whether there is 1 or 100. There is no reason for making artificial distinctions or budget divisions between 1 person program grants and more than 1 person program grants.

How will SPIGs be seen as different from fellowships - given current criteria, a renewing fellow (ie >5 years into the fellowship scheme) who is likely to be successful in renewing will almost always be in the league to apply for an SPIG which will however exclude their salary - this doesn;t seem logical as the assessment criteria for fellowship and SPIG will be the same - past track record.

In assessing maximum quanta it would be important to assess comparative levels between the two schemes.

It will be important for SIPGs to be able to gain as much funding as they currently get from the Project system.

The current situation regarding Program Grants is not good at all, and requires urgent fixing. Many high-flying laboratories, with a strong RORA within their fields, have been pushed to associate in somewhat artificial collaborations to take advantage of the five year funding. A substantial funding for smaller program grants is imperative.

The ratio might need to change with time, depending on the productivity/success of the different schemes.

New SIPG's probably have project grant support now. That should be the main source of SIPG funds, not existing team program grants.

SIPG should not take budget from Projects or People support.

It might start off with 80/20 but could be re-assessed after a period to see whether a larger/smaller proportion was justified. But judging from the likely amount of competition for these grants there may well be pressure on existing programs to surrender more in the long term. However, if my suggestion above about inserting a clause into the S(C)IPG about some expectation that this would evolve into a team program was accepted then it might maintain the dynamics more tightly between the two types of program.

There should be a nominal ratio eg 70:30 provided the standard is there; otherwise it could be varied to ensure that the quota system does not over-ride quality.

No extra funding for SIPGs; funds to come out of current Program budget; award based on average score based on "normalised" formula to judge research contribution.

The ratio of Programs to SIPG should be informed by an analysis of the approximate number of programs in a steady state and the estimated number of single investigators who would be appropriate for SIPG. It would be unwise to unleash a major NHMRC scheme without such an analysis. The ratio I suggested above (90:10) may be inappropriately high when such an analysis is done.

It should be allocated competitively with all the other SIPG grants.

1. It would be not unreasonable to structure the budgets in a way that still encourages people into the more multidiscplinary programs where appropriate.
2. The provision of budgets based purely on track record is bizarre. The budget allocated should reflect their track record, their future productivity and the real costs of doing the research they propose. Thus budgets may be set in a band which might be 200K to 400K for instance.
3. The successful applicant should not under any circumstances be allowed to be a CI on a Program Grant or Project Grant. Where others are supported on these grants and then, consideration could be given to allowing them to apply for Project Grants.

The SIPG individuals will inevitably reduce the demand on Project Grants - some funds from projects should be diverted to this scheme.

The quantum level of funding should be set in accordance with the median level of funding per project grant for research work of similar discipline considered by the GRP in the year of the SIPG award, and the funding should be indexed during period of award.

I think the budget should be based on considerations of the previous levels of NHMRC support, the cost of the type of research and the quality of the applicant

Don't allocate one!

If you are to hive off money in this way it should be transferred into an open competitive Project grants scheme- without these unrealistic track record requirement for CIs that are designed to ensure that only those who head a major group at an institute or are towards the end of a very successful career are eligible.

Respondents: Researchers < 9 years post-doc

Really, it should come out of both Project Grant and Program Grants current budget proportions. As there is no synergy in SIPGs, really they are an alternative for highly successful project grant applicants.

Summary of Raw Comments
Scoring Matrix for SIPGs

Question 16: Do you have any other comments relating to the scoring matrix for SIPGs?

Respondents: Researchers > 9 years post-doc

By far the most important is track. Track takes into account all necessary criteria and it really doesn't matter what strategy the investigator uses to be successful, so long as he has proven he is successful

Don't weight the RORA so heavily -give more for the research plan and research environment; or make the RORA more flexible.

The collaborative interactions with overseas investigators should be given extra weighing if this is backed up by a consistent history and that the research discipline is under-represented in Australia which may have restricted the scope of local collaboration.

Collaborations can be considered as part of the RORA.

These grants should focus on indicators of future achievements in the 5 years of the proposed grant. Traditionally, strong predictors should be track record, the quality of the application and thirdly project specific issues.

60% for RORA is the minimum option provided? Why not 50% with more weighting for the quality of the science? Without having the full detail of how RORA is calculated, it is hard to say much more.

I don't see why you need the third category at all. Leave it up to the individual PIs who they collaborate with (or not).

I think this scheme would be most suited for individuals who have an extensive collaborative network, but this is not covered by existing PG rules, e.g. international collaborations.

none of the above

50:30:20

There is no justification for getting extra points for "quality of collaboration" or "breadth of resources" because if they are real and help they will be reflected in the productivity. The only thing that needs to be measured is output. This would save paperwork as well as be a better predictor of future productivity.

To be considered a program the scope must be broad and multi-disciplinary. A single investigator may be able to achieve this - or could be achieved by collaboration with overseas collaborators.

Envisage SIPGs would be awarded to single investigators with large teams and/or extensive collaborators (overseas?). Other members of the team such as more junior PIs/CIs in the team should also contribute to the RORA for the Program. It is essential that SIPGs establish that they have a competitive and multidisciplinary team. If this includes an overseas investigator then there may be an arguments for including that CI on the team but this would require strict criteria and perhaps leveraging fundng from OS agencies/OS investigator to ensure financial or strong commitment to the program.

I think a quality of proposed research project should be given higher ratio at the cost of RORA which should be reduced at least to 50%

The RORA is culturally biased and manipulable. It suits those who work in fashionable areas and are associated with large teams. While the case could perhaps be made that these features are appropriate for team program grants, this is not so for single investigators. There, individual creativity and scientific plans should be the most important factors (giving due, but not overwhelming, importance

to track record). Just like project grants, in fact.

A standard RORA scoring system should be scored identically for all NHMRC funding schemes.

It should be for a prime mover and allow maximum flexibility to reform and change their group. Not a good idea to pin it on the surrounding team - better keep it flexible to make the most of the team and encourage turnover in it

For SIPG the main measure used should be a flexible interpretation of track record. A highly prescribed listing as in the RORA will will probably not be sufficiently discriminating to select individuals with the likelihood of providing a strong SIPG. Be careful with this aspect, because, to be successful, the SIPG will have to pick up two types of researcher: the one person (with a strong team, but not a strong team in terms of CIs), and the highly focused researcher who has only a small team. There will also be fallout from the current Program scheme in which a number of marriages of convenience were forged. Some of those researchers are already looking to swamp any SIPG scheme. Hence the need for a detailed analysis of likely numbers of SIPG and Program holders (see comment above).

The third category, even combining both of the criteria above, will remain the most problematic as it is harder to assess. Given the subjectivity, it should be given a relatively small weighting.

For this scheme (unlike in the traditional Program grant scheme), a strong case would need to be made that all applicants DO HAVE strong, existing links, including joint publications.

I think RORA should be max 50% - I have only marked 15b because I had to.

The scoring matrix for SIPGs and Program Grants should take into account the quality of the PIs as well as potential collaborative gain.

I pressed the 60% on 15a and cannot clear it - I think 60% is an arbitrary number and ask why this cannot be changes to less that 60%

The whole purpose of Program Grants should remain the funding of excellent teams. if the single CI application is funding essentially only their own work, then they should be accommodated by modifications to the 5-year project Grant scheme.

R'er Less than 9 years post-doc

I think it is important to still foster the notion of these being collaborative grants!!

If there is to be competition between team-based applicants and single investigators then SIPG applicants should be left to score 0 for Team and Cooperation.

See above - SIPG applicants can still rate well on 'quality of collaborative interactions' but teams who are suited to a multi CI programme will still go that way as they will probably rate even better on this score.

Summary of Raw Comments
Further Comments

Question 17: Do you have any comments regarding the proposed SIPG Scheme?

Respondents: Researchers > 9 years post-doc

There is no justification for getting extra points for "quality of collaboration" or "breadth of resources" because if they are real and help they will be reflected in the productivity. The only thing that needs to be measured is output. This would save paperwork as well as be a better predictor of future productivity.

It should be for a prime mover and allow maximum flexibility to reform and change their group. Not a good idea to pin it on the surrounding team - better keep it flexible to make the most of the team and encourage turnover in it

By far the most important is track. Track takes into account all necessary criteria and it really doesn't matter what strategy the investigator uses to be successful, so long as he has proven he is successful

The third category, even combining both of the criteria above, will remain the most problematic as it is harder to assess. Given the subjectivity, it should be given a relatively small weighting.

For this scheme (unlike in the traditional Program grant scheme), a strong case would need to be made that all applicants DO HAVE strong, existing links, including joint publications.

The whole purpose of Program Grants should remain the funding of excellent teams. if the single CI application is funding essentially only their own work, then they should be accommodated by modifications to the 5-year project Grant scheme.

I pressed the 60% on 15a and cannot clear it - I think 60% is an arbitrary number and ask why this cannot be changes to less than 60%

To be considered a program the scope must be broad and multi-disciplinary. A single investigator may be able to achieve this - or could be achieved by collaboration with overseas collaborators.

Don't weight the RORA so heavily -give more for the research plan and research environment; or make the RORA more flexible.

60% for RORA is the minimum option provided? Why not 50% with more weighting for the quality of the science? Without having the full detail of how RORA is calculated, it is hard to say much more.

I think this scheme would be most suited for individuals who have an extensive collaborative network, but this is not covered by existing PG rules, e.g. international collaborations.

The scoring matrix for SIPGs and Program Grants should take into account the quality of the PIs as well as potential collaborative gain.

These grants should focus on indicators of future achievements in the 5 years of the proposed grant. Traditionally, strong predictors should be track record, the quality of the application and thirdly project specific issues.

The RORA is culturally biased and manipulable. It suits those who work in fashionable areas and are associated with large teams. While the case could perhaps be made that these features are appropriate for team program grants, this is not so for single investigators. There, individual creativity and scientific plans should be the most important factors (giving due, but not overwhelming, importance to track record). Just like project grants, in fact.

I think RORA should be max 50% - I have only marked 15b because I had to.

I think a quality of proposed research project should be given higher ratio at the cost of RORA which

should be reduced at least to 50%

The collaborative interactions with overseas investigators should be given extra weighing if this is backed up by a consistent history and that the research discipline is under-represented in Australia which may have restricted the scope of local collaboration.

Collaborations can be considered as part of the RORA.

Envisage SIPGs would be awarded to single investigators with large teams and/or extensive collaborators (overseas?). Other members of the team such as more junior PIs/CIs in the team should also contribute to the RORA for the Program. It is essential that SIPGs establish that they have a competitive and multidisciplinary team. If this includes an overseas investigator then there may be an argument for including that CI on the team but this would require strict criteria and perhaps leveraging funding from OS agencies/OS investigator to ensure financial or strong commitment to the program.

Idon't see why you need the third category at all. Leave it up to the individual PIs who they collaborate with (or not).

For SIPG the main measure used should be a flexible interpretation of track record. A highly prescribed listing as in the RORA will probably not be sufficiently discriminating to select individuals with the likelihood of providing a strong SIPG. Be careful with this aspect, because, to be successful, the SIPG will have to pick up two types of researcher: the one person (with a strong team, but not a strong team in terms of CIs), and the highly focused researcher who has only a small team. There will also be fallout from the current Program scheme in which a number of marriages of convenience were forged. Some of those researchers are already looking to swamp any SIPG scheme. Hence the need for a detailed analysis of likely numbers of SIPG and Program holders (see comment above).

A standard RORA scoring system should be scored identically for all NHMRC funding schemes.

Respondents: Researchers < 9 years post-doc

If there is to be competition between team-based applicants and single investigators then SIPG applicants should be left to score 0 for Team and Cooperation.

See above - SIPG applicants can still rate well on 'quality of collaborative interactions' but teams who are suited to a multi CI program will still go that way as they will probably rate even better on this score.

I think it is important to still foster the notion of these being collaborative grants!!

Question 18: If the SIPG Scheme is *not* introduced, can you suggest any changes to the current NHMRC Program Grant Scheme, or any other NHMRC research funding scheme, that would produce analogous benefits to those which are argued for SIPGs?

Respondents: Researchers > 9 years post-doc

This scheme is a must

Grow out of this top down model of science. By progressively shifting funding more and more towards Program grants that are open only to very senior very successful section heads you are risking demotivating future generations of scientists. This will lead to a long term decline in Australian science. If this is Government policy then the policy is badly flawed.

An excellent idea

Excellent idea - long overdue - do it!

I have been approached on approximately 10 occasions since the introduction of the Program scheme to join an applicant team - on each occasion I have been forced to answer that the constraints imposed by being a program participant on the research projects which fall outside the theme of the Program are too limiting. Accordingly, I have chosen to stay with the more arduous path of writing multiple Project grants to maintain a multi-facetted research program under my direction.

In my view the SIPG scheme is a good idea.

I think it is a desirable scheme to fund the best of Australian biomedical research.

I am strongly supportive of it. However it is imperative that the budget for these comes from the Program grant budget. It is impossible to further dilapidate the Project grants scheme without making the whole system non-viable, particularly for younger researchers.

I run a lab that involves multiple collaborations (>30) and multiple disease targets. This has ruled out any possibility of applying for program grants and requires that I hold/apply for multiple project grants. The admin burden is very significant with multiple grants. The proposed SIPG will fill a clear hole in the current funding scheme, particularly for technology based groups

I do not support a separate SIPG scheme. I think the majority of the proposed purpose would be better served by modifications to project grant funding and potentially redirection of some funds from the program grants scheme to support this aim.

Within the existing Program grants scheme I believe that consideration should be given to Removing scoring related to demonstrable collaboration. Program grant applications should be flexible and allow the formation of appropriate groups of high performing researchers. I believe the current scoring matrix is detrimental to this outcome.

This should benefit highly productive researchers who collaborate more broadly than just within a single 'team'. This is often the case in population health.

It is a welcome change, but teams do need protection for capacity building

The proposed SIPG scheme would add significant strength and latitude to the current Program scheme. It is a concept not easily replaced by other schemes (Qs 18) such as large 5-year project grants without setting limitations to these other schemes to make them look like SIPG anyway.

I therefore fully support it.

Very good idea, long overdue - will only suit certain senior investigators but they would gain greater freedom to get on with their work and would be able to contribute more to GRP's and other evaluations with less CoI.

Some discretion to return SIPG's to the Program Scheme? Include a justification section for SIPG v

Program.

Would improve chances of capturing how much research is actually done and provide more flexibility in the funding system for high achieving individuals.

SIPGs may have some benefit but feel that probably they should be the exception rather than the rule. There are outstanding investigators in Australia that derive their strength and synergies from OS collaborations rather than locally. This should be promoted but not at the cost of effective local collaborations.

Put the money back into projects.

Strongly support its introduction

Do It!

I consider that the introduction of single chief investigator programs is overdue. It is an excellent proposal and will recognise those outstanding investigators who draw upon overseas collaboration as a major part of their research activity. It will also provide greater, 5y instead of 3y,to those investigators who have a proven and competitive track record in the system. The extra breathing space will enable them to move into the realm of the program people and have greater flexibility in designing and carrying out a research program. This category will recognise excellence and will be very competitive so I see no point in having categories of research quanta. This category should only be competing for the top research quanta. This might also be a good time to think about extending that to $500,000 since a significant number of the likely candidates may be in this range from projects If this were the case then one could remove the right of these investigators to have any access to the project scheme. This would not have detrimental effects on the induction of new investigators into the project scheme with help from the established if the above clause about young investigator training was included.

Excellent initiative.

This scheme if introduced should not allow the researcher to hold ANY NHMRC project grants except under EXCEPTIONAL circumstances. This would truly indicate that the researcher is dedicated to the real long term benefits of sustained program funding. If the quantum were sufficient, this would not be an impediment. It would reduce the number of senior folk putting in multiple project grant applications. The size of the quantum should be informed by the particular requirements of the researcher (e.g. team size, major equipment to keep running etc) as well as by track record etc.

As with the Program Grant scheme, the contribution of PIs needs to be more formally recognised.

I consider the SIPG Scheme is merely a replacement for fixing problems with the distribution of funds between different NHMRC schemes. More funding should go to Project Grants scheme, and funding longer than 3 years should be provided if relevant. This would eliminate the need for SIPG scheme.

There is insufficient funding in the Program, Projects and Fellowships grant scheme to viably introduce this option - Unless the budget is increased, there seems little point in spreading the funds even more thinly

The SIPG should have a cap and be seen as an adjunct to the Program grants scheme for some cases that do not fit the original concept.

It would be of benefit to project grant committees to have the major CIs funded by program or SIPG schemes and allow focus of projects more to new and more junior investigators.

No fixed ratio of multiple CI and SI program grants should be set.

Award of SIPG should be made entirely on scientific merit and the opportunity of fostering collaboration for funding within Australia-based CI-team program and the restrictive contribution of RORA by overseas investigators.

It is a great idea, because it makes it possible to accomplish a serious study given 5 years and international collaboration. In my opinion 3-year standard NHMRC projects are merely suitable for

pilot studies, or an opportunity for younger investigators to demonstrate their ability to conduct research. On the other hand, standard program grants are too demanding and time and energy consuming, which could be better spent on doing research without all the administrative burden and the risk of failing the application or of break down of collaboration between different teams during the period of the study.

SIPGs should perhaps be looked at and funded more appropriately as large 5 year project grants (similar to the 10 year Merit awards given by NIH) rather than putting them under the auspices of programs which have a different stated objective and different criteria for success.

This is the best thing the NH&MRC could do to bring us into line with international competitors. Now all they need to do is squeeze more money out of the government. We are still lagging way behind of the US and Europe in grant funding on a per capita basis.

What will the restrictions be on PIs? The will include junior investigators not “good enough” to be CIs, but wanting to get there.

Respondents: Researchers < 9 years post-doc

The success of the scheme may be determined by the quanta available to successful applicants - the idea would be to replace the ongoing annual NHMRC grant applications necessary to fund a lab at a high level.

It would provide more support, at the same level as the Program Grant, for focussed specialised research that doesn't need a big team. However for more junior investigators not having the assessment weighting of more junior CIs may be a disadvantage and could perhaps be accounted for.

This is a positive development which should be implemented.

Go for it!

Not answered

Additional information to question 5. Some of our senior researchers have believed that their particular circumstance does not fit the Program Grant descriptors. They are senior scientists with substantial track records but do not have collaborators which fit the criteria of the program grant.

Additional information to question 6. We have a number of people who hold NHMRC researcher support awards including research fellowships, RD Wright career development awards and training scholarships and fellowships

Additional information to question 12.It may also be appropriate to examine whether project grant money will be “saved” as strong players leave the project grant scheme.

Additional information to question 13. The ratio should be determined by need and the standard of the applicants, using the RORA scores would be the best way to standardise

Additional information to question 15. Both quality of collaborators and the breadth of program and technical resources should be considered. Ratio should be 60:30:10