# **Torres Strait Scientific Advisory Committee Meeting 77**

DRAFT Meeting Record 02 November 2020 Videoconference

Note all meeting papers and records are available on the PZJA webpage: <a href="www.pzja.gov.au">www.pzja.gov.au</a>



# 1 Meeting Administration

# 1.1 Preliminaries - Acknowledgement of Traditional Owners/ Chair's Opening Remarks/ Apologies/ Declarations of interest

- 1 The 77<sup>th</sup> meeting of the Torres Strait Scientific Advisory Committee (TSSAC) was opened at 1130am AEST, on Monday 2 November. The chair led an acknowledgement of country, and an opening prayer was offered by Mr Rocky Stephen.
- 2 Apologies were received from Mr Maluwap Nona, Traditional Inhabitant member for Gudumalulgal.
- 3 Each TSSAC member declared their interest in the fishery as documented in **Table 1** (below).
- 4 Conflicts specific to each agenda item are also detailed against each member. The Chair advised that given the purpose of the meeting was to recommended research priorities for the 2021/22 call for research proposals all members could participate in the discussion and making of recommendations. This is different to SAC next meeting where advice on specific proposals for funding would be sought.
- The TSSAC noted that Dr Pitcher, and Ms Williams, were the only two possible conflicts of interest against the agenda, and considered how their interests should be addressed. As the discussions were limited to scopes rather than EOIs or projects, they remained present for the full period of the meeting.

Table 1. Attendance and declarations of interest – TSSAC 77 meeting members

Name	Position	Declaration of interest
Mr lan Cartwright	Chair	Fisheries consultant. Member of QLD sustainable fisheries expert panel. No conflict considered against current agenda.
Ms Selina Stoute	AFMA Member	Senior manager Torres Strait Fisheries, AFMA. No conflict considered against current agenda, however AFMA assist with the finfish biologicals project, with no financial benefit.

Name	Position	Declaration of interest
Ms. Lisa Cocking	Executive Officer (AFMA)	Senior Management Officer AFMA. EO of TSPMAC. No conflict considered against current agenda.
Dr Roland Pitcher	Scientific Member	Fisheries Scientist, CSIRO. No current conflicts of interest as no Torres Strait related projects. Some CSIRO projects are held by researchers in same office. A potential conflict was identified against a research project being considered "Design study for an alternative index of abundance for the Torres Strait Spanish mackerel stock." CSIRO have indicated they will likely put in an application. Dr Pitcher will not be involved in the project.
Dr Dirk Welsford	Scientific Member	Research scientist at Australian Antarctic Division. Sub-Antarctic resource assessment group. No conflict considered against current agenda.
Dr Steve Newman	Scientific Member	Fisheries Scientist at Department of Primary Industries and Regional Development (WA). No conflict considered against current agenda.
A/Prof Natasha Stacey	Scientific Member	Researcher at Charles Darwin University. Past (early 2020) FRDC NT Research Advisory Committee member. Not involved in any Torres Strait related projects. No conflict considered against current agenda.
Mr Quinten Hirakawa	TSRA Member	The TSRA hold in trust, on behalf of the traditional sector, sunset licences for a number of the Finfish Fishery and hold licences in the TRL and BDM Fisheries. No conflict considered against current agenda.

Name	Position	Declaration of interest		
Mr Rocky Stephen	Traditional Inhabitant Industry member	Councillor for Ugar, Chairperson of Kos and Abob Fisheries Ugar, Works with brother in a commercial fishing business on Ugar, Eastern cluster representative on the PZJA Finfish RAG & Working Group. Torres Strait Scientific Advisory Committee. Does not hold a TIB licence.		
		TSRA Board member for Ugar TSRA Finfish Quota Management Committee member Member of Zeneth Kes Fisheries company. No conflict considered against current agenda.		
Mr Patrick Mills	Traditional Inhabitant Industry member	Member of the Torres Strait Fishers Association. TIB fisher. TRL Working Group industry member. No conflict considered against current agenda.		
Mr Gavin Mosby	Traditional Inhabitant Industry member	Traditional Owner, Traditional fisher for BDM, TRL and Finfish. TSPMAC member.		
Winning member pri		Works in the same department as the principle investigator of the Spanish Mackerel biologicals project currently underway, and being discussed at this meeting for continuation over the next three years.		
Observers				
Mr Andrew Trappett	AFMA observer	AFMA staff member. Co-investigator on finfish biologicals project to date. Leaving AFMA to take up a formal contract on the project.		

## 1.2 Review and adoption of agenda

- 6 The agenda (Attachment A) was adopted as circulated by AFMA.
- 7 The committee noted that the main agenda item was to consider priorities put through by each fishery PZJA forum expert committee, and approve the research scopes that would be circulated in the call for research EOIs for the 2021-22 funding round.

## 1.4 Action Items from past meetings

The TSSAC noted progress against actions arising from past meetings, detailed in Table 2 at the end of the meeting record.

# 2 2021-22 research proposals

- 9 The TSSAC noted the research priorities being put forward for the 2021-22 financial year. In particular, they noted the following points regarding priorities:
  - Four priorities have been put forward for finfish for 2021-22 (and some are multi-year projects).
  - Whilst the other fisheries have not proposed priorities to be included in the next funding call, priority work is scheduled next year to both progress and further refine research and data needs in the fisheries.
  - Some research needs for other fisheries are still included in the current strategic research plan for future years (Attachment B).
  - The AFMA research budget has been estimated again at around \$411,000 for the 2021-22 financial year. Of that \$290,824 of the 2021-22 AFMA research budget is committed to multiyear funding for the TRL survey and stock assessment research, leaving \$120,176 for spending on other priority research.
  - The estimated budgets for the four projects put forward as priorities together with the committed TRL budget, equal \$561,824 which is \$150,000 beyond AFMAs anticipated research funding for 2021-22.
  - Some project budgets have been underestimated in the past. It is possible one or two projects in particular may overspend budgets, which would increase the funding gap.
  - TSRA advised they are unable to committee funding until after the new TSRA board is formed in February 2021. They are hopeful they may be able to provide some funding after this time.
  - Queensland Fisheries are unable to provide any funding due to large budget cuts.
- 10 Mr Mills asked why White Teetfish surveys are not included in the research priorities, and requested it be included as a fifth priority for 2021-22, as he considered it a very high priority fishery for traditional inhabitant fishers.
- 11 The TSSAC noted that BDM remains a priority. BDM surveys, including a survey of White Teetfish occurred in December 2019 and January 2020. The preliminary results of these surveys are being presented to communities during AFMA visits this week, and the report will be released before the end of the year, and made publicly available.

- 12 Mr Mills was concerned that he hadn't received information about the results, and that fishers should be informed about the results of these projects as a priority.
- 13 AFMA confirmed that communicating the results of research to communities and fishers is a priority. AFMA provided an update on the advisory and consultation efforts undertaken in agreeing to the survey as a priority and to the funding proposal. The TSSAC also noted that the preliminary results of the survey had already been considered by the PZJA Hand Collectable Working Group. The AFMA member agreed to circulate the preliminary report to all members.
- 14 The Chair encouraged the member to contact AFMA outside of the meeting if they wished to discuss current and future communication strategies and ideas with AFMA, and in particular how they can be improved.
- 15 Traditional inhabitant members advised that it is important to provide project outcomes as soon as possible to communities when projects are finalised and welcomed AFMA advice about the community visits presently being undertaken.
- 16 AFMA noted that the outcomes of the project will also be considered by to be formed new Hand Collectables Resource Assessment Group (HCRAG), which was recommended to be set up at the last HCWG meeting.
- 17 The chair invited general comments about the projects and budget, before AFMA explain each project in detail.
- 18 Mr Welsford asked if the CKMR study could be pushed forward to a future year, given that in his experience this research could be quite expensive and may not achieve the results the Finfish Resource Assessment Group (FFRAG) desire. He noted the complexity of CKMR as an alternate index of abundance, which Antarctic Division have been exploring recently for Toothfish. He has concerns that this method, when used in small fisheries, could raise more questions than answers. The committee noted his recommendation to consider other options for indices of abundance, which may be more reliable, rather than focusing on this one technique which is still fairly experimental.
- 19 Traditional inhabitant members raised concerns that more than half of the TSSAC budget is consumed by the TRL survey work each year, leaving little funding for other fisheries, which is favouring one group of fishers. The other fisheries are 100% owned by the traditional sector, and are also very important to communities.
- The committee noted that despite the increasing complexity of, and requirement for, scientific advice to inform the sustainable managed of Torres Strait fisheries, the AFMA budget for the TSSAC has been substantially reduced. The Committee agreed it is important to continue exploring ways to securing more funding for Torres Strait research, noting there is likely to be more ongoing stock assessment work for other fisheries to in future, leaving little funding for other projects each year.

- 21 AFMA advised it can look into securing more AFMA funding, however it is unlikely given that AFMA budgets are not increasing generally. It's important to look at securing other regular funding, such as from the TSRA, to grow the pool of funding for Torres Strait research. TSRA have offered co-commitments for funding Torres Strait research in the past, and it would be great if this can be a regular feature in a shared budget going forward.
- 22 A/ Prof Stacey also noted that fisheries are now acknowledged more and more as being linked to other goals in relation to health and economic development, such as the 'Close the Gap' targets, which may bring interest from other parts of Government to support Torres Strait research.
- 23 The committee agreed to invite FRDC to a meeting next year to explore further funding opportunities.
- 24 The chair requested a paper be presented next year, regarding possible funding options for discussion by the committee, seeking more formal advice from the different agencies regarding their ability to provide funding or not, which differs from papers of this nature presented to the TSSAC in the past.

ACTION: TSSAC EO and the Chair to explore other funding options from other Government and non-government agencies, noting that fisheries are more and more recognised as providing value to other areas of priority, include people's health and wellbeing and 'Close the Ga'p initiatives. This action will include formal communication with TSRA, FRDC and AFMA regarding funding commitments and options, for presentation to the TSSAC through a paper on funding options.

- The TSSAC went on to discuss the four project scopes suggested for the 2021-22 funding round.
- 26 AFMA advised that the major focus for the FFRAG over the past few years has been to focus on collecting information/ data and on building knowledge (to tell a story with the data). These projects fall under these goals.

## Spanish Mackerel and Coral Trout Biological sampling

- 27 This project is focused on the data and information collection objective.
- 28 The data from this project is one of the key inputs into the stock assessment model. The CPUE time series (as a proxy for abundance of the animals) has been decreasing in the available information, for the last 8-9 seasons.
- 29 Given fishing pressure has been at a record low level, this change may be environmentally driven, which may impact recruitment of fish into the fishery. As such, the FFRAG advise it is crucial to understand what is happening with

- recruitment into the fishery, and this is determined through age and length frequency data collected during this project. Continued sampling over multiple years is required to get a strong time series.
- 30 The FFRAG have requested that tissue samples are also collected through the project, to support future work around alternate indices of abundance. They also noted Spanish Mackerel is the priority, if there is insufficient funds to cover both species. It was noted there are economies of scale with including Coral Trout given they are already in the lab collecting data for Spanish Mackerel.
- 31 Mr Stephens advised that the community elders from Ugar are very supportive of the ongoing work of this project, so communities can see what is happening over time.
- 32 The committee noted that QDAF have indicated that \$121 000 is still estimated to be a realistic budget for the Coral Trout and Spanish Mackerel data collection.
- 33 Scientific members were supportive of the project, however noted that we will be very limited in our ability to do other research, if we commit to this multi-year project, and are not able to secure additional funding.

## Spanish Mackerel Stock Assessment

- 34 The committee noted that this project falls under both the data and information priorities identified by the FFRAG.
- 35 This project was recommended by the FFRAG, as the present estimate of biomass is around 23% of unfished biomass, on average, and evidence suggests that the stock is depleted. The stock assessment is currently our only way of monitoring the stock.
- 36 We need to know if the biomass is decreasing further towards the limit reference point of 20%, or if it is increasing, which could allow the total allowable catch to increase.
- 37 The FFRAG have been assisting the Mackerel project team to update the stock assessment with the age and length biological data, and incorporating CPUE time series from traditional inhabitant fishers into the assessment. They are also looking at ways to incorporate fish receiver data into the model going forward, further develop the older data, and look at selectivity given they are fishing a breeding aggregation. This will allow us to understand hyper-stability which leads into the Alternative Index of Abundance, close kin mark recapture (CKMR) project to.

# Design study for an alternative index of abundance for the Torres Strait Spanish Mackerel stock (CKMR)

- The RAG recommended as a priority to pull together a case study to determine the likely efficacy of CKMR techniques for providing an alternative index of spawner abundance for the Spanish Mackerel Fishery, independent of fishery logbook data. Because we are using CPUE fishery dependant data with only a few boats, are near the limit reference point and have hyperstability in catch rates, it's important to find other ways we can monitor the stock outside of fishery dependant data.
- 39 The FFRAG have been reaching out to other jurisdictions to see whether they are having similar experiences, indicating that changes may be environmentally driven. Initial advice seems that is is the case. This may mean other jurisdictions would be interested in being a part of a broader project, funding this CMKR work across the North, as there would be economies of scale in a bigger project and offers the possibility of alternative sources of funding.
- 40 The TSSAC noted that the FFRAG has recommended CKMR as an innovative option, on the understanding that Spanish Mackerel is a likely suitable candidate for the method. The scoping study aims to explore how it would work alongside our biological sampling project, which is currently collecting tissue samples. They would use the Spanish Mackerel stock assessment model to determine how many samples are needed over what time series and when that data will start to inform the management process.
- 41 The committee noted that the cost of taking the samples is low, as it is only an additional 1-2 minutes work per sample already being taken through the finfish biologicals project.
- 42 AFMA advised that it could be several years before the actual data starts getting collected, after this scoping study takes place, which is why there is a push to do the study now.
- 43 Mr Welsford re-iterated his view that the complex stock structure of Spanish Mackerel may not lend itself to this method, noting it is difficult to apply to metapopulation structures. He suggested a project which could scope multiple possible techniques for determining indices of abundance, such as traditional mark recapture or change ratio studies. The CKMR method to date is struggling to be applied outside of very big highly valuable fisheries such as Southern Bluefin Tuna and Sharks. They have tried using it for Toothfish, but are pessimistic that it will raise more questions than answers. He believes the higher

- priority is developing the Harvest Strategy, which should help us understand the data we actually need and the level of uncertainty we will be managing.
- 44 The committee noted that Dr Rik Buckworth, a member of the FFRAG, advised that the Torres Strait Spanish Mackerel stock is a distinct stock, which is one of the factors which makes close kin more likely to be successful.
- 45 The TSSAC noted that the relative urgency around this project, is related to the likelihood of increased risk of heat wave events in the future, as a result of the current la Nina event. This could lead to further declines in spawning biomass for all Spanish Mackerel fisheries around Northern Australia if environmental factors are at play.
- 46 AFMA noted that although there is no specific priority put forward this year regarding effects of environment on recruitment, it's still a key area of interest to the FFRAG, and they are trying to integrate this into the stock assessment model.
- 47 The TSSAC noted that the FFRAG are hoping to explore possible options for future projects relating to this during 2021, which may be put forward as a priority in future years. The current climate change project will be able to provide some guidance around this to.
- 48 Dr Welsford left the meeting at 1pm.

### Finfish - Harvest strategy development for the Torres Strait Finfish Fishery (Spanish Mackerel and Coral Trout)

49 This research priority aims to update the current work on the harvest strategy, including further developing Harvest Control Rules (HCRs), and looking at risk appetite and the data we need to collect to support the needs of the fishery. The project may also be able to tie in information regarding alternative indices of abundance.

Andrew Trappett left the meeting at 120 pm.

### Summary regarding project scopes and funding

- 50 The committee noted that the projects are all focusing on removing uncertainty of the current assessment, and we should try to focus on supporting the best value for money projects, most likely to bring understanding as to why the stock is declining.
- 51 The TSSAC also noted that some traditional inhabitant fishers (both the members on this committee and more broadly) feel the assessment is indicated

declining stocks, yet they are seeing plenty of fish on the water. One traditional inhabitant industry member provided an alternative view, that they are seeing less (and smaller) females around this year, and the flush of fish from Ugar to Masig which usually runs the month of October was very short.

- 52 The committee agreed that all projects should go forward in the call for research, noting, although the current AFMA budget is not able to meet the estimated cost for the projects, we are hopeful that TSRA may be able to provide funding towards the projects following the election of the new Board. The committee also noted that if budgets for projects have been underestimated, as in past years, then they may come in higher and result in a larger shortfall than predicted.
- 53 The committee also noted there may be possible funding available from FRDC as well, particularly for a broader Australia wide project that was discussed for the Spanish Mackerel alternate index of abundance (CKMR) project. However this project should still be progressed through the TSSAC call for research, while feelers put out to the States about possibly being involved in a broader project. If this happens, it may attract funding from FRDC or the States.
- 54 Options will be provided in some projects (such as the biologicals), providing some room to move around budgets and maximising the projects we can support within our available budgets.
- 55 The committee agreed that the call for research should again make clear to researchers, that AFMA cannot guarantee funding of these projects even though we are calling for proposals, to manage expectations and time commitments.
- 56 The committee also noted the need to prioritise projects that may be put forward to FRDC for funding, as they are unlikely to provide endless funding for Torres Strait projects. The climate change and non-commercial take scoping projects, which are about to be completed, were earmarked for possible FRDC funding last year.

ACTION: TSSAC to consider priorities that could be put forward for FRDC funding carefully, noting limits to funding for Torres Strait projects. There here are several priority areas to consider that may be attractive to FRDC, including climate change, non-commercial catch monitoring and alternative indices of finfish abundance).

ACTION: AFMA to send a copy of the White Teetfish project report to members including Patrick Mills.

**RECOMMENDATION 77.1:** The TSSAC AGREED that all four finfish project scopes should be released in the 2021-22 call for research.

**RECOMMENDATION 77.2:** The TSSAC NOTED that the TSSAC Executive Officer will work with scientific members to finalise the project scopes, and then send these to TSSAC out of session for final comment before the call for research is released.

**RECOMMENDATION 77.3:** AFMA will continue to explore avenues with the states around the possibility of a bigger project looking at alternative indices of abundance for Spanish Mackerel around Australia, alongside progression of the Torres Strait specific project through our 2021-22 round, to avoid delays to this work.

ACTION: AFMA to release call for research with four finfish project scopes; Spanish Mackerel and Coral Trout Biological sampling, Spanish mackerel stock assessment, Design study for an alternative index of abundance for the Torres Strait Spanish Mackerel stock and Harvest strategy development for the Torres Strait Finfish Fishery (Spanish mackerel and coral trout).

# 4 Other Business

# 4.1 Next meeting

- The TSSAC agreed that a videoconference will be held for the March meeting to discuss the pre-proposals for the four agreed projects. A face to face meeting will be held in May, which will invite FRDC and may also invite other agencies that maybe interested in support Torres Strait fisheries research. This was scheduled for this year, however had to be postponed due to COVID restrictions and delays to projects.
- AFMA thanks members for being patient during the COVID period, as it isn't always ideal to meet via video-conferences. They also acknowledged how well video conferences have been working, and that it is a useful tool to use for short meetings, with less than a days work, given the big travel commitments of some members, of 1-2 days each side of the meeting. AFMA also noted they are happy to assist with conversations before meetings to get members up to speed with the agenda, and to ask any questions to assist with the smooth running of meetings.

# 4.2 meeting close

59 The meeting closed at 150 AEST with a closing prayer.

**Table 2.** Actions from TSSAC 77 and progress against actions from past TSSAC meetings

Action number Action item Responsi ble person
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77.1	TSSAC EO and the Chair to explore other funding options from other Government and non-government agencies, noting that fisheries are more and more recognised as providing value to other areas of priority, include people's health and wellbeing and 'Close the Ga'p initiatives. This action will include formal communication with TSRA, FRDC and AFMA regarding funding commitments and options, for presentation to the TSSAC through a paper on funding options.	
77.2	TSSAC to consider priorities that could be put forward for FRDC funding carefully, noting limits to funding for Torres Strait projects. There are several priority areas to consider that may be attractive to FRDC, including climate change, non-commercial catch monitoring and alternative indices of finfish abundance).	
77.3	AFMA to send a copy of the White Teetfish project report to Patrick Mills.	AFMA
77.4	AFMA to release call for research with four finfish project scopes; Spanish Mackerel and Coral Trout Biological sampling, Spanish mackerel stock assessment, Design study for an alternative index of abundance for the Torres Strait Spanish Mackerel stock and Harvest strategy development for the Torres Strait Finfish Fishery (Spanish mackerel and coral trout).	AFMA

# **Actions from past TSSAC meetings**

Action number	Action item	Responsi ble person	progress
76.1	Send hard copies of minutes (TSRA) to TIB members once finalised.	TSRA	Ongoing action item.

76.2	AFMA to try to release papers 2 weeks before meetings so TSRA can send a hard copy of papers to TIB members who request them.	AFMA and TSRA	Ongoing action item.
76.3	TSSAC Executive Officer to send a copy of the draft AIATSIS code to TSSAC with the minutes.	TSSAC EO	Complete. A copy was sent with the minutes of the last meeting.
76.4	AFMA to coordinate a meeting regarding the project "Measuring non-commercial fishing (indigenous subsistence fishing and recreational fishing) in the Torres Strait in order to improve fisheries management and promote sustainable fishing" between Natasha Stacey, the Project team, AFMA and the TSRA	AFMA	Complete. Ms Stacey was invited to be a part of the steering committee meeting for this project, and discussed her ideas at the meeting. She will be continuing to work with the team while they finalise the project.
76.5	TSRA to facilitate a discussion between the two project primary investigators on the sampling methods used in the biological sampling project, and any lessons that can be shared between the projects	AFMA/ TSRA	Complete. A meeting was held between the two project Pls in September. They spoke about the importance of data collection during this project, and more broadly. Mr Bedford also agreed to talk to the staff in the new Erub facility to encourage them to keep supporting providing samples for the project. Ms Langstreth is going to arrange another discussion, to focus specifically on any lessons learnt from Mr Bedford's project, which can be applied during her project.
76.6	TSSAC EO to write letter to finfish biologicals project team asking for minor updates to the full proposal and stakeholder engagement plan and inform them the project has been supported for funding.	TSSAC EO	Complete.

76.7	TSSAC EO to reference the correct area (community) that the finfish project will be occurring within, under the comments section of criteria 6 of the project assessment.	TSSAC EO	Complete.
76.8	AFMA to explore ways to use more specific terminology (specific nations) in their work rather than use the term Traditional Inhabitant or Torres Strait Islander. This should also be considered to ensure the right nation is being consulted or engaged around management issues	AFMA	Ongoing. AFMA have started referring to the specific representative from the relevant cluster nation in meeting records. Changes to old documents may take time to update, an further advice around other changes that are requested is welcomed.
75.1	AFMA to explore a possible method for undertaking research relating to historic finfish dive surveys and habitat mapping to improve a future stock assessment, noting there may be some additional funding from AFMA and the TSRA.	AFMA	Ongoing. AFMA worked with FFRAG members to obtain the dive survey data, including an unpublished summary report for the data. This is now housed in AFMA ready for future stock assessments or projects. There has been no progress on obtaining habitat mapping data. The FFRAG and FFWG can consider the possibility of future research related to this data when updating their 5 year rolling research plan this year for the finfish fishery.
73.4	Include a requirement in the procedural framework for undertaking research in the Torres Strait for researchers to inform communities how any traditional knowledge will be used during a project (i.e. for catch data for stock assessments, for improving survey design for research). The section should also explain how researchers should handle the traditional	TSSAC EO/ AFMA	Ongoing. The procedural framework is currently being reviewed. COVID-19 has delayed the update of the Indigenous research guidelines produced by AIATSIS, so this item will be progressed further once these are released.

	knowledge, including examples of the incorrect use of the data.		
73.6	Consider options for presenting information on research to a TSIRC meeting, giving a bigger picture view of research for communities.	AFMA	Ongoing. This hasn't been progressed to date. AFMA are still considering the best way of presenting information on research to TSIRC. That said, AFMA are in liaison with TSIRC Councilors, regarding Torres Strait research, and are continuing to provide information about the research program, to educate councilors about research in the Torres Strait and their involvement.
73.8	TSSAC EO to speak to Cass Hunter about getting a copy of template for communicating research results to communities once her project is finalised.	TSSAC EO	Ongoing. We are still waiting for a final copy of the report. It will be sent to TSSAC when received.
73.10	Add a standing agenda item which reviews projects against the SRP themes to keep track of which themes we are covering. The review should also consider whether multi-fishery projects are being considered, which are often missed in fishery specific plans.	TSSAC EO	Ongoing. This item was due to be considered at this meeting, however has been set aside for discussion at our next face to face meeting. This is noting that long teleconferences are difficult, and the priority for the November 2020 meeting is to discuss the few critical research priorities identified for 2021-22 funding.