**CARES C4T 2019 SAC meeting**

**Information request to IRPs for submission February 15th latest**

Draft agenda may be found [here](https://www.dropbox.com/s/jjwjlupkxjwqq62/2019%20SAC%20meeting%20-%20draft%20agenda.pdf?dl=0). Please note this has been updated with some requests from the SAC.

Supporting briefing material for the SAC will be circulated to them in late February. Each IRP should submit the following information to contribute to this briefing pack by **February 15th**:

* **Nomination of a researcher or group of researchers to create 1-2 posters** for the IRP. Poster deadline will be March 15th and further instructions on templates etc. will be given to nominees in Feb. Posters should where possible showcase recent work that helps to evidence the SAC guidance questions (see attached). New IRPs may submit an explanatory poster, if work has not yet commenced.
* For experimental IRPs, **suggestion for 1-2 lab demos** in CREATE labs including names of researchers who will help to organise.
* For the briefing pack, each IRP should **give its answers to the following** NRF questions to the SAC. New IRPs can discuss the near future plans, if work has not yet fully commenced.

1. **Significance and likely impact of the research thus far**

IRP BB is a new IRP and we have hired one research fellow so far in February 2019. We have identified the other candidates but their work passes are still being processed. We are hopeful that three of them will join us in March 2019. In parallel, we are laying the groundwork, learning more about the techniques that we will apply and about the technologies being developed in the other IRPS, as well as starting to build internal and external linkages. The 3 PIs have expertise in and have carried out significant research in value mapping, technology roadmapping, business model development, technology transfer and innovation management, and development of incentive mechanisms using game theory. These will be brought to bear to assist the other IRPs in identifying pathways to eventual commercialization of their research.

1. **Who is likely to benefit from answers to the research questions posed?**

Other IRPs in this large multi-year project. Industry and policymakers.

1. **Are there likely to be translational outcomes?**

The analysis that we will conduct with relevant early-stage technologies will produce value maps, technology roadmaps and business models that will benefit other IRPs in identifying specific pathways for eventual translational outcomes.

1. **Is the approach and methodology adopted credible?**

Yes, the methods used have been adopted by other sustainable technology based start-ups and are proven. The PIs in IRP BB are well published and have complementary skillsets. We have practiced and used many of the methodology required in other contexts and in our own research.

1. **How can the project be strengthened?**

IRPBB is a new addition the project in phase 2, which has just commenced. We can provide more insight on this point at a later date.

1. **Give some specific examples of the benefits of Singapore/Cambridge collaboration in the IRP**

The 3 PIs in IRPBB have very complementary skill sets that are vital for the project. We believe that we have already gelled well as a team. Specific examples of the benefits of the collaboration will be provided by year 3 after we have worked together for a sufficiently long period of time.

1. **Give some specific examples of where the IRP is collaborating with other IRPs or concrete near-term plans to do so.**

We have already initiated discussions and planning with IPR1 (Sustainable Reaction Engineering). We will be working with them in April and afterward to develop their value map for the technologies that they are developing. These value maps will be refined to develop the technology roadmaps for each of the technologies that are developing and from these roadmaps, business models will be developed. The work with IRP1 will be used as our initial case to further develop and work with all the other IRPs.

1. **What external collaborations does the IRP have or plan to have in the coming year?**

Nothing envisaged at the moment. As we are just commencing the project, it is difficult to predict external collaborations that might develop at a later stage. We have established connections to SIMTech and to EDB as likely future collaborators.

**i) How, in practical terms, is the IRP leadership team working together to deliver the work?**

See also response to (f) above. The 3 PIs in IRPBB are communicating regularly by email and voice, and will spend 5 weeks face-to-face in March/April 2019. We have very complementary skill sets that are vital for the project. The Cambridge PI has expertise in value mapping, technology roadmapping, and business model development. The NUS PI’s expertise is in innovation strategy and management, entrepreneurship, technology transfer and patent development. The NTU PI’s expertise is in supply chain coordination, developing incentive mechanisms, sustainable operations and corporate sustainability. All three have a techno-commercial background with research and educational background in engineering, management and business. They have already gelled well together as a team. We look forward to working together along with research staff being hired to achieve the deliverables of IRP BB.

* Please ensure researchers respond promptly to the request to **submit recent publications** and ensure that particularly publications involving Singapore/Cambridge collaboration.
* Please give a brief update on the current **plans for delivery of the IRP’s** [**current listed mid-term deliverables**](https://www.dropbox.com/s/fsxe7lttn46fdd5/C4T%20P2%20Deliverables.pdf?dl=0). If you wish to propose any changes to the approved deliverables, please list these with justifications for the change.
* The Emerging Opportunities Fund will not be awarded until late 2019/early 2020. However, to give the SAC an indication of the possibilities and to obtain some initial feedback from them, if you already **have ideas for this fund please submit a brief (100-200 word) summary** of the project idea(s). Following gives an idea of scope:
  + Project budget should be in range SGD250k-750k, although a smaller number of larger projects would be possible if highly supportive of the programme goals
  + 2- 2.5 years duration
  + Must strongly support programme goals and ideally be new opportunities the need for which has emerged since the proposal was put together
  + Can be basic science, but also translation, outreach etc. Fine to be creative!

This table outlines some of the questions that the SAC will consider during their visit. Please keep these in mind when preparing your briefing.

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| **Guidance to Scientific Advisory Committee**  ***Produced by the National Research Foundation, Singapore*** | |
| 1. | Is the vision for the programme coherent and clearly articulated, with appropriate and clearly defined programmatic outcomes? |
| 2. | Are the projects in the programme likely to lead to the proposed programmatic outcomes? |
| 3. | What is the evidence that indicates collaboration between Singapore and Cambridge investigators on each project? Are these collaborations crucial for each project and relevant for achieving the programme’s objectives? |
| 4. | What is the evidence that indicates collaboration across the research projects? |
| 5. | What other collaborations outside of the programme could contribute to the overall impact of the programme? |
| 6. | Leadership: Is the leadership team effective in articulating and executing the programme strategy? Is there evidence of appropriate planning, resource allocation and management process? |
| 7. | Are key milestones being met? Are there other milestones the programme should set itself? |
| 8. | Please comment on the quality of each project:  a) Significance and likely impact of the research thus far  b) Who is likely to benefit from answers to the research questions posed?  c) Are there likely to be translational outcomes?  d) Is the approach and methodology adopted credible?  e) How can the project be strengthened? |
| 9. | Please recommend if the programme should continue to be supported and amendments in research direction and focus that you deem essential or desirable. |