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Collaborate or Commiserate !

Gordon G. Wallace

University of Wollongong, gwallace@uow.edu.au

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Collaborate or Commiserate !

Abstract

The ability to build effective collaborative research activities is no longer a secondary skill for scientists. It is a skill critical to the development of a successful career. Without a demonstrated capacity to deliver on projects that mandate collaboration, a competitive position cannot be sustained. The importance of collaboration in delivering efficient, effective and high impact advances in research and innovation is well documented. See for example the position paper entitled "Australian Science in a Changing World: Innovation requires Global Engagement" published by the Australian Academy of Science in 2011. A scant search of the research literature also shows numerous studies highlighting that collaboration is essential (plug – collaboration, research and innovation into your search engine). A simple survey of high profile publications shows multiple authors from different backgrounds and research organisations are usually involved.

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Collaborate or Commiserate !

Gordon Wallace

**ARC Centre of Excellence for Electromaterials Science (ACES)
Intelligent Polymer Research Institute, AIIM Facility, Innovation Campus
University of Wollongong, Wollongong, NSW 2522, Australia**

The ability to build effective collaborative research activities is no longer a secondary skill for scientists. It is a skill critical to the development of a successful career. Without a demonstrated capacity to deliver on projects that mandate collaboration, a competitive position cannot be sustained.

The importance of collaboration in delivering efficient, effective and high impact advances in research and innovation is well documented. See for example the position paper entitled “Australian Science in a Changing World: Innovation requires Global Engagement” published by the Australian Academy of Science in 2011.

A scant search of the research literature also shows numerous studies highlighting that collaboration is essential (plug – collaboration, research and innovation into your search engine). A simple survey of high profile publications shows multiple authors from different backgrounds and research organisations are usually involved.

At a local level, on a daily basis, it is obvious that the complex global research challenges we face cannot be effectively confronted by individuals, indeed not even by a group of individuals, from a single discipline.

In our Centre of Excellence (ACES) the pursuit of more efficient energy conversion systems using biomimicry calls on the talents of Biologists, Chemists and Chemical Engineers, Materials Scientists / Engineers to design and synthesis new material structures and Mechanical Engineers who can build fabrication equipment to assemble these in appropriate configurations. Our quest to build next generation Medical Bionic Platforms also calls on these skills; in addition to the input needed in the areas of physiology, electronic engineering and the direction of clinicians who will use the outcomes. This collection of highly-talented individuals, technically gifted in their chosen fields, and with interpersonal skills that have enabled effective collaboration, have achieved advances that would not have been possible individually.

The interpersonal skills essential for collaborative success include:

- The ability to listen. Respect for the talents of others and an innate thirst for knowledge usually result in an individual who can listen and acquire information from a completely different discipline.
- The ability to clearly articulate complex phenomena in simple terms. A detailed knowledge of your own field is needed if you are to be able to break the message down into digestible chunks.
- The ability to be creative with the wide range of communication tools now available to help listening and articulating.
- The ability to help build a rapport with individuals and with the team that facilitates the collaborative process.
- The highest level of integrity and patience. The ability to put the collaboration and longer term benefits for all ahead of short-term benefits for the individual.

We do have a choice. We can either develop such interpersonal skills and establish ourselves in an effective integrated team of high calibre researchers and collaborate - or commiserate with those that thought collaboration was not necessary!

Ten steps to building effective research collaborations.

1. Establish the Vision.
2. Identify the skills needed to take the Vision forward.
3. Take the Vision “to the streets” – make sure the Vision is embedded in and promoted through every opportunity. Get others excited !!
4. Bring others to the Vision – organise symposia, workshops, invited talks. Tap into existing collaborative networks such as Centres of Excellence, Co-operative Research Centres, Australian Nanotechnology network, or the many others you will find relevant to your field of expertise. As a PhD student start to build links – with other researchers. Make the most of visiting experts to your labs. Get prepared and be enthusiastic. Every visitor is a prospective collaborator at some point in your career.
5. Refine the Vision as needed - the first idea is unlikely to be the best. If it finds itself in the wrong place at the wrong time it is easier to refine the idea than manipulate these physical realities.
6. Recognise Collaborative Opportunities. It is more than just a collection of appropriate skills that makes collaborations work. You need to identify and align yourself with like-minded individuals. If it doesn't feel right almost immediately then in my experience it is probably not going to work. Ninety nine per cent of the time you can gauge the likelihood of collaborative success very quickly (two beers and a packet of Nobby's Nuts should do it).
7. Once identified, treat the relationship as precious. Identify a short-term opportunity to get some runs on the board, and build on that. If you can produce an output that has required collaborative planning, execution and delivery, you are more ready to seek external investment in the partnership.
8. Build the collaboration – patience, integrity and enthusiasm will be required. Building the collaboration requires resources and practical support. You need to ensure that resources can be kicked-in to breathe life into the collaboration. Those resources are usually more than just cash; it is the dynamic supportive environment that fosters real collaboration.
9. Acknowledge collaborators – celebrate Success! Researchers are not good at celebrating success because we always want to make it better. Celebrate significant results together Celebrate that joint publication !!
10. Would be great to hear your ideas.

So we have discussed why and suggested how, but where ?

Not all organisations are adept at facilitating collaborative research. So if you are choosing **where** to work – chose carefully.

While there is no doubt that these skills will make individuals more attractive to prospective employers, the collaborative research environment to be supplied and resourced by the employing organisation is also critical to success.

So be prepared for the “do you have any questions for us” routine.

How does the organisation support a collaborative research environment ?

What resources are available to initiate meetings and fund collaboration promoting events ?

What resources are available to initiate collaborative projects ?

How does the organisation facilitate (not just encourage) cross department collaborations ?

This does not just include across technical Departments, for example, do the organisations marketing people work effectively on collaborative projects with researchers ?

How does the enterprise actively facilitate collaborations?

Organisational structure and attitudes are critical to efficient building of successful collaborations. So don't go to the wrong place !!

Remember your collaborators may be hampered by the policies of their organisation as you will be by yours. Understand that and work together on them. For many research organisations/bureaucracies, collaborative research arrangements are really a hassle (the lip-service is usually politically correct) but the practical support afforded to those who are collaboratively active can be a number of decibels below the usual lip-service.

So we have covered why, how and wherebut when ?

Having established yourself in an appropriate organisation, you will be expected to deliver research impact in a timely manner. So **when** do you expend the effort required to establish collaborations.

Well that's a real dilemma in our current environment. The suitor needs some credentials to look attractive and those credentials are not just technical. Much to the astonishment of most administrators in research organisations, the establishment of collaborations consumes energy and resources (this is widely recognised in the business community) where relationships are valued and appropriate resources to initiate and sustain them are supplied. But for researchers, something has to give !

This is usually the shorter term return, linked to "tenure" and promotion.

In some way, it is much simpler NOT to collaborate; the shorter term returns will most likely be better.

Of course the longer term returns will not compete, so here we start to see the importance of engaging in collaboration with an organisation that really understands and appreciates what is involved, and what the benefits will be if sustainable support is provided.

*So Collaborate or Commiseratea bit harsh ? a bit simplistic ?
Yesand very real !*

In the space available, all I can hope to have achieved is to have sparked some discussion so that you can refine and customise everything above for your own personal situation.