Part 4

A research manager's notebook

Facilitating research partnerships

Notes for researchers and research managers

a Research publication

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Introduction

Some years back, the term 'North–South partnership' was fashionable. Today, 'South–South', 'South–South–North', 'South–East', 'developed–developing', 'inter-regional' or 'trans-boundary' co-operation are heard more often. Regardless of which terms are used, now that scientists are more mobile, and able to share large and complex data sets at the click of a button, international research is increasingly conducted via formal or informal partnerships and collaborations.

A 2011 report entitled *Knowledge, Networks and Nations: Global Scientific Collaboration in the 21st Century* emphasises that collaboration often enhances the quality, efficiency and effectiveness of research. In addition, as research budgets grow, partnerships have become increasingly necessary – the same report notes that, between 2002 and 2011, the amount of funding available for research and development worldwide increased by 45 per cent! And, despite the continued strength of the traditional centres of scientific research (Europe the USA and Japan), new players are emerging.

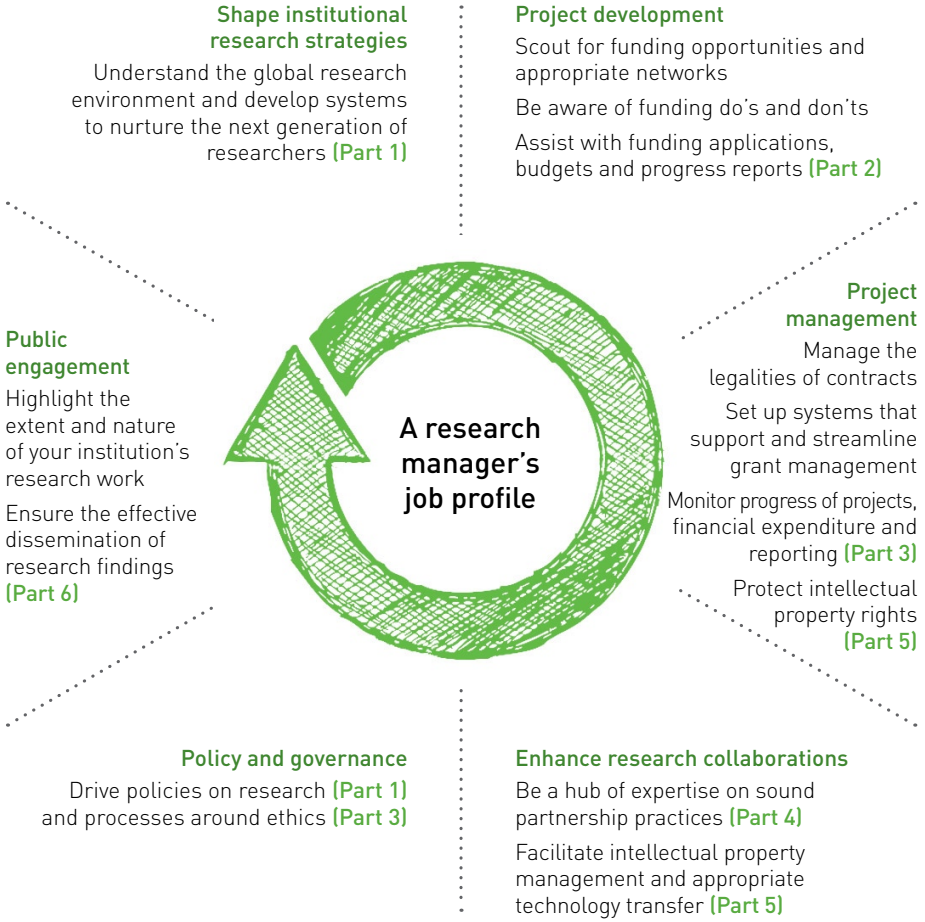
> We live in an increasingly multi-polar scientific world, in which scientific activity is distributed across a number of widely dispersed hubs.

Working with partners across borders and regions can be both exciting and daunting. Differing personal and professional cultures, languages, terminologies, methodologies and resources all affect research partnerships, and present a range of complex challenges for researchers and their institutions.

As a research manager, you may be expected to provide guidance about the kinds of organisations that your institution or your research colleagues should partner with. Alternatively, colleagues may ask you for some guidance about effective ways of networking.

This booklet is the fourth of a series of six notebooks in which research managers, based mainly in Africa and the Caribbean, share their unique insights, and provide practical guidance on the challenges they have faced in different aspects of their work.

Research management: the skills in brief



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This diagram illustrates the core skills that research managers need, and shows which book in the series contains most information on each skill. (In designing this diagram, we also drew on the core-competency framework developed by the Association of Research Managers in the UK and the US Society for Research Administrators.)

The booklets do not contain any strict rules or procedures, but rather suggest issues that you may need to consider as you work out the best way of serving your own institution.

Of course, the complexities of each topic go well beyond what can be covered in a short booklet, so some additional resources are listed on the last few pages. We also urge you to share your own experiences with us at info@research-africa.net. Where appropriate, we will make these available via the relevant regional networks.

Behind the partnership trend

As a concept in development thinking, the notion of research partnerships has been debated for decades. The topic was raised at the 1969 Commission for International Development, for example. It came up again at the 1992 Rio Earth Summit, and at the 2002 World Summit on Sustainable Development.

Scholars, too, have long been interested in collaborative behaviour. Topics that have been researched include: what makes partnerships successful, the effect of geographical distance between collaborators, how much co-authorship happens nationally and internationally, and whether any notable trends can be discerned in patterns of national or international collaboration. For a deeper insight into these questions, check out the resources listed at the end of this booklet. For more information about some of the interests that are shaping partnerships at present, namely: donor agendas, researcher agendas, and local national and international development agendas, read on.

Donor agendas

One of the driving forces behind the surging interest in research partnerships is funding organisations. In the past, donors tended to provide many small grants. Then they realised that this was creating a large administrative load for themselves, and, in some cases, leading to duplication of research.

In 2011, for example, Ahmadou Lamine Ndiaye led a study by Senegal's National Agricultural and Agro-Processing Research Fund (FNRAA), which found that many Senegalese researchers were working on similar issues but in separate silos. To reduce this duplication, and to get researchers in universities to talk to those working in industry, Senegal set up a national board to identify research being done in similar fields. In January 2012, thirteen Senegalese institutions signed collaboration agreements.

Some funders have even begun to make it compulsory for researchers to work in partnerships of one sort or another, in the hope that they can tackle larger projects and share their findings more widely. For instance, in 2012, the *Africa, Caribbean and Pacific Science and Technology Programme* published

a call for agriculture and energy proposals worth over €20 million. The announcement stated that only consortia that included a mix of partners from universities, research institutions, business and civil society and/or government agencies would be eligible.

Researcher agendas

While donors and research institutions are encouraging research partnerships, most researchers acknowledge that many of the world's problems require global solutions, and that forging partnerships and collaborations across all kinds of boundaries is proving fruitful in identifying solutions through trans-disciplinary discussions and new forms of knowledge production.

It is also true that, in seeking answers to their questions, researchers are naturally keen to work with the pioneers and leading scholars in their field, wherever they may be.

> Relationships and networks between researchers help to ensure that where solutions are found for one context, researchers can quickly determine if the same solution can work in other contexts.

Institutional and developmental agendas

While research is central to whether partnerships work or not, it would be naive to imagine that geo-politics and issues of agenda setting are unimportant in shaping many of the initial contacts. So, while research communities strive to constantly improve their skills, and to remain on the cutting edge of innovation, institutions will benefit significantly from clarifying what kinds of partnerships are most appropriate to their own strategic priorities.

For example, if the local economy surrounding an institution is building strong trade relationships with Eastern countries, it might be beneficial for that institution to seek partnerships with organisations that foster trade links with the East, or to create opportunities for students to study the languages, economics, politics and culture of that region. Similarly, if your institution is located in a predominantly agricultural area, it would probably make little sense for researchers to focus on innovations in urban design or industrial engineering.

> A research organisation's values and strategic direction should play a critical role in determining the partners it chooses.

Mamohloding Tlhagale
Director of Strategic Partnerships
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South Africa

Dr Edak Uyoh
Department of Genetics & Biotechnology
University of Calabar, Nigeria

This could be you: perspectives on partnerships

From the Antilles to Zimbabwe, the criteria used to choose partners are the same. Drawing on their experiences as researchers, Mamohloding Tlhagale, the Director of Strategic Partnership in South Africa's Department of Science and Technology, and Dr Edak Uyoh, from the Department of Genetics and Biotechnology at the University of Calabar in Nigeria, share their knowledge about research partnerships.

How do you find research partners?

Mamohloding Tlhagale: I have found partners through consulting and getting referrals from my current partners and networks, both local and international. Internet databases are also useful; by checking programmes I am interested in, I see who has worked collaboratively before and then I contact those people. My current department's research office, and other state departments (such as the Department of Science and Technology), also promote and facilitate the participation of South African researchers in international and African programmes.

Edak Uyoh: I find research partners among colleagues at my university, or at national and international conferences, workshops and symposia. Sometimes I write to people I have never met to ask them to collaborate with me, based on research that they have published on the internet.

Have you experienced any problems in working with multiple partners?

Mamohloding Tlhagale: I would say there are more benefits than challenges involved in multiple collaborations. The challenges are mostly concerned with co-ordination; that is, in getting all partners to deliver on time, including reports to funders.

Edak Uyoh: Sometimes unnecessary arguments and disagreements arise between partners but these can be resolved if all partners listen to each other and bow to the superior argument.

What do you see as the benefits of collaborative research?

Mamohloding Tlhagale: Partnerships facilitate the sharing of knowledge and expertise, the broadening of networks and learning about local and international best practice. They also help you to keep up with current trends in your area of research, and to tap into extra funding. Additional funding can help you achieve more. This improves your career prospects, gives you opportunities to publish internationally, and thus build your reputation.

What advice do you have for emerging researchers trying to find partners?

Mamohloding Tlhagale: First use local networks to tap into international networks, then find out what support your government and its entities offers to researchers, and finally, align your work with your country's national priorities. This will make it easier for you to obtain government support and funding, with which you can form partnerships with researchers from other countries.

Edak Uyoh: Remember that no one knows it all, so two heads are better than one. Be sincere and make meaningful contributions to partnerships you are involved in; avoid tendencies or temptations to be exploitative.

Where to start?

As a research manager, you can help to build links with organisations that may have an interest in adopting innovations developed within your institution. You can also help researchers by establishing institutional relationships with regional or international scholarly networks.

However, trying to establish new research partnerships can feel a bit like doing a sales pitch or going on a blind date: not impossible, but not exactly easy. The next few pages contain a few guidelines that may help.

Clarify your principles

All partnerships involve continuous processes of trust building, mutual learning and shared ownership. These are tricky issues in any relationship, and when partnerships cross national, cultural and disciplinary boundaries, dialogue can become even more sensitive.

The Swiss Commission for Research Partnerships with Developing Countries (KPFE) published *A Guide for Trans-Boundary Research Partnerships*, which draws on the experiences of researchers worldwide, and sets out eleven principles and seven useful questions.

Guiding principles

1. Set the agenda together
2. Interact with stakeholders
3. Clarify responsibilities
4. Account to beneficiaries
5. Promote mutual learning
6. Enhance capacities
7. Share data and networks
8. Disseminate results appropriately
9. Pool profits and merits
10. Apply results
11. Secure outcomes

Questions to answer as you go

1. Why work in partnership?
2. How to ensure cohesion?
3. What form of collaboration?
4. Which foci and priorities?
5. Who to involve?
6. Where to create relevance?
7. When to consolidate outcomes?

Be aware of the risks and know your rights

Concerns around the ownership of intellectual property can be a major obstacle to partnerships. It is natural for researchers to worry that their ideas, methods or data may be hijacked.

It is not unusual for an unequal power dynamic to arise between high-income and low-income institutions (including within South–South collaborations and university–business partnerships). A *2013 publication by the Council on Health Research for Development* notes that high-income institutions often set conditions that implicitly or explicitly disadvantage low-income partners. For example, the high-income partner sometimes tries to claim exclusive ownership of intellectual property rights or exclusive ownership of the data, even if the low-income partner has collected all the data.

To avoid such situations, the rights and responsibilities of all partners must be kept fair and transparent at all times. See **Part 3** in this series for some tips on negotiating contracts, and **Part 5** for information about different kinds of intellectual property and how best to protect it.

Work out what you see as an appropriate balance in relation to intellectual property, data sharing and ownership, to ensure that the **benefits** of your research **are equitably shared**.

> Agreements on setting the research agenda, clarifying responsibilities, promoting mutual learning, sharing data and networks, as well as pooling profits, chart a course for sound partnerships.
>
> – Jon-Andri Lys, Executive Director, KPFE

Mine online resources

Google Scholar, a free e-resource, can be useful in identifying potential collaborators and relevant topics. Use it to find the names of authors and studies that are related to your field. Then check out the authors via their institution's website. Apart from reading the web pages of staff and departments, browse through research-office reports. This is where universities often showcase their flagship research projects.

If the people you are interested in are active on the professional networking website *LinkedIn*, ask them to connect with you, or follow them on *Twitter* or *Facebook*.

A quick comment via social media is all that is needed to foster an in-depth discussion later on.

Good to know...

- The *African Observatory of Science, Technology and Innovation* in Equatorial Guinea is attempting to grade the quality of, and quantify scientific publications in Africa, to make it easier for researchers to select outstanding researchers for collaboration. See *http://aosti.org/*
- A new 'online-dating-type service' has been set up for medical researchers. Research consortiums looking for sites to test treatments for various diseases can now search the Global Health Network's *SiteFinder* website to find researchers all over the globe to collaborate with. But instead of 'man seeking woman' or vice versa, SiteFinder has sections for 'studies seeking sites' or 'studies seeking research centres'. The database can be searched by disease, facility type or region. Countries that tend to find it difficult to network with international or even local collaborators can use the tool to publicise themselves and their research interests. Trudie Lang, the director of the Global Health Network, the driving force behind the initiative, notes that, in the past, research teams, such as the Gates Foundation's product-development unit, went back to the same sites again and again. SiteFinder hopes to change this. By 2013, more than 60 sites had joined, ranging from large, internationally known centres such as The Gambia's Medical Research Council, to small facilities such as the Bengoz Maternity Home in Lagos.

Network, network, network

Person-to-person networking is an essential part of identifying potential partners. Conferences and symposia are where the seeds of partnership often get planted.

Work out how you can get to the next important national, regional or international gathering in fields your institution has identified as strategic to its development. When you get there, look out for speakers and delegates who share your interests. Remember that personal interactions are key in fostering the relationships necessary for collaboration. Aim to build solid relationships based on mutual respect and equal exchange; that is, make sure you have opinions and ideas to offer, and avoid coming across as needy.

> Realize this: everyone feels the same way you do. So simplify it. Say, 'Hi, I am [Insert Your Name Here]. I don't know a soul here, how about you?' Then ask for their business card and give them one in return. Ask them where they work, why they came to the conference, if they have any kids, how long they've worked in the industry, whatever you think might put them at ease.
>
> – Chester Elton, author

Create a ten-second summary of the research being done by your institution. Capture the key points in an interesting way and rehearse the summary by yourself so that you can say it fluently as you introduce yourself. Then, if someone shows an interest, be prepared to engage in a more substantial conversation about yourself and your organisation.

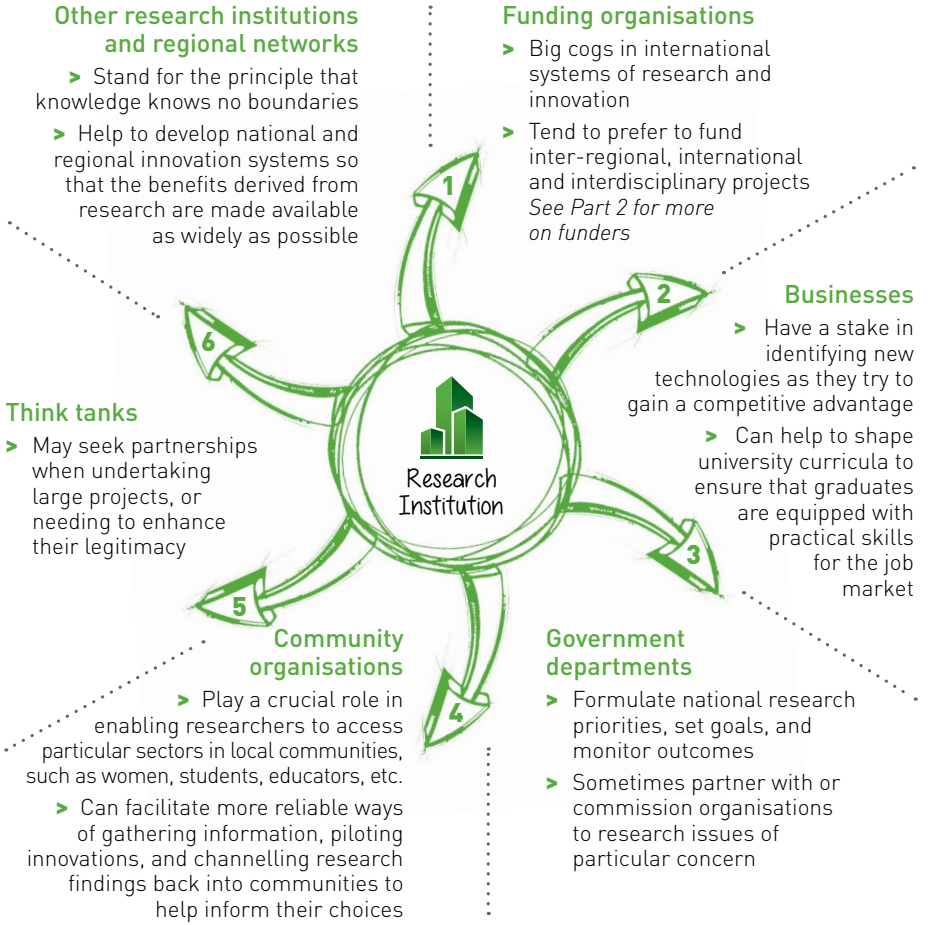
Most importantly, **follow up after the conference**. Of course, when you return to your office you will have a thousand emails to read, and loads of work to

catch up on. Don't let the business cards you have collected get pushed to the edge of your desk, and then into a drawer where you will forget all about them. Use the cards to connect with potential colleagues via LinkedIn, or send a quick email to say how pleased you were to meet them. Take this a step further by blogging or tweeting about what you learned at the conference, and who you learned it from. Connect with speakers you liked, and let them know which ideas of theirs you plan to use and how. Chances are, many of the people you talk to or contact will become your friends and colleagues in future, or would be useful contacts to put in touch with colleagues or researchers you may work with.

Decide that within, say, three days of returning home, you will make contact with all the key people you meet at conferences.

Facilitating research partnerships likely partners

Broadly speaking, your institution is likely to require partnerships with some or all of the different types of organisations shown here.



Funding organisations

- Big cogs in international systems of research and innovation
- Tend to prefer to fund inter-regional, international and interdisciplinary projects *See Part 2 for more on funders*

Businesses

- Have a stake in identifying new technologies as they try to gain a competitive advantage
- Can help to shape university curricula to ensure that graduates are equipped with practical skills for the job market

Government departments

- Formulate national research priorities, set goals, and monitor outcomes
- Sometimes partner with or commission organisations to research issues of particular concern

Community organisations

- Play a crucial role in enabling researchers to access particular sectors in local communities, such as women, students, educators, etc.
- Can facilitate more reliable ways of gathering information, piloting innovations, and channelling research findings back into communities to help inform their choices

Think tanks

- May seek partnerships when undertaking large projects, or needing to enhance their legitimacy

Other research institutions and regional networks

- Stand for the principle that knowledge knows no boundaries
- Help to develop national and regional innovation systems so that the benefits derived from research are made available as widely as possible

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Spotlight on...

All partnerships are unique, and vary significantly in nature depending on the kinds of organisation involved. It would be virtually impossible to catalogue all the different kinds of partnerships that are possible, but to show how different such relationships can be, we describe just two kinds of partnership in this section, namely: partnerships in which commercial objectives are key, and partnerships that focus primarily on influencing policy.

Commercial partnerships

Research institutions tend to have two main types of relationship with commercial partners.

In the first, established corporations subsidise infrastructure development, research, or student bursaries in exchange for some input into curriculum development, and/or the right to place a specific amount of corporate branding on your campus. Academics also offer consultancy services to specific companies.

This could be you...

The African University of Science and Technology (AUST) in Abuja, Nigeria, aptly demonstrates this symbiotic relationship. AUST is a small university, which was established in 2007, and had just 110 students by 2013. According to Wole Soboyejo, president and provost at AUST, the university engages industry partners by creating industry advisory boards. This partnership is important because, until recently, many industries complained about graduates' lack of expertise. Now, by partnering with multinational oil companies, for example, they understand the industries needs better, and are able to offer the students a more dedicated education pathway. In addition, these industries send them experts who teach application aspects, to make their students' curricula more complete. Between 2011 and 2012, the university's research budget increased from US$1 million to US$5 million.

In the second kind of relationship, commercial enterprises harness the work of research organisations to enhance their capacity for innovation, and then the two organisations often jointly commercialise the results of such research, with the profits split between company shareholders and the research institution.

In this second form of partnership, intellectual property rights and ownership, as well as the distinct roles of each partner have to be precisely described and specified in an appropriate contract. See Part 3 of this series for more information on negotiating contracts, and Part 5 for more information about intellectual property.

University - industry partnerships can take several forms. These range from joint research projects, to industry input in university courses, and feedback about the supply of graduates in the job market.

Think tanks: a new type of research organisation

Policymakers often find it difficult to locate relevant information from trusted sources to enable them to respond rapidly to complex problems. Meanwhile, civil society organisations and other interest groups often feel excluded from policymaking processes.

Overcoming this conundrum requires knowing where to turn for rigorous, reliable and accessible analysis, as well as knowing who to lobby, how and when. This is where think tanks have begun to prove their usefulness as agents of change, and to build bridges between knowledge and power. In general, think tanks undertake research and lobbying in an attempt to influence or provide viable alternatives to government policy. They tend to specialise in specific issues such as social policy, political strategy, economics, foreign policy and security, law, food security and technology. By generating and analysing credible data, most think tanks aim to encourage public debate and promote evidence-based decision-making.

Some see think tanks as one of the main policy actors in democratic societies. Others are more critical, and see think tanks as a proxy for interest groups that have their own political agendas. Both of these views are valid, and some think tanks even exist in the space between these two extremes. At best, they contribute to pluralistic, open and accountable processes of policy analysis, research, decision-making and evaluation. In other words, think tanks can take a variety of forms, including:

- NGOs which can be ideologically independent or affiliated with particular groups
- Institutes affiliated with one or more universities
- State-created and/or state-funded organisations
- Business-affiliated research units
- Political-party offshoots
- Global (or regional) organisations (also aligned to various interests)

Think tanks have been defined as 'universities without students'. But that doesn't mean they do nothing but research. Think-tank staff spend much of their time communicating with policymakers and the media, and they have to be able to provide quick sound bytes and short policy briefs at a moment's notice.

Research managers need to be aware of the existence of think tanks, and conscious of the particular role they play in the research arena. If a research partnership with a think tank seems likely or beneficial, ensure that you know who they are aligned with, and that this is compatible with the goals of your own institution.

Worth knowing

If you already work for or with a think tank, then make sure you know about Canada's International Development Research Centre's *Think Tank Initiative*. The Initiative aims to provide long-term, flexible funding for capacity building so that think tanks can focus on producing high-quality research, and on the impact they make. The initiative has also brought think tanks together nationally, regionally and internationally. *Research International* also provides resources to assist think tanks to grow their funding bases, and help ensure their long-term sustainability.

Key aspects of successful research partnerships

As mentioned earlier, partnerships have themselves been the subject of a growing body of research. There are many ways of measuring or evaluating the success of a partnership, and it is helpful if all parties know how they would measure the success or otherwise of a partnership *before* they start working together. In general, however, the following two elements seem to make research partnerships work:

- **A good partnership formalises a relationship between organisations, and allows them to produce a larger net result from their joint working arrangement**. Partnerships tend to be successful when what one organisation can achieve by collaborating with another is more than either organisation could have achieved alone.

- **Partnerships work best when each party pursues their individual interests in a collective way**. So, although there will be a shared purpose or goal – a collaborative clinical trial, for example – a good partnership allows each participant to derive specific benefits from the collaboration, such as the acquisition of new technological expertise or improved career opportunities for participants.

Summing up: facilitating collaborations

Here are a few examples of the ways in which research managers can begin to facilitate regional and international collaborations:

- **A first strategy might entail increasing the opportunities that your colleagues have to collaborate at a regional level**. Try to expand the traditional North–South collaborations to include South–South and South–South–North relationships. This makes sense because of the shared developmental challenges, and can help to extend limited resources.

- **Ensure that you have institutional backing in the form of a carefully considered strategic direction and the legal expertise to draw up equitable contracts**. See **Part 3** of this series for more on contracts and agreements.

- **Partnerships often start slowly – via a small joint research project and/or a teaching exchange, for example**. Raising seed funding for such initiatives is a key role that research managers can play.

- **Keep up to date with relevant opportunities offered by local research networks, and join in lobbying for national programmes to fund transnational research collaborations**. For example, South Africa's Department of Science and Technology has signed bilateral research agreements with its counterparts in a number of other African countries and is funding collaborative research projects between institutions based in these countries.
- **Joint degree programmes are another means of fostering institutional relationships. For this to work, accreditation systems have to be harmonised**. In Africa, pioneering work is being done on this by the *African Economic Research Consortium*, the *Partnership for Africa's Next Generation of Academics*, the *Regional University Forum for Capacity Building in Agriculture*, and *TRECCAfrica*.

This information is based on an article entitled, 'Africa: Collaborate to Integrate' published by the Mail & Guardian, *9 September 2011.*

Useful resources

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