# Graduate Grant-Writing

A structured, mentored and scaffolded process



# Introduction

Following the PhD, early-career scholars may have difficulty in transitioning into the role of an independent researcher. In practical terms, this workshop equips post-doctoral researchers to develop a successful and substantial grant proposal. But the overarching aim is to transfer ownership and leadership of research and scholarship to the graduates and allow them to demonstrate independence. This curriculum guides you, as facilitator, not to teach in a directive manner but rather to engage participants in scaffolded writing assignments and peer-to-peer learning.

Download this <u>curriculum</u> in full.

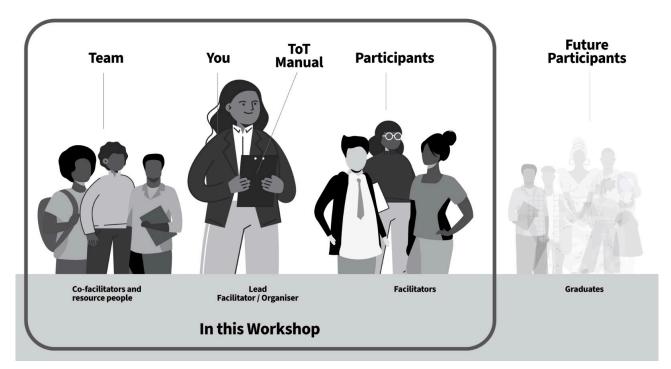
# Overview

CARTA designed these sessions to inspire participants to improve institutional systems and drive transformation to attain world-class research in African universities in particular, but the training is effective in research institutions anywhere in the world, as a one-week workshop or over time, for faculty and administrative staff.

Within a single institution or a group of several, the sessions create a forum for those who seldom collaborate collectively. Here, they discuss:

- How different functionaries can be more responsive to and supportive of research, research training and doctoral and postdoctoral participants.
- Ways in which they can strengthen the training of doctoral and postdoctoral participants and at the same time strengthen the capacity of the institutions.
- The rationale for a strong research agenda, including the positive linkages between good research and development.
- The important role of a supportive network of research administrators.
- Clear distinctions between different roles and functions.
- The need for funding and technology transfer, particularly in Africa.
- Knowledge management, defined as the process of creating and sharing information.

- The ethical use of social media as a platform capable of enhancing credible knowledge generation.
- Other relevant topics such as repository policies (especially in open access journals) and copyright issues.



# **Outcomes**

By the end of a Graduate Grant-writing workshop, participants can:

- Write a successful proposal that addresses a research question that is in the participant's area of expertise and that they
  want to answer.
- Understand how to structure and write the proposal, including literature review, methodology, methods including analysis plans and impact plans.
- Understand the process of developing a research proposal including identifying funding sources; Tailoring a proposal to funding sources; drawing on expertise; and developing a budget, management plan, and dissemination strategy.
- Seek and receive critique of research ideas and plans and integrate feedback into a proposal.
- Successfully work to a submission deadline.

# **Delivery**

Various modes of delivery are possible: in-person residential, virtual, blended, over a single week or over a longer period. However, CARTA recommends a core week of activity completed in an intensive residential model, because:

- Writing requires separation from other distractions and commitments.
- The on-site model allows for a more natural model of mentorship and consultation, which is often brief, graduate-initiated bursts of conversation. In the in-person mode, participants can connect with facilitators and each other without delay.
- For co-facilitators, on-site mode enables vicarious modelling and shared experience, as each facilitator gets to watch others struggle, find solutions, and gain confidence.
- On-site presents the greatest flexibility in modes of communication (presentation, body language of reaction, graphic and written presentations).
- On-site permits rapid shifts from full group to one-on-one or small break-out groups. The same modes may be achieved online, but require far more scripting and coordination.
- In person, there is greater sense of cohort camaraderie among participants and with facilitators who are also academic peers.
- In person, there is greater opportunity for contact to lead to collaboration between participants and between participants and facilitators both during and beyond the workshop.

# **Approach**

The CARTA approach is problem-posing and participatory, acknowledging the skills, and experience that people bring into the workshop. Each session presents situations and poses problems. Participants work with each other and with inputs from the facilitator to find solutions. Problem-posing education bases itself on creativity and stimulates true reflection along with action on reality (Freire, 2020). It is different from the transfer or transmission of knowledge or facts to the passive learner, where the trainer is seen as possessing all essential information, and trainees as 'empty vessels' needing to be filled with knowledge.

The choice of participatory method is deliberate: there is a coherence between values and the approach to sharing them. From the beginning, this curriculum recognizes all participants as thinking, creative people with the capacity for action. Each person is a contributor, bringing different perceptions based on their own experiences. This requires that you, as facilitator, make a conscious effort to use participatory methods to enable participants to grow in awareness.

Watch this video for more insight into CARTA's approach.



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://pressbooks.pub/cartacurricula/?p=1997#oembed-1

# **Facilitation**

Some people assume that facilitating a workshop will be an easy process, until they try doing it. The participatory method means that you and your co-facilitators guide the workshop while appreciating that the participants are in charge. Your responsibility is to create an enabling environment that allows participants to learn from each other, come to an understanding, and pool their collective wisdom in resolving issues.

A good co-facilitator works as an ally to help you ensure that meetings, seminars, planning sessions and workshops, deliver the intended and desired outcomes. It is very difficult to facilitate a meeting yourself, when you also want to participate in it as an equal. But not all facilitators are alike. Identify co-facilitators who have the personality and aptitude to understand the goals, objectives, and expected outcomes of this curriculum. CARTA recommends you look for co-facilitators with these attributes.

# **Facilitator attributes**

An unbiased perspective

Participants should feel comfortable that their opinions are welcomed and encouraged. As an unbiased facilitator, you create a neutral zone where alternative points of view can be shared and debated in a respectful manner. This is key to driving a constructive, productive discussion.

Sensitivity to individuals

To create and maintain an atmosphere of trust and respect, you must be aware of how people are responding to the topics under discussion, and to the opinions and reactions of others. Most people will not articulate their discomfort, hurt feelings, or even anger; instead, they silently withdraw from the discussion and often from the group. Sensing how people are feeling and understanding how to respond to a particular situation is a critical skill of facilitation.

Sensitivity to the group

In any group, the whole is greater than the sum of the parts, and group 'chemistry' generally reflects shared feelings: eagerness, restlessness, anger, boredom, enthusiasm, suspiciousness, or even silliness. Perceiving and responding to the group's dynamic is essential to skilful facilitation.

Ability to listen

One way you learn to sense the feelings of individuals is by listening carefully, noting body language along with both the explicit meaning of words, and their tone and implicit meaning. As a good facilitator, you practise 'active listening'. You might repeat, sum up, or respond directly to what a speaker says to ensure that their meaning is correctly understood by the group.

#### Tact

Sometimes, a facilitator must say difficult things for the good of the group. The ability to do so carefully and diplomatically is critical. Examples include a group discussion dominated by one person or a group of silent participants. Find a gentle, tactful way to engage the group so that everyone can participate and get the most out of the session. A capable facilitator knows how to diffuse awkward moments and maintain a productive atmosphere.

#### Commitment to collaboration

Collaborative learning can occasionally seem frustrating and inefficient. At these moments, every facilitator feels tempted to take on the familiar role of the traditional teacher and to lead, rather than facilitate. However, genuine conviction about the empowering value of cooperative learning will help you resist a dominating role. Likewise, a good facilitator is willing to share facilitation with co-facilitators. The goal is always to conduct the best and most effective discussion. To that end, you need to adjust your role accordingly.

# A sense of timing

Any facilitator needs to develop a sixth sense for timing: when to bring a discussion to a close, when to change the topic, when to cut off someone who has talked too long, when to let the discussion run over the allotted time, and when to let the silence continue a little longer.

# Resourcefulness and creativity

Each group of participants presents different dynamics. Despite a well-planned agenda, discussions may not unfold as anticipated. You must be able to think on your feet. This may mean changing direction in mid-stream, using other creative approaches to engage the group, or welcoming ideas from the group on how to shift the agenda. Good facilitators always have tricks up their sleeves to move forward with an eye on the overall objective of the meeting.

### A sense of humour

As in most human endeavours, even the most serious, a sense of humour enhances the experience for everyone. A good facilitator appreciates life's ironies and is able to laugh at themselves and share the laughter of others.

# Preparation

#### Lead coordinator/s

Lead co-ordinator(s) of a Graduate Workshop must be accomplished academic leaders and demonstrate leadership abilities to:

- Ensure the recruitment of graduate participants is effective and equitable.
- Recruit and retain qualified and motivated facilitators.
- Recruit a large list of international external peer-reviewers from across a broad range of methodologies and subject areas reflecting the diversity of research areas of the participants.
- Work with administrative staff to ensure effective coordination.
- Evaluate the impact of the workshop on individual participants, on a graduate's early-scientist career, and on the larger research community in Africa and globally.

#### Co-facilitators

### Recruit facilitators with:

- Experience with the peer-review process.
- Experience with student-centred teaching models including methods of active learning and delivery models designed to develop independence and critical thinking. Examples include case-based learning, dialogic teaching or other models.
- Flexibility to work with graduates across a range of specific research areas.
- Methodological training and ability to critically appraise research proposals.
- Availability and willingness to participate fully in the workshop, beyond their responsibility for specific sessions. Facilita-

tors should prepare to engage in the workshop over multiple days allowing them to follow the progress of multiple participants over the course of the workshop.

Commitment to the tasks of evaluating the impact of the workshop on individual participants at the end of the workshop, on a graduate's early-scientist career, and on the larger research community in Africa and globally.

As a team, the facilitators must include a range of disciplines, areas of research, and methodological expertise (including qualitative, quantitative research and mixed methods; descriptive research and implementation sciences; and laboratory and basic sciences).

#### **Participants**

Before you issue a call for participants to apply, decide if the workshop is to be:

- Open to any early-career researcher, or to a specific department, or somewhere in between.
- A mix of senior and junior PhD graduates, or close cohort.

For an open call, highlight the objectives of the workshop, mode of delivery (entirely face to face or blended), commitment required, eligibility criteria, instructions for making the applications, and timelines. You might decide to shortlist:

- Competitively (those showing more commitment, more support to dedicate time, better drafts).
- By topic (for instance, at least two working on each area, or groups who apply to write a collaborative grant).
- First-come-first-served, where everyone gets the same chance and those responding faster secure a spot if their application is complete.
- Share feedback on their applications with both successful and unsuccessful applicants.

For an invitation-only call:

- Define the inclusion criteria.
- Contact those who meet the criteria, highlighting the time, mode of delivery, and instructions for application if needed.

Two weeks before the workshop, send detailed information to participants on workshop logistics, the reason they were selected, the participatory workshop method, and what is expected of them as participants.

You might also consider sharing an online pre-workshop survey link to get the participants' profiles and to give them an opportunity to state their expectations and describe what they are willing to contribute to ensure the successful running of the workshop. With your co-facilitators, you can then analyse the information and adapt the workshop programme, as much as possible, to suit participants' expressed needs.

In plenty of time, identify and engage the co-facilitators and the different contributors. Hold planning meetings until the team members are on the same page. To prepare, advise facilitators to read and re-read this training manual until they feel comfortable and confident that they know what is expected for all the sessions.

Identify a location that will allow participants to move around easily, for example for role-plays. Make sure there are enough break-away rooms for small-group activities and adequate wall space for poster tours and other elements of the workshop methodology.

# **Pre-workshop activities**

At least three weeks before the in-person workshop (or sessions), hold a series of conversations with the group of participants and ask them to complete some tasks and submit the results. This ensures that instructions are clear, that the graduates are able to identify opportunities for research funds and early career placements, and that the time for writing and revision will be is well spent.

# **Outcomes**

By the end of the pre-workshop activities, participants have:

Identified one or more appropriate calls for funding or opportunities for research-focused post-doctoral fellowships or comparable early-career placements.

- Identified potential supervisors and locations for early research appointments.
- Familiarised themselves with eligibility requirements with respect to applicant, subject area, context of proposed work, and methods.
- Created a summary of the eligibility criteria and instructions to peer reviewers.
- Identified relevant methodology resources to refer to as they develop a research plan.
- Begun the literature review.

# Preparation

Establish a learning management platform for document delivery, uploading of tasks, online annotation and feedback, live webinar collaboration, and break-out rooms.

## Assessment

Review participants' materials and provide feedback and support where necessary to complete the tasks.

# Workshop elements

Individual writing.

Table-top work in small groups

Flip-chart pin-up presentation with peer-to-peer comments and questions.

Brief pop-up presentations by facilitators.

# Workshop program

Time	Step	Who
DAY 1		
0800 - 0830	Registration	
0830 - 0900	Welcome	Facilitator
0900 - 1000	Review of the plan for the week	Facilitator
1030 - 1230	Literature Review and Research Gap  • Defining research questions and research aims  • Background literature review  • Frameworks and theoretical perspectives  • The research that came before yours  • Defining the gap in knowledge	Pop-up Participants (at flip-charts)
1330 - 1400	How to find mentors; values of mentorship	Facilitators
1400 - 1600	Pop-up session  • Background literature review  • Developing the argument for the research; what this research adds  • Alignment of research approach with objective	Facilitators (pop-up) Facilitators and participants (small group; flip-charts)
1630 - 1900	Group discussions Individual writing Progress target report	
1900 onwards	Writing and further research (background, prior research, research methods resources)	

Time	Step	Who
DAY 2		
0900 - 0930	Recap and discussion in groups on proposal writing	All
0930 - 1030	Methodology Overviews • Critical selection of research approach • Methodology	Pop-up session - Facilitator Participants (at flip-charts)
1100 - 1230	Methodology continued     Purpose-driven sampling and measurement	Pop-up Flipcharts
1330 - 1530	Goals of the analysis plan	All
1600 - 1645	Ethical considerations in research approach	Facilitators (FG)
1645 - 1900	Group discussions Individual writing Progress target report	

Time	Step	Who
DAY 3		
0900 - 0930	Recap and discussion in groups on proposal writing	All
0930 - 1030	Research, dissemination and time plan	Pop-up Flipcharts
1100 - 1230	Research, dissemination and time plan cont.	
1330 - 1900	Group discussions Individual writing Progress target report	

 $1900\, onwards \quad Writing\, to\, submit\, draft\, in\, the\, morning.$ 

Time	Step	Who
DAY 4		
0830	Submit draft proposals (research sections only) for external peer review by $8.30\mathrm{AM}$	Participants
0930 - 1030	Community engagement and knowledge translation	Pop-up Flip charts
1100 - 1230	Budget	Facilitator
1330 - 1430	Engaging with funders	
14:30 - 15:30	Understanding the peer review process	
1600 - 1700	Ethical approvals and partnerships	FG

Time	Step	Who
DAY 5		
0900 - 0930	Quiet reading of reviews received	
0930 - 1000	Receiving critical feedback and rejection	All
1000 - 1030	Quiet reflection on received external reviews of proposals, goals for revision Pop up on common themes and strategies to improve	Facilitators and participants
1030 - 1100	Tea Break	
1100 - 1230	Cont. Review of proposals and external review: How to improve further Full group discussion. Strategies to use critical feedback to improve further	Facilitators and participants
1230 - 1330	Lunch	
1330 - 1430	Individual writing and inclusion of suggestions from reviews that improve the proposals	Facilitators available for on-demand consultation
1500 onwards	Town halls and reflection (parallel sessions).  • Participant review, reflection and feedback  • Facilitators: review, reflection and feedback Participants depart	

**Training of Trainers**To implement this curriculum effectively, facilitators must be well prepared. This ToT workshop builds or refreshes the skills and background knowledge of your team.

Download the **ToT workshop**.