



**Communiqué from the
high-level convening on
early-career researcher
development in the
post-PhD phase**

6-7 December 2022

Cape Town, South Africa



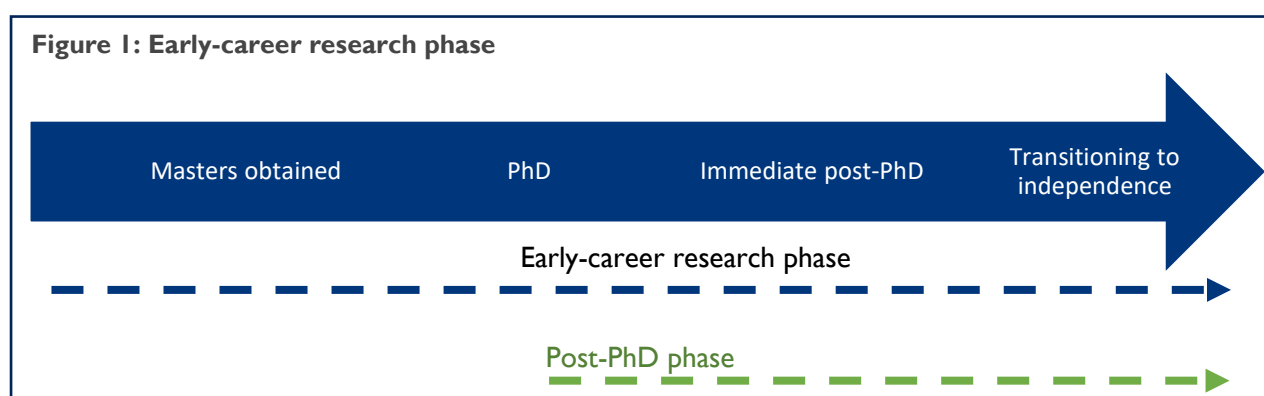
Background and introduction

This communiqué summarises key messages and recommendations that emerged from the high-level convening on early-career researcher development in the post-PhD phase, held during 6 to 7 December 2022 at the Cape Town International Convention Center (South Africa).

The purpose of the convening was to facilitate conversations and consolidate learnings about the development of early-career researchers (ECRs) across Africa, as documented through the Peer-Learning for Emerging Researchers' Knowledge and Advancement (PERKA) research project. PERKA was funded through a grant by the Carnegie Corporation of New York (CCNY) to South Africa's National Research Foundation (NRF), and implemented in collaboration with the Center for the Advancement of Scholarship (CAS) at the University of Pretoria (UP). The objective of the project was to identify, analyse, document and share key lessons from ten post-PhD support programmes in Africa funded by the CCNY. A framework evolved through this process, which was construed as a set of guidelines aimed at serving multiple audiences, including science funders, development partners, higher education institutions, and networks who wish to implement interventions focused on the post-PhD phase, as well as the project teams responsible for implementing these programmes. During the convening, a set of guidelines, entitled *Designing and Implementing Impactful Post-PhD Support Programmes in Africa* was launched as a key output of the project. The guidelines are available in hardcopy format (as distributed at the convening), as well as a print-friendly online version, available [here](#).

The Post-PhD phase

Figure 1 illustrates the definition of the early-career phase adopted in the guidelines and used at the high-level convening. The phase is seen as a continuum, beginning at the master's-degree level until a point of independence (sometimes well) beyond the PhD. Only when scholars have a publication track-record and proven ability to win grants, implement projects and supervise postgraduate students does the early-career continuum transition into a phase of research independence. The guidelines focus on the *post-PhD phase* but avoid the blanket term 'postdoctoral fellowship' to describe support as there are a range of structures to support immediate post-PhD's. Discussions at the convening were based on the premise that, regardless of structure, support to aspiring researchers in the post-PhD phase should focus on deepening their research *as well as* other professional skills to enable them to establish themselves independently in a career of their choice. In addition, in the absence of a consistent definition for early-career researchers across the continent, it was understood that each institution had to be clear on its own context-specific classification and design support interventions accordingly.



The Convening

The convening programme consisted of six sessions, namely i) a keynote presentation by Prof. Ernest Aryeetey, the Secretary-General of the African Research Universities Alliance (ARUA), ii) an overview of PERKA and introduction to the guidelines, iii) a session on designing high-impact programmes, iv) a session on planning for and implementing high-impact programmes, v) a session on funding high-impact programmes and vi) a session on understanding impact (monitoring and evaluation). The event culminated in the official launch of the guidelines at the end of the second day.

The two-day event was attended by over 100 participants, drawn from academic institutions across Africa, including early-career researchers (ECRs), project managers of African ECR programmes and directors of postgraduate studies and research offices. Representatives of sixteen science granting councils across the continent joined the convening.



From left to right: Dr Sepo Hachigonta, Director of Strategic Partnerships, NRF; Dr Marilet Sienaert, PERKA researcher; Dr Aldo Stroebel, Executive Director, NRF; Prof. Tawana Kupe, Principal and Vice Chancellor, University of Pretoria; Dr Melody Mentz-Coetzee, PERKA senior researcher; Prof. Frans Swanepoel, Director and Principal Investigator: PERKA

The communiqué is organized into two sections:

Section 1 highlights areas in the guidelines that stood out as ‘hot topics’ during the discussions and were affirmed as take-away messages.

Section 2 summarises three key recommendations that emerged as a result of stakeholders’ reflections on, and collective engagement with the guidelines.

Concluding thoughts, and relevant weblinks to the guidelines are provided at the end of the communiqué.

Section 1: Hot topics and key messages

1.1. Challenges faced by early-career researchers

The challenges articulated in the guidelines were corroborated by the presenters and participants, with resources, institutional environment, mental health support and marginalized groups highlighted in the discussion.

At present, *resource constraints* often mean that funds for stipends and benefits such as pension and medical aid are inadequate, as are funds for research infrastructure and running costs, which inhibit career progression. In addition, **the remuneration levels for ECRs differ between institutions and countries and depend on the disciplinary field and purpose of the fellowships**. Ideally, funders, institutions, and science councils should establish guidelines on making adjustments to accommodate differences in local costs of living, taking into account different levels of fellows’ expertise and experience. This would require

considerable effort and coordination but would be invaluable to ensure that fellows are appropriately remunerated.

Challenges in the *institutional environment* include the lack of appropriate standards and policies for the categorization of ECRs and adequate integration into the institutional ecosystem. **There are only a few institutions that have invested in the establishment of ECR standards, policies and dedicated support structures, with the result that ECRs typically have limited institutionalized recognition and support.**

As articulated in the guidelines, presenters and participants agreed that the competitive and pressurized higher education environment often impact negatively on the *well-being of ECRs* who are already in tenuous positions due to their transitory status, with mental health increasingly becoming a concern. ECRs must learn to balance teaching and research workloads and have limited channels to resolve disputes. Furthermore, when ECRs are not part of a cohort, feelings of isolation often come to the fore, with too many institutions not providing adequate (or any) mental health support. **A holistic approach to capacity development should ideally include resilience training, and access to in-house mentorship and counselling support.** Where such support structures are not embedded in the host institutions, allowances could be made for this from the programme funds. Mentors should be sensitized to the occupational stressors of the post-PhD phase and advised on how to connect ECRs with the appropriate support mechanisms.



The *exclusion of marginalized groups through omission* surfaced in the discussions, for example when selection criteria for fellowships or programme requirements such as study abroad do not explicitly accommodate care-givers or those with family obligations. Funders typically do not consider the constraints of pregnant women or women with young children, consequently excluding them from pursuing fellowship opportunities for which they may be qualified. **Being flexible about the duration and conditions of residencies built into fellowships would allow more opportunity for building networks through academic exchange.** Language also presents a significant barrier to funding and opportunities, particularly for Francophone and Lusophone ECRs.

1.2 Factors enabling early-career researchers to flourish

Several opportunities and enablers to overcome these challenges are outlined in the guidelines and were enriched by further discussion at the convening. These include the roles of networks, mentorship, and strategies for overcoming gender and other exclusivity barriers.

The convening presenters and participants confirmed the importance of international networks, and that collaboration is vital to advance a research career. Both horizontal (peer) and vertical (upward) networks are essential. Mobility components in support programmes present opportunities for ECRs to connect with researchers across Africa and internationally, not only vertically to gain access to mentorship from senior colleagues or participating during residencies in projects led by senior researchers outside one's home institution, but also horizontally through peer-learning with other ECRs and through doing teamwork. **Being embedded in a community of scholars provides a powerful impetus for career advancement.**

Mentorship that provides continuous informal support remains vital to ECR development, with a more experienced researcher in the field providing practical guidance, facilitating introductions and access to opportunities. Formal (or structured) and informal models of mentorship exist across the continent, but these models would benefit from further development and integration, with clear guidelines to both mentors and mentees on their respective roles and responsibilities. As mentors are often recruited on a voluntary basis, the time and opportunity to have a platform for sharing good practice cannot be assumed.

“Mentors have the responsibility to plan for creating opportunities and opening doors for ECRs”.

Taking on a mentorship role could be incentivized in different ways, for example by requiring this from academics with PhDs and tying it to promotion in addition to research, teaching and community engagement. Importantly, monitoring and evaluation (M&E) frameworks (see 2.6. below) can provide significant insights into the effectiveness of mentors involved in ECR programmes.

Intentionally addressing gender or other inequalities at the programme design phase – and for example making this explicit in the call for fellowship applications – enhances inclusivity. An institutional environment that has policies and practices in place to safeguard the university community from sexual harassment and harm was also identified as a key enabler for ECRs’ success.

1.3 The importance of intentional design

A strength of the Carnegie-funded interventions is deliberate career-pathing inherent in the programme design, and provision of attractive opportunities to promote the retention of ECRs. This is in contrast to many interventions that are fragmented and unsystematic. Scalability is important, as many institutions aim to attract more PhD students, without being able to absorb them into post-PhD programmes after graduation or introduce them to alternative career options. This is where intentionality aligned with institutional mission and strategic planning is key, to assure growth in areas of need or choice. Awareness of career options beyond an academic track must be cultivated throughout, as the system cannot realistically accommodate all post-PhD’s in academia.

There was agreement that multiple models of post-PhD support were appropriate in view of the differences between countries and the diversity in circumstances of ECRs at different stages of their careers and lives. Participants nevertheless favoured structured support programmes where they formed a cohort and were treated as ‘insiders’ over free-standing fellowships, but cautioned against the limits imposed by funder-prescribed *areas* of research. Although the need for strategic focus in a financially constrained environment is well understood, ECRs don’t want to be precluded from following their own research interests. In such cases, free-standing grants provide more flexibility in terms of subject choice, as opposed to those awarded to research cohorts working in the same discipline, or collaboratively on a specified theme.

1.4 Critical aspects of planning and implementation

Participants confirmed that, as articulated in the guidelines, investing time in the pre-planning phase is essential for bringing key stakeholders on board, putting call documents in place and establishing operational structures. **The effective roll-out of a high-impact programme can be administratively demanding and requires a team with diverse expertise.** Additionally, continued monitoring and agile responses to challenges as they arise are often vital to keep the momentum going whilst negotiating unforeseen change.

The guidelines identify non-academic or complementary skills training as a critical design component. Participants similarly emphasized the importance of professional skills development in order to grow and

thrive as independent researchers. Effective communication was recognised as one of the critical "soft skills" and would include training related to working as part of a team, particularly in multi-, inter- and transdisciplinary research groups. It also refers to the skill of describing scientific work in lay-person terms, for example to the general public and policymakers. Leadership and management training were also identified as essential non-academic areas of training. Other skills training areas mentioned included fundraising, administration, project management, entrepreneurship, publishing and supervision.

1.5 Managing funding constraints through partnerships

Current resource constraints have increased the demand for partnerships, to share the funding burden and strengthen capacity. In this context, the guidelines emphasise the need for equitable, mutually beneficial, and transparent partnerships that reflect the different partners' values and priorities. The meeting concurred that there is a growing appreciation amongst African researchers and the Global North that Africans need to lead and define the African research agenda. To this end, it is essential to equip African ECRs with the skills to collaborate globally from a position of strength, and to sustain equitable partnerships in which they play a leadership role.

A diverse base of funders is necessary to enable more expansive funding to support ECRs. Stronger engagement with the private sector in the design and implementation of ECR programmes would increase funding streams and diversify career opportunities. Similarly, commercialising more research products and innovations could be an avenue for generating additional research funding. The vital role played by industry and the private sector in linking academic training with industry- and private sector-related needs was reiterated.

1.6 Understanding impact (monitoring and evaluation)

M&E was affirmed as critical to measuring the success and impact of any ECR programme within the institutional, national and continental context. It should be built into the programme design as part and parcel of implementation, to help identify gaps and inefficiencies as the programme unfolds. Qualitative as well as quantitative indicators should be taken into account, for example, measuring access to networks or measuring mentees' confidence before and after a mentorship programme. Continued monitoring of fellows and mentors even after the programme has ended would provide valuable insights into long-term impact, helping to formulate institutional vision and strategic plans.

Section 2: Recommendations

In addition to the validation of the guidelines, three issues were repeatedly raised and can be construed as specific recommendations resulting from the discussions.

Recommendation 1: Strategic intentionality regarding post-PhD support

The first key message that emerged from the convening was that academic institutions and funders must be strategic and intentional in taking ownership of, and investing in support programmes for ECRs. There is a missing middle of researchers which can be attributed to the leaky pipeline of researchers who drop off between the early-career phase and the independent researcher phase. Often, once ECRs complete their fellowships, their paths are unclear. The academic pipeline needs to be protected and institutions must make deliberate efforts to provide support and retain as many ECRs as possible in the academic system.

Strategic intentionality requires institutions and funders to focus their efforts and resources on the development of ECRs despite an already constrained financial environment. In this context, the value of

impact studies that track early-career participants' trajectories and evaluate the impact of their research (also beyond academia) cannot be over-emphasised, as it provides evidence that demonstrate a return on investment and helps to make a powerful case for the prioritization of funds.

Recommendation 2: Strengthening institutional capacity for monitoring and evaluation

The second recommendation that emerged was that capacity to carry out in-depth impact studies must be strengthened, with the costs being integrated at the programme planning stage. Although M&E are seen as crucial, it is mostly an under-resourced function or completely omitted from budget plans. In addition, institutions generally lack the capacity and / or skill to undertake such work. Similar to the theory of change required as an integral part of most funding proposals, M&E activities should be an integral part of programme design, and carried out from the inception to the conclusion of the programme.

There is awareness that over and above research publications, a broader set of indicators need to be identified and used to monitor activities, achievements and outputs. For example, M&E processes could monitor the intersections between individual, institutional, and systemic change. It was suggested that some of the evaluation criteria and frameworks used by the Organisation for Economic Cooperation and Development (OECD) to monitor programmes in Development Aid Countries (DAC), for example, might be used as a foundation for exploring the value and impact of post-PhD support programmes. Approaches should combine quantitative and qualitative data to enable the measurement of outcomes, such as care and well-being, that often cannot be quantified.

Strengthened capacity in carrying out in-depth impact studies will inform evidence-based decisions on funding such interventions. This will create a virtuous circle with strategic intentionality and the prioritisation of funding.

Recommendation 3: Cross-boundary engagement to break operational silos

Linked to the need to strengthen institutions, the relative *isolation* of stakeholders across Africa's regions was flagged as an ongoing hurdle in the sustainable development of early-career research trajectories on the continent. This applies not only to individual institutions and the post-PhD's they host, but also to funders and science councils, funding agencies, and those in government departments and the private sector that are role players in higher education. The PERKA guidelines have been well received, a reception that demonstrated the need for ongoing opportunities to connect in person or virtually around themes of common interest. Post-PhD fellows at the convening spoke out about their need for opportunities to meet with peers, not only for co-learning and networking but to bolster their emotional resilience. Cross-boundary in-person meetings where stakeholders can break out of their silos and engage with others around areas of common concern would enable shared solutions rather than spending time and effort trying to re-invent the wheel when faced with challenges. It would also pave the way for regional bodies such as the African Union (AU), the Southern African Development Community (SADC) and regional economic communities to coordinate investment in research infrastructure and facilitate intra-Africa mobility for education, training and research purposes. In particular, the need was flagged for equal opportunities for Lusophone and Francophone countries on this agenda.

In direct reference to a suggestion in the guidelines, the notion of a centrally coordinated website or electronic repository was put forward, to share literature on support for ECRs, examples of relevant institutional policies and templates – for example regarding M&E – that institutions, networks, and funders could use within their own contexts. It was recognized that an over-arching or inter-regional body would need to become involved, and that there would be costs associated with such a venture.

Looking to the future

The trajectory of fellows wishing to remain in academia when they exit the post-PhD support programme continue to be problematic, particularly in securing funding to continue their independent research. But the firm footing gained through adequate support during the early-career phase greatly enhances their chances for success. In addition, the experience and professional skills gained during this phase help ensure attractive employment options in the private and public sectors.

The PERKA project has not only affirmed the challenges faced by PhD graduates in reaching their full potential, specifically by those in Africa, but identified a range of good practices that can be adopted by others. The high-level convening has initiated broader conversation among funders, institutions, and programme designers to strengthen the system. There is consensus amongst all stakeholders that the deliberate fostering of a scientific workforce is needed, not only to address the most pressing needs of our local communities and environment but also to do research that adds to the global knowledge base of our natural and social worlds.

To learn more about PERKA

Visit our website on <https://www.up.ac.za/peer-learning-for-emerging-researchers-knowledge-and-advancement-perka-program>

Download the full colour guidelines

https://www.up.ac.za/media/shared/792/ZP_Resources/designing-and-implementing-impactful-post-phd-support-programmes-in-africa.zp231847.pdf

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Reach out on email perka@up.ac.za

