



NRF Postdoctoral Fellowships

Framework Document

Directorate: Human and Infrastructure Capacity Development

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Purpose

The purpose of this framework document is to outline the funding principles and implementation of four postdoctoral fellowships, namely: (i) the Freestanding Postdoctoral Fellowships, (ii) the Innovation Postdoctoral Fellowships, (iii) the Scarce Skills Postdoctoral Fellowships, and (iv) the Professional Development Program Fellowships. The Freestanding, Innovation and Professional Development Program (PDP) Fellowships are funded by the Department of Science and Innovation (DSI), while the Scarce Skills Fellowships are financed by the National Skills Fund (NSF) through the Department of Higher Education and Training (DHET). This document outlines the objectives of the funding instrument, eligibility criteria, funding principles, application process and governance - including management of the fellowships.

1. Background and Rationale

The National Research Foundation (NRF) is an agency mandated by an Act of Parliament (Act no. 23 of 1998, as amended), for the implementation of human capacity development initiatives, knowledge production and the provisioning of research infrastructure.

The National Research and Development Strategy of 2002 identified the need for a new generation of scientists to underpin the central thrust of innovation. The South African research and academic system is faced with a challenge of having an ageing productive scientific population. Strategic interventions are needed to reverse these trends to ensure correct positioning of the country for competing in the global research and innovation arena. These interventions or investment initiatives need to develop and strengthen the South African National System of Innovation (NSI) and technological innovation. The technological innovation is expected to lead to commercialization of products and services and thus contribute directly to international competitiveness, wealth creation and improvement in the quality of life of a country's citizens. In response to this need, the DSI and NRF supports postdoctoral fellowships to promote research and research capacity development in all knowledge fields.

In addition, the South African government passed the Skills Development Act (Act no. 97 of 1998), which provided a framework for addressing the severe shortage of skills in the country. The legislation provided guidelines for increasing the overall level of skills in the country and for improving access to quality learning, especially for the previously disadvantaged sectors of the population. It also aimed to ensure that the learning system is more responsive to the skills requirements and needs of industry. Emanating from the abovementioned Act, the Departments of Labour (DoL), Education (DoE) and the DSI were

mandated to advance capacity development in scarce skills disciplines at higher education and training institutions. In response to this mandate, the DoL, allocated funding from the NSF, and entered into a contractual agreement with the NRF for management of the Scarce Skills Development Fellowships (SSDF) postgraduate and postdoctoral funding. The Scarce Skills Development Fellowships supports students at Honours, Masters and Doctoral levels as well as Postdoctoral Fellows. The NSF has migrated to the Ministry of Higher Education, Science and Technology (HEST) and funding for postgraduate and postdoctoral training is made available to the NRF through annual budget proposals submitted to the Ministry.

2. Objectives of Postdoctoral Fellowships

The objectives for the postdoctoral fellowships supported by the NRF are listed below:

- Increase the number and quality of Postdoctoral Research Fellows in South Africa in all fields of research, with a focus on specified scarce skills areas;
- Leverage innovation and research at public Research Institutions, Science Councils and National Facilities in South Africa, through the implementation of science and technology related skills development;
- Expand transformation initiatives through career growth opportunities for South African designated groups;
- Develop a cohort of high-performing emerging / early career researchers in order to renew and replenish the research workforce;
- Support young scientists and professionals - in conjunction with universities, public research institutions and industry - to support the development of basic, strategic and applied research, for knowledge and socio-economic impact;
- Enable young scientists and professionals to access world-class research training opportunities to strengthen their research profiles and thereby improve their prospects of employment within the national science system; and
- Enable outstanding international Postdoctoral Research Fellows to undertake research in South Africa and contribute to the national research enterprise.

3. Application Process

All applications must be submitted through the NRF Connect system at <https://nrfconnect.nrf.ac.za/>.

Institutions are required to implement internal processes to ensure that, the NRF receives complete applications by the closing date.

4. Areas of Support

Postdoctoral Fellowship funding is intended to support candidates to conduct research, in all areas of Science, Engineering, Technology, Social Sciences and Humanities, including Indigenous Knowledge Systems, focusing on research aligned with one of the National Priority Research Areas. Additionally, the research that is conducted by postdoctoral fellows must align with the thematic focus areas (The Circular Economy; Education for the Future; Sustainable Energy; The Future of Society; Health Innovation; High-tech Industrialisation; ICTs and Smart Systems; Nutrition Security; and Water Security) as outlined in the Science, Technology and Innovation (STI) Decadal Plan 2022, which serves as an implementation guide of the 2019 White Paper on STI.

The broad disciplines supported are: Accounting, Actuarial Science, Agricultural Sciences, Astronomy, Astrophysics, Auditing, Bioinformatics, Biotechnology, Cellular and Molecular Biology, Chemistry, Climate Change, Computer Science, Cosmology, Demography, Drug Discovery and Development, Earth Sciences, Earth Observation, Ecology, Economic Sciences, Education, Engineering, Environmental Sciences, Financial Management, Functional Genomics, Geology, Global Change, Society and Sustainability, Health Sciences, Information Science, Information Systems, Indigenous Knowledge Systems, Law, Mathematical Sciences, Marine Sciences, Medicinal Plant, Medical Sciences, Nanotechnology, Nuclear Technologies in Medicine and Biosciences, Palaeosciences, Polar Science, Physics, Renewable Energy, Construction management, Dermatological sciences, Architecture, Nuclear science, Data Science, Economic and Management Science, Biochemistry, Microbiology, Geosciences, Materials Research, Bibliometrics and Scientometrics Science, Technology and Innovation (Policy) Studies, Higher Education (Policy) Studies, Sociology of Science and Technology, History and Philosophy of Science, Research Evaluation and Research Impact studies, Science Communication, the Public Understanding of Science and Technology, Social Science and Humanities, Space Science, Statistics, Transportation Studies and Tourism.

The overall percentage of supported fellows by the NRF will be 80% from the Science, Engineering and Technology (SET) disciplines and 20% from the Social Sciences and Humanities (SSH).

5. Eligibility

The eligibility criteria applicable to all the Postdoctoral Fellowships supported by the NRF are listed in section 6.1. In addition, sections 6.1.1 and 6.1.2 list eligibility criteria for each category of fellowships relating to institutional and citizenship requirements.

5.1 General eligibility criteria for all Postdoctoral Fellowships

- Applicants must intend to undertake research at a public research institution in South Africa;
- Applicants must have graduated with their doctoral degree within five (5) years of applying to the NRF. Applicants that obtained their doctoral degree prior to February 2019 are therefore not eligible to apply;
- Applicants who are currently completing their doctoral dissertation for submission may apply. They should however complete their doctoral degree by 31 December 2024. The NRF must receive proof of having completed the doctoral degree at the time of commencement of the Postdoctoral fellowship grant. **All awards that are not taken up by 30 June 2025 will be cancelled by the NRF** and no exemptions will be made if the completion letter or Doctoral certificate has not been issued by this time;
- A Letter of Completion from the institution will be considered in lieu of the Doctoral certificate if the applicant is only awaiting the graduation formalities. A copy of the Doctoral certificate should however be forwarded to the NRF when received;
- Full-time employees of Higher Education Institutions (HEIs) or other research institutions are only eligible to apply **if they intend to take unpaid leave for the duration of the postdoctoral fellowship**;
- Applicants who are applying for a second NRF Postdoctoral research placement will be eligible if they intend undertaking research on a new project **(Please note applicants who are on a PDP fellowship will not be considered for a second PDP fellowship)**;
- Applicants who are applying for a second NRF Postdoctoral research placement to continue with research on the **same project are not eligible**; and
- Applicants who are applying for a third NRF Postdoctoral research placement **are not** eligible.

5.1.1. NRF Freestanding and Innovation Postdoctoral Fellowships

- Applications are open to South African citizens, South African permanent residents¹ as well as international candidates; and
- Applicants must intend to undertake research at South African Public Universities or South African Public Research entities, viz., Science Councils, National Facilities, Museums or other NRF recognised research institutions as declared by the DSI.

5.1.2. Scarce Skills Postdoctoral Fellowship

- Applications are open to South African citizens and South African permanent residents only; and
- Applicants must intend to undertake research at South African Public Universities or South African Public Research entities, viz., Science Councils, National Facilities, Museums or other NRF recognised research institutions as declared by the DSI.

5.1.3. Professional Development Programme Postdoctoral Fellowships

- Applications are open to South African citizens and South African permanent residents only;
- Applicants must intend to undertake research at South African Public Research entities **only**, viz., Science Councils, National Facilities, Museums or other NRF recognised research institutions as declared by the DSI. Applicants at **South African Public Universities** are **not eligible** to apply for PDP; and
- Applicants are required to contact the Host of Research at the respective institution of choice before submitting their proposals, and a Letter of Support from the institution needs to be attached to the application.

6. Short-term research mobility

All fellows receiving NRF funding for postdoctoral studies in South Africa are encouraged to incorporate a period of international training that forms an integral part of their postdoctoral

¹ At the time of application, only persons with a valid South African ID number will be considered as a South African Permanent Resident, and not those in the process of applying for permanent residency. The latter will be considered as International candidates.

training programme. International training opportunities must be identified and financed in consultation with the support of the postdoctoral supervisor(s) and the university.

South African women postdoctoral fellows undertaking research in Biotechnology and attached to the International Centre for Genetic Engineering and Biotechnology (ICGEB) in Cape Town, will have an opportunity to spend between three (3) to six (6) months abroad at the ICGEB laboratories in Trieste, Italy or New Delhi, India. Applicants interested in the South African Women in Biotechnology Programme (SAWBP-ICGEB) programme should apply under the 'General Postdoctoral Fellowships' (indicating ICGEB as the institution of choice). Further information on these short-term research fellowships may be accessed at: <https://www.icgeb.org/activities/fellowship/>

For other short-term research mobility opportunities offered by the NRF and applicable to postdoctoral fellows, please refer to the Global Knowledge Partnership (GKP) implementation Framework at: <https://www.nrf.ac.za/global-knowledge-partnerships-programme-implementation-framework-for-the-2024-academic-year/>.

In addition, successful candidates for the postdoctoral fellowship will be eligible to apply for a travel grant through the Knowledge Interchange and Collaboration (KIC) and the Equipment-Related Travel and Training Grants (ERTTG). The KIC grant will support the postdoctoral fellows to undertake local and international travel for activities such as poster and oral presentations in conferences, seminars, symposia and workshops. The ERTTG will support the postdoctoral fellows to gain access and training on state-of-the-art research equipment, within South Africa or abroad, that is not available at their own research institution, nor at other institutions regionally or nationally. Please refer to the KIC and ERTTG funding frameworks for the detailed information (and application deadlines) about the two programmes which can be found on the NRF website (<https://www.nrf.ac.za/funding/>).

7. Application Requirements

- Applicants should apply to undertake postdoctoral research (i) on a research project that is different from the doctoral research; (ii) located in a different department from that where the doctoral training was undertaken; or (iii) at a different institution to that where the previous study was undertaken, as fellowships will preferably be awarded to individuals that will be expanding their research training on a new project and/or at a new institution;

- Special consideration will be given to applicants who are applying for a first NRF postdoctoral research placement where the individual's research training and outputs may be enhanced by continuing with postdoctoral research at the same institution; department; or under the same mentor. In such instances the applicant must provide a **strong motivation** describing the benefits to the applicant and for advancing research and innovation. **Failure to provide a motivation will result in a rejection without review;**
- Applicants' must attach proof of their masters and doctoral qualifications to their application. For those who are in the process of completing their doctoral degree, a letter of confirmation from their current institution, stating that their doctoral qualification will be completed by December 2024 must be attached to the application;
- Requested information that is not included in the appropriate section of the online application form, but is submitted as an attachment instead, will render the application incomplete resulting in a rejection without review.

8. Value of the Postdoctoral Fellowships

8.1 Postdoctoral Fellowships in South Africa

Successful applicants will receive funding for a maximum period of two (2) years for Free-standing, Innovation and Scare Skills Postdoctoral Fellowships and a maximum period of three (3) years for PDP based on the initial commencement date of the project.

Female Postdoctoral Fellows that take maternity leave during the tenure of the fellowship, are eligible for an additional four (4) months of support beyond the two (2) or three (3) year fellowship period.

The Postdoctoral Fellowships in South Africa grant values for 2025 are indicated in **Table 1** below.

Table 1: Postdoctoral Fellowship Values for 2025

Category	Period of Support	Amount of support per annum (Rand)		
		Stipend (Rand)	Contribution towards research costs (Rand)	Compulsory institutional contribution (Rand)
Free-standing	Two years	320 000 (Non-taxable)	50 000	15 000
Innovation				
Scarce Skills				
Professional Development Programme	Three years	400 000 (Taxable)	N/A	N/A

For Freestanding, Innovation and Scarce Skills Postdoctoral Fellowships Postdoctoral Fellowships, host institutions will be expected to supplement the fellowship with a minimum of R15 000.00 per annum as part of the institutional commitment. In addition, the host institutions will ensure the provision of an enabling environment for Fellows' research training and skills development.

For the Professional Development Programme Fellowships, host institutions and principal investigators will be expected to contribute towards training costs, travel costs and running expenses in addition to providing the necessary infrastructure and mentorship of the Postdoctoral Fellow.

8.2 Assistive Devices for Postdoctoral Fellows with Disabilities

All Postdoctoral Fellowship-holders with a disability may apply for additional funding for an assistive technology device of up to R20 000. This is the maximum amount allowed during the tenure of the fellowship. As defined by the Individuals with Disabilities Education Act Amendments of 1997 (IDEA), an assistive technology device is "any piece of equipment, or product system, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities".

9. Conditions of the Fellowship

- The grant must be taken up within two (2) months of receipt of the award letter, except in cases where the result of the doctoral degree is pending (refer to Section 6 on Eligibility). The award letter and Conditions of Grant (CoG) letter will be available on the awardees' NRF Connect profile;
- Carry-over of unspent funds will not be permitted for Postdoctoral Fellowships, except under extenuating circumstances, e.g., ill-health, and must be motivated for in writing.
- The awards must be taken up in 2025 and awards not taken up by 30 June 2025 will be cancelled by the NRF;
- The award, if successful, will be explicitly awarded for the research area as indicated in the application;
- The fellow is not permitted to engage in any other research project not approved by the NRF nor that which has not been subjected to a scientific review process by the NRF;
- The fellowship shall be held as the primary funding for the postdoctoral research training;
- Fellowships may not be held simultaneously with another fellowship from any other government or NRF source or NRF administered source;
- Postdoctoral Fellows may hold non-binding supplementary grants or emoluments from the South African government or from a private sector funder to the institutional capped value;
- Postdoctoral Fellows are permitted to spend a maximum of 20% of their time undertaking lecturing and student supervision; and
- Postdoctoral Fellows may not concurrently hold the fellowship with any full-time salaried employment.

10. Equity and Redress

In line with the national imperative of equity and redress, the programme prioritises support for appropriately qualified applicants from designated groups, viz. South African citizens (excluding permanent residents) who are Black (African, Coloured, and Indian), women and people with disabilities.

The equity targets for the Freestanding and Innovation Postdoctoral Fellowships are:

- 80% South African citizens and permanent residents;

- 20% citizens from other countries including Southern African Development Community (SADC);
- 80% Black (African, Indian and Coloured); and
- 55% Female.

The equity targets for the Scarce-Skills Postdoctoral Fellowships and Professional Development Programme Postdoctoral Fellowships are:

- 100% South African citizens and permanent residents;
- 80% Black (African, Indian and Coloured); and
- 55% Female.

11. Review Process

All applications will be screened based on the eligibility criteria and application requirements. Should an application not be eligible, it will be rejected without review. All eligible and appropriately completed applications are subjected to a competitive merit review process. The reviewers are selected by the NRF from existing reviewer databases and other sources and may include reviewers suggested by the applicant. In assessing the proposals, the reviewers' reports are referred to and, agreed assessment criteria are applied in the form of a scorecard during the panel review process.

The purpose of the scoring system is to evaluate applications to identify applicants that are most deserving of the limited number of Postdoctoral Fellowships available. All research proposals submitted to the NRF for funding are evaluated according to the pre-determined criteria. Each area is given a weighting to indicate its relative importance as indicated in **Table 2** below:

Table 2: Scorecard for the Assessment of Proposals for Postdoctoral fellowships

Criteria	Sub-Criteria	Weighting (Total = 100%)
Track Record of Applicant	Relevant expertise/training that will enable the applicant to successfully undertake the proposed research.	10%
	The applicant's research track record which could include peer-reviewed publications, conference proceedings, research prizes and awards.	10%
Scientific and Technical quality of proposed research	Literature review with citations; significance of the research in terms of the problem statement, aims and objectives. Scientific contribution; originality and new knowledge to be generated.	20%
	Research design and methodology developed to address the aims and objectives of the research. Provision of a work plan aligned to the objectives including feasible timelines and milestones for the research.	20%
	Alignment with national and institutional research priorities.	5%
Institutional Support	Institutional support for the postdoctoral fellowship through mentorship, infrastructure and facilities for an enabling environment.	10%
Potential Research Outputs and Impact of the research²	Details of envisaged realistic research outputs such as books, chapters in books, articles in refereed/peer-reviewed journals, refereed/peer-reviewed conference outputs, patents, articles in non-refereed / non-peer reviewed journals, Technical/Policy reports, products, artefacts, prototypes and other recognised research outputs.	5%
	Contribution to postdoctoral research skills development in a priority research area (human capacity development of the applicant).	10%
	Potential for impact of the research in South Africa realised through either: <ul style="list-style-type: none"> • Knowledge impact - scientific advances in understanding, interpretation, methods, theory and applications. • Societal impact - the value research adds to society through improvements in the social, economic or environmental spheres. 	10%
		100%

² Access the 'NRF Framework to Advance the Societal and Knowledge Impact of Research' document on the NRF website

12. Conditions of Award

The NRF will notify successful applicants of the outcome of their application by publishing a list on the NRF website and issuing of an award letter. Successful applicants can access their award letter and CoG letter on their NRF Connect profiles.

13. Reporting

For continuous monitoring of progress, the awardees will be required to submit a Progress Report (PR), on the NRF Connect system, against deliverables as outlined in the application form and the signed CoG.

14. Contact Details

Freestanding, Innovation and Scarce Skills Postdoctoral Fellowship

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For technical NRF online submission enquiries, please contact the NRF Support Desk during office hours from 08:00 to 16:30 from Monday to Friday.

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