



NRF Funding Overview Booklet (2022)

Grants Management and Systems Administration (GMSA)

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ABBREVIATIONS AND ACRONYMS

| | |
|----------------|--|
| AJ-CORE | Africa/Japan Collaborative Research |
| AP | Associated Partner |
| BAAP | Black Academics Advancement Programme |
| BOCP | Biodiversity on a Changing Planet |
| BRICS | Brazil, Russia, India, China, and South Africa |
| CBD | Convention on Biological Diversity |
| CPRR | Competitive Programme for Rated Researchers |
| CSUR | Competitive Support for Unrated Researchers |
| CUT | Central University of Technology |
| DFG | German Research Foundation |
| DHET | Department of Higher Education and Training |
| DSI | Department of Science and Innovation |
| DVC | Deputy Vice-Chancellor |
| EOL | Encyclopaedia of Life |
| ERC | European Research Council |
| FBIP | Foundational Biodiversity Information Programme |
| GMSA | Grants Management and Systems Administration |
| GRC | Global Research Council |
| HDI | Historically Disadvantaged Institute |
| HEI | Higher Education Institution |
| IBOL | International Barcode of Life |
| IPBES | Intergovernmental Platform on Biodiversity & Ecosystem Services |
| IRTG | International Research Training Group |
| ISARP | Italy-South Africa joint Research Project |
| ISC | International Science Council |
| iThemba | iThemba Laboratory for Accelerator-based Sciences |
| JINR | Joint Institute for Nuclear Research |
| JRP | Joint Research Programme |

| | |
|----------------|--|
| KIC | Knowledge Interchange and Collaboration |
| LAP | Lead Agency Procedure |
| MOST | Ministry of Science and Technology |
| MUT | Mangosuthu University of Technology |
| NASSP | National Astrophysics and Space Science Programme |
| NDP | National Development Plan |
| NEP | National Equipment Programme |
| nGAP | New Generation of Academics Programme |
| NGO | Non-governmental Organisation |
| NRF | National Research Foundation |
| NSI | National System of Innovation |
| NWO | The Dutch Research Council |
| PAPPG | Proposal and Award Policies and Procedures Guide |
| PhD | Doctor of Philosophy |
| PI | Principal Investigator |
| R&D | Research and Development |
| RISA | Research and Innovation Support and Advancement |
| SA | South Africa |
| SAASTA | South African Agency for Science and Technology Advancement |
| SABI | South African Biosystematics Initiative |
| SARAO | South African Radio Astronomy Observatory |
| SARChI | South African Research Chairs Initiative |
| SARSP | South African Research Scholarship Programme |
| SDG | Sustainable Development Goals |
| SME | Small and Medium-sized Enterprises |
| SMU | Sefako Makgatho Health Sciences University |
| SNSF | Swiss National Science Foundation |
| UFH | University of Fort Hare |
| UL | University of Limpopo |
| UNIVEN | University of Venda |
| UNIZUL | University of Zululand |
| USA | United States of America |

| | |
|------------|---------------------------------------|
| UWC | University of the Western Cape |
| WEF | Water-Energy-Food |
| WSU | Walter Sisulu University |

Disclaimer

Every effort has been made to ensure that the information in this booklet is accurate. Changes that may occur from time to time will be communicated to the research community where possible. Updated information for each Call for Proposals will be provided in the Funding Frameworks and The General Application Guide. The NRF is not responsible for any errors or omissions, or for the results obtained from the use of this information. All information in this booklet is provided "as is", with no guarantee of completeness, accuracy, timeliness, or the results obtained from the use of the published information.

The link to the documents is: <https://www.nrf.ac.za/funding/>

1. INTRODUCTION

The National Research Foundation (NRF) is a statutory body established through the National Research Foundation Act (No. 23 of 1998, as amended). The NRF supports the development and implementation of national strategies and policies, funds research supports the development of high-end human capacity and provides access to critical research infrastructure to promote knowledge production across specific disciplinary fields. The organisation promotes public awareness and engagement with science and seeks to inspire and nurture a new, representative, and globally competitive research community. The NRF also supports the development of the national science system and Government priorities.

Together with higher education institutions, research institutes, business, industry, and international partners, the NRF acts as a catalyst for knowledge production in science and technology to improve the quality of life of all the people of the Republic of South Africa.

This booklet presents information to all NRF stakeholders on funding opportunities for researchers, students, and postdoctoral fellows for all its various funding instruments. It provides an overview of funding opportunities for research, travel, conference attendance, scholarships and fellowships, and provision of infrastructure.

Awards will only be made under these funding instruments if budgets permit. The information is not meant to replace any policy, procedure, or system within the NRF, but endeavours to explain some of the pre-and post-award processes. Applicants are advised to read all published information thoroughly before applying.

This booklet should be read in conjunction with other resources, such as the NRF website (www.nrf.ac.za), and publications such as the NRF Annual Reports; Business Plans and Funding Instrument-specific Frameworks; and the General Application Guides. In addition, grant-related enquiries may be directed by e-mail to: supportdesk@nrf.ac.za or utilise the 'Live Chat' facility on <https://nrfconnect.nrf.ac.za/>

2. MANDATE

The mandate of the NRF is to contribute to national development by:

- Supporting, promoting, and advancing research and human capacity development through funding

and the provision of the necessary research infrastructure, to facilitate the creation of knowledge, innovation, and development in all fields of science and technology, including humanities, social sciences, and Indigenous knowledge.

- Developing, supporting, and maintaining national research facilities.
- Supporting and promoting public awareness of, and engagement with, science; and
- Promoting the development and maintenance of the national science system and supporting Government priorities.

This mandate translates into the Vision 2030 Strategic Plan of the NRF, which is available at: <https://www.nrf.ac.za/about-us/> The mandate applies to the three organisational arms of the NRF, namely:

- **National Research Facilities**, which perform research and innovate in priority areas through a critical mass of unique skills, cutting-edge research platforms, and users. They are also custodians of large pieces of scientific equipment and large collections of data and specimens. These resources are for the use of researchers across the country and beyond its borders. Descriptions of these facilities can be found at www.nrf.ac.za
- **Research and Innovation Support and Advancement (RISA)**, which is responsible for:
 - The development of high-end human capital to secure the next generation of researchers.
 - Advancement of frontier research and the generation of new knowledge to ensure global competitiveness.
 - Ensuring that cutting-edge research infrastructure is in place; and
 - Ensuring the fidelity, robustness, and transparency of its processes for evaluation and peer-review and research grants management and systems administration.
- **The South African Agency for Science and Technology Advancement (SAASTA)**, which aims to advance public awareness, appreciation and engagement of science, engineering, innovation, and technology in South Africa. SAASTA's contribution to the NRF's vision is to grow the pool of quality learners today who will become the scientists and innovators of tomorrow.

This booklet focuses entirely on the activities of RISA and specifically on the award of research grants, as well as the benchmarking of research quality through the NRF Rating System.

3. INVESTMENT PRINCIPLES

The NRF strategically invests its limited resources according to the following broad principles:

- Awarding funding on a competitive basis.
- A healthy balance between strategy-driven versus demand-pull funding.
- Merit-based and rigorous peer-review.
- The PhD as a driver.
- Cross-fertilisation of talent within the National System of Innovation (NSI).
- Effective, goal-oriented resource allocation.
- Fairness, transparency, and accountability; and
- Transformation and excellence.

4. GENERAL ELIGIBILITY CRITERIA

All applications must adhere to the NRF general list of Funding Criteria, listed in Section 8 of this document.

Some Funding Instruments may have additional criteria. These are listed in Section 9 of this document.

5. EVALUATION OF APPLICATIONS

Review of applications

All applications received by the NRF are screened for eligibility and for compulsory documents that need to be submitted with the application. Applications that are deemed not eligible or do not have ALL the required attachments will not be processed further.

Reviewing of most funding applications will be through a one-stage or two-stage process. The one-stage review refers to where the reviewers (experts in the discipline of the application) who receive the applications, review them virtually, or convene as a panel, to share their reviews of the applications, score them & generate a collective outcome & recommendation. This process, therefore, entails the panel of experts engaging the applications directly, and not receiving & dealing with postal reviewer reports.

In the case of two-stage reviews, the applications are sent to remote, specialist reviewers who submit review reports on the applications. A panel/committee primarily considers the review reports in scoring & generating collective outcomes & recommendations.

Outcomes of applications

Following the review process, the NRF makes awards according to review the recommendations, set criteria and objectives of the various funding opportunities, and funds available. The dates of the outcomes of the funding decision process are available in the General Application Guide published at: <https://www.nrf.ac.za/funding/>

6. DURATION OF AWARDS

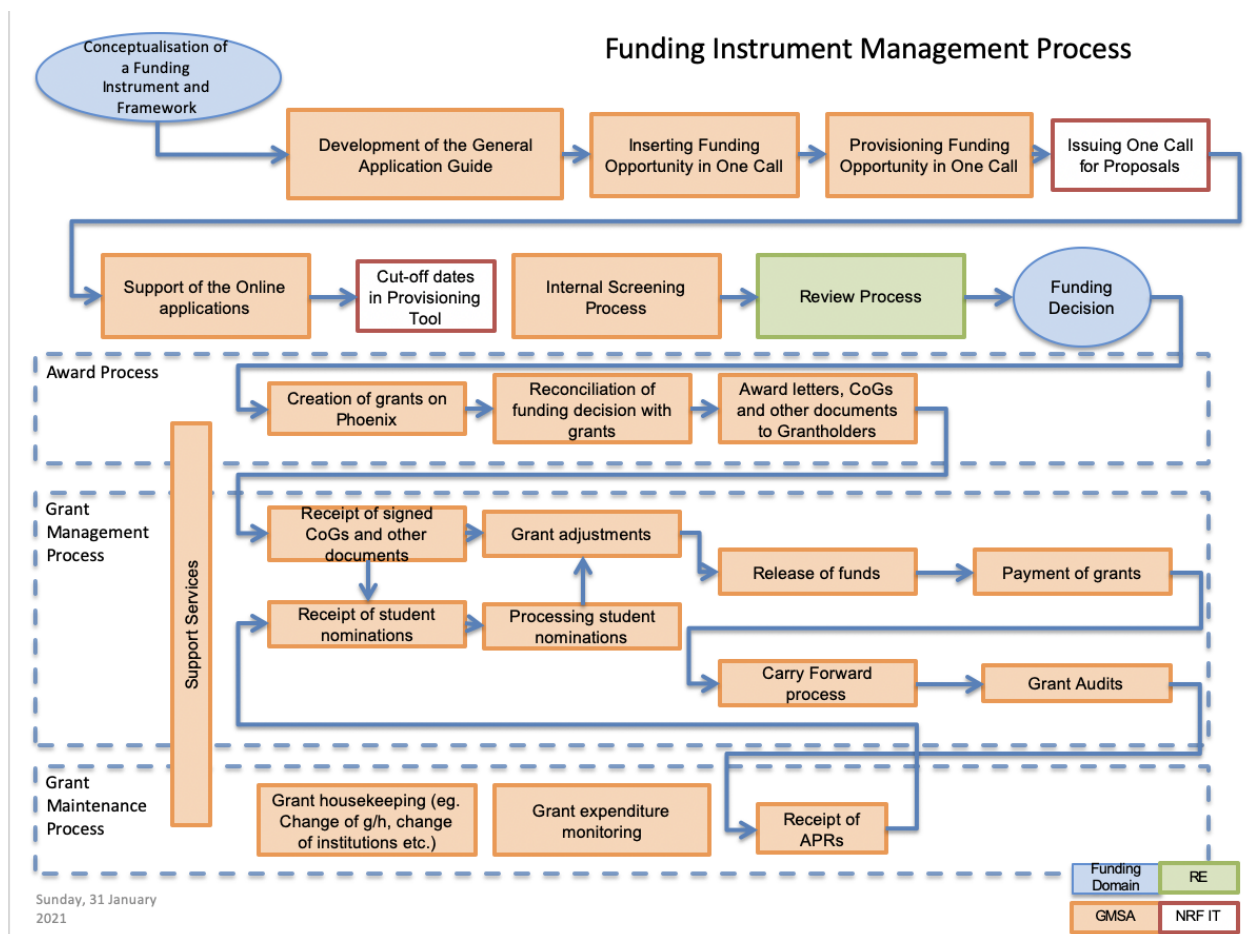
The duration of awards differs among funding instruments. In general, however, awards for research grants are made for periods/cycles of three years. In some cases, there may be a limit on the number of funding periods/cycles allowed, especially in the developmental funding instruments where the emphasis is on the development of research capacity.

Awards for scholarships vary depending on the level of study, i.e., one year for Honours, two years for Masters, and three years of a Doctoral degree.

Continued funding within the period, however, is dependent on satisfactory progress, which is assessed annually.

7. PROCESSES AND PROCEDURES

The following diagram shows a general flow of applications for funding through to the award and management of grants.



8. OVERARCHING RESEARCH GRANT CRITERIA

The overarching eligibility criteria that apply to the majority of RISA Funding Opportunities are summarised below:

Researchers

All researchers must be employed and remunerated on a full-time permanent, or full-time contract basis at beneficiary institutions. These are institutions that receive and administer funds from the NRF. They are administering these funds on behalf of the institution's researchers and students (beneficiaries).

- Persons from institutions not listed as beneficiary institutions, who conduct research and who are formally affiliated with one of the beneficiary institutions, as defined for each specific Funding Opportunity (e.g., appointed as a visiting professor). In the case of grant funding, the funds will be paid to the affiliated institution.
- Retired academics/researchers who are:
 - Residing in South Africa.

- Formally affiliated (e.g., appointed as an emeritus professor, honorary research associate/professor, supernumerary/contract employee) with a research institution, and whose application is formally supported and endorsed by the institution with which they are affiliated, or anticipate being affiliated.
- Active researchers with a distinguished track record of research and postgraduate student supervision; and
- Still actively mentoring/training postgraduate students/young research staff.
- **Research-intensive Institutions**
The NRF primarily supports **research-intensive institutions** conducting basic or applied research of a pre-competitive nature for the benefit of the long-term knowledge base. These institutions must be committed to human resource capacity development, including equity and redress.
- **Student Training**
The quality of all funding applications is enhanced if the applicant has a track record of student training, although this is not always an eligibility requirement.
- **Foreign Applicants**
Persons who hold a joint appointment at a South African and a foreign institution and who are actively involved in research capacity building in South Africa are eligible for a RISA Research Grant if they are employed by the South African institution in a full-time capacity for at least six months per annum and spend at least six months annually in South Africa. Likely to change to
Persons holding joint appointments between a SA institution and a foreign institution; Persons holding joint appointments between two institutions within SA (of which at least one appointment should be a formal association with an NRF recognised research institution).
- **Freestanding Bursaries**
The NRF has implemented a new Postgraduate Funding Policy wherein postgraduate funding allocations will be underpinned by the principles of equity of opportunity; representivity; prioritisation; and enhanced access, success, and throughput. This Postgraduate Funding Policy gives effect to the Ministerial guidelines for improving equity in the distribution of the Department of Science and Innovation (DSI)/NRF Bursaries and Fellowships (2013). Citizenship, age, gender, and disability will be considered in the allocation of funding, with the transformation of the postgraduate cohort as the core objective. Financial need is for the first time, included as a criterion for determining the level of funding.
- **Grantholder-linked Funding**

Grantholders who have bursary funds on their grants for continuing students (students who have received grantholder-linked bursaries on the grant), should nominate these students on the NRF system. No new students should/can be nominated for these bursaries. Instead, all prospective grantholder-linked students must apply under the pooled Postgraduate Scholarships call and select the relevant category, to be considered for a freestanding bursary under the new Postgraduate Funding Policy.

- Grantholder-linked postdoctoral fellowships – For candidates who have obtained their doctorates within the last five years.
- Grantholder-linked Staff Development Grants – For South African staff members at the same institution as an NRF grantholder, or another beneficiary institution. These South African staff members must be registered for a Masters, or Doctoral degree, and must be directly involved in the NRF-approved/funded project/grant. Grantholders cannot nominate themselves for a Staff Development Grant.

9. FUNDING OPPORTUNITIES

The wide range of Funding Opportunities of the NRF is dynamic, and therefore, subject to change. Applicants are advised to visit the NRF website at www.nrf.ac.za regularly for notifications of changes and updates on the status of the respective Funding Instruments.

The opening and closing dates for funding opportunities differ. Please refer to the General Application Guide for the Call for funding opportunities opening in 2022, published at: <https://www.nrf.ac.za/funding/> for details.

This booklet provides a summary only. Contact staff listed at the end of the booklet for more information.

9.1 Global Knowledge Partnerships

9.1.1 Fulbright – Visiting Student Research (Offline)

The Fulbright South African Research Scholar Programme (SARSP) is an opportunity for NRF-funded South African doctoral students to conduct research in their field of expertise at an academic or research institution in the United States of America (USA) for 12 months. A research grant enables the scholars to perform high-level research in those institutions, which are aimed at strengthening

academic programmes or curricula at his/her home institution. Applicants need to have a proven track record of productive scholarly research, and publications.

Additional Eligibility Criteria:

- Applicants must be South African citizens or permanent residents (a minimum of 5-years of permanent resident status required).
- Open to scholars in all disciplines and without regard to gender or age. Please note that proposals for clinical medical research involving patient contact cannot be approved under the Fulbright Program.

9.2 Infrastructure Bridging Finance

9.2.1 Infrastructure Bridging Finance (IBF)

The objectives of the IBF Initiative are to:

- Support South African public universities and all other recognised public research institutions that are listed as NRF approved beneficiaries, with the establishment of suitable infrastructure needed for large pieces of research equipment funded through other NRF mechanisms.
- Prevent the delay in the deployment of research equipment due to infrastructural constraints that arise from a shortage of cash or inadequate cash flow; and
- Support the acquisition of research equipment to enhance the research infrastructure capacity at the universities.

9.3 Infrastructure Grants

9.3.1 National Equipment Programme (NEP)

The National Equipment Programme (NEP) is founded based on equipping South African research institutions with state-of-the-art research equipment that are enablers for advancing the national Research and Development (R&D) agenda. The objective of the NEP is to provide cutting edge equipment for research and technology infrastructure required to ensure the competitiveness of the South African research community. This investment in research equipment aims to: (i) accelerate innovation and to improve the quality of research conducted; (ii) expand on existing institutional capacity and on research and training; and (iii) promote national as well as

regional collaborations in line with national research priorities.

Funding criteria:

- The NEP aims to support the acquisition, upgrade, or development of state-of-the-art research infrastructure in the broad fields of Science, Engineering and Technology.
- The applying institution must provide funding towards the purchase of the equipment at a ratio of 2:1, noted as -NRF: Applying Institution.
- The NRF grant awards will not exceed R10 million per application and will cover two thirds of the total cost of acquisition.
- The cost of the equipment applied for, excluding the service contract, may not be less than R1 million and, the total cost of acquisition must include a three-year maintenance plan.

9.4 Institutional Grants

9.4.1 South African Research Chairs Initiative (SARChI) Chairs

DSI-NRF SARChI Chairs: Basic Research Chairs fully funded by the DSI and NRF with a primary focus on knowledge advancement and human capacity development. These Chairs are awarded following an open and competitive process to all qualifying universities and their respective nominated candidates who meet the minimum requirements of a SARChI Chair.

The successful Research Chairs are awarded to the institutions where they will be based, and they are not transferrable to other institutions.

Aims and Objectives of the SARChI Chairs

The main goal of the SARChI Funding Instrument is to strengthen and improve the research and innovation capacity of public universities, research councils, and national research facilities to produce high-quality postgraduate students and research outputs. The SARChI objectives are:

- Expand the scientific research and innovation capacity of South Africa.
- Improve South Africa's international research and innovation competitiveness, while responding to social, economic, and transformation imperatives of the country.
- Attract and retain excellent researchers and scientists.
- Increase the production of Masters and Doctoral graduates; and

- Create research career pathways for young and mid-career researchers, with strong research, innovation, and human capital development output trajectory.

Additional Eligibility Criteria:

The selection of candidates will be based on the merits of each candidate's full research proposal. This will include the strength of the candidate's profile, including his/her qualifications and experience, publications in the discipline of the Research Chair and postgraduate student supervision track records. This will also include an assessment of the candidate's research and activity plan in respect of its ability to deliver on SARChI objectives, as well as a proposed budget.

The full proposal must also give specific details on:

- Proposed teaching to research-time ratio.
- Research objectives for the five years.
- Expected knowledge outputs in the first five-year period.
- Expected human capital outputs in the first five-year period; and
- Existing and planned collaborations in the first five-year period.

9.4.2 Co-funded Chairs

These Chairs are funded by the DSI-NRF in partnership with the private sector, other government departments, Science Councils and Universities, respectively. Nominations and applications for these Chairs are invited exclusively from black South Africans and females from other demographic groups, provided they meet the minimum requirements of a SARChI Chair. Accordingly, these Chairs are preferentially awarded to exclusively black South Africans followed by females from other demographic groups provided they meet the minimum requirements of a SARChI Chair. Thus, these Chairs are also awarded following a competitive and rigorous process that upheld the SARChI standard. In addition to the general objectives, they aim to redress inequalities, address, and accelerate transformation in partnerships with like-minded co-funding entities, such as those mentioned below, and ensure equitable and representative participation in the knowledge enterprise project. These Chairs also focus on the advancement of knowledge and human capacity development.

9.5 NRF Postgraduate Scholarships (Local)

9.5.1 Honours Scholarships

The NRF honours scholarships are intended for South African Citizens and Permanent Resident students pursuing full-time studies at South African public universities, 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. Applicants must be 28 years of age or younger in the year of application and must obtain a minimum average mark of 65% for major subjects in the final year of undergraduate study.

SARAO will consider applications from South African citizens and permanent residents who have achieved a minimum average of 65% at the undergraduate level, and who will be studying one of the following degrees:

- Bachelor of Science – Honours, in Physics and Electronics/Astronomy/Astrophysics/Computer Science; or
- Bachelor of Science – Honours at National Astrophysics and Space Science Programme (NASSP) <https://www.star.ac.za/honours-astrophysics-and-space-science>.

9.5.2 First-time Masters Scholarships

The general eligibility criteria have been outlined in the section above. The period of support for the Masters level is based on the first date of registration for the degree and is only provided for the first two (2) years of Masters studies.

Funding opportunities like NRF-DAAD have additional eligibility criteria and application requirements. Therefore, the Framework document must be consulted before completing an application online.

SARAO will consider applications from:

- South African citizens and citizens of Botswana, Ghana, Kenya, Madagascar, Mauritius, Mozambique, Namibia, and Zambia, who wish to complete a relevant Masters degree at a South African university.

- Academically excellent students who have completed/are completing an undergraduate or Honours degree, which is relevant to the scientific or technical focus areas of SRAO.
- Students who have selected a SRAO-approved research project, from the list of approved postgraduate projects, which are available on the SRAO website; and
- Students who have obtained written agreement from the supervisor of the SRAO-approved research project, stating that the supervisor agrees to supervise the student.

9.5.3 First-time Doctoral Scholarships

The general eligibility criteria have been outlined in the section above. The period of support for doctoral level is based on the first date of registration for the degree and is only provided for the first 3 years of doctoral studies.

Funding opportunities like NRF-TWAS, NRF-DAAD and NRF-Nuffic have additional eligibility and application requirements. Therefore, the Framework document must be consulted before completing an application online.

SRAO will consider applications from:

- South African citizens and citizens of Botswana, Ghana, Kenya, Madagascar, Mauritius, Mozambique, Namibia, and Zambia, who wish to complete a relevant Doctoral degree at a South African university.
- Academically excellent students who have completed/are completing a Masters degree, which is relevant to the scientific or technical focus areas of SRAO.
- Students who have selected a SRAO-approved research project, from the list of approved postgraduate projects, which are available on the SRAO website; and
- Students who have obtained written agreement from the supervisor of the SRAO approved research project, stating that the supervisor agrees to supervise the student.

9.5.4 Extension Support for Masters and Doctoral Studies

The eligibility criteria for applicants for Extension Support for full-time Masters and Doctoral studies are as follows:

- Applicants must be NRF scholarship-holders in 2022. Extensions will only be granted under exceptional circumstances and will be for either six (6) or twelve (12) months as the NRF

expects all postgraduate students to complete their qualifications within the NRF funding period.

- Applicants applying for extension support at the Masters and Doctoral level must have been registered for a maximum of three years at the year of application.
- Only students pursuing full-time Masters or Doctoral studies in South Africa are eligible to apply; and
- Applicants for extension support will be eligible for postgraduate funding at the same value as their 2022 funding.

9.6 Postdoctoral Grants

9.6.1 Postdoctoral Research Fellowships

The objectives for these Postdoctoral Research Fellowships supported by the NRF are listed below.

- Increase the number and quality of Postdoctoral Research Fellows in South Africa in all fields including specified scarce skills areas.
- Enable South African Postdoctoral Fellows to obtain international exposure.
- Encourage outstanding international Postdoctoral Research Fellows to undertake research in South Africa.
- Leverage innovation in universities and the implementation of science and related skills development; and
- Expand transformation initiatives through equity and career growth opportunities for designated groups.

Additional Eligibility Criteria for all Postdoctoral Fellowships

- Applicants must have obtained their Doctoral degree within five (5) years of applying to the NRF.
- Applicants who are currently completing their Doctoral dissertation for submission may apply, but they should complete their Doctoral degree by 31 December 2022, as **awards that are not taken up by 30 June 2023 will be cancelled by the NRF.**
- Full-time employees of Higher Education Institutions (HEI's) or other research institutions are only eligible to apply **if they intend to take unpaid leave for the duration of the Postdoctoral Research Fellowship.**

- Applicants who are applying for a second NRF Postdoctoral research placement will be eligible if they intend to research a new project.
- 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.

SARAO Postdoctoral Fellowships

Eligibility Criteria:

- Applicants for SARAO Postdoctoral Fellowships must have been active in research since obtaining their Doctoral degree.
- Successful applicants must be able to commence with their postdoctoral fellowships in South Africa on, or before, 1 October of the funded year.

9.7 Research Grants: General

9.7.1 Black Academics Advancement Programme (BAAP)

The objectives of the Black Academics Advancement Programme are to:

- Support academics, particularly Black South African females, and persons with disabilities, employed at public universities in South Africa to attain a Doctoral qualification and post-PhD research training.
- Promote the attainment of an NRF rating by Black South African early-career academics, especially Black and female researchers, and persons with disabilities.

Additional Eligibility Criteria

The Black Academics Advancement Programme supports well-structured research projects with achievable aims and sound methodologies which support the study's objectives and demonstrate the prudent use of funds. The selection of successful candidates for this grant will be guided by the principles outlined below.

- Prioritising Equity and Redress
- Ensuring Institutional spread
- Commitment to Excellence
- Objectives must be Achievable

- Must be nominated by the Deputy Vice-Chancellor (DVC) and should include the Candidate's motivation.

9.7.2 Foundational Biodiversity Information Programme (FBIP) – Small Grants

The FBIP addresses the generation, mobilization and integration of foundational biodiversity knowledge and information so that it can be managed and disseminated for addressing societal needs. The Programme is fully aligned to international and national obligations and objectives including the Convention on Biological Diversity (CBD), the Intergovernmental Platform on Biodiversity & Ecosystem Services (IPBES), National Biodiversity Act, the National Biodiversity Strategy & Action Plan, the Global Change and Bio-economy Grand Challenges of DSI and its programme on Indigenous Knowledge Systems. The Programme integrates SABIF, SABI, DNA barcoding as promoted by the International Barcode of Life (IBOL), and the compilation of species information in line with the Encyclopaedia of Life (EoL).

The main approach of the FBIP is to fund large, collaborative/integrated team projects which align with knowledge needs, or which involve participants along the entire value chain from knowledge generation to application for decision-making. These projects will also include postgraduate students and emerging researchers, and the upskilling of researchers and practitioners who use the data generated. The projects will generate or mobilize species occurrence data, DNA barcode data, and descriptive information on species, and will ensure that the knowledge is coordinated, managed, and disseminated through appropriate structures and systems.

Monitoring of the uptake and impact of the knowledge generated will allow the development of an understanding of best practices for ensuring that research outputs do have an impact on global change understanding and decision-making relating to biodiversity and sustainable livelihoods. A limited number of small grants will also be available to address key strategic gaps in data/knowledge. This framework is applicable for three years, and it is anticipated that it will be revised every fourth year.

9.7.3 New Earth Observation Frontiers (NEOFrontiers)

The objectives of NEOFrontiers are to:

- Advance the implementation of the South African Earth Observation Strategy for addressing South Africa’s socio-economic and environmental priorities.
 - Generate knowledge through research and collaborations within the Earth Observation sector.
 - Develop a transformed, sustainable national science and industrial skills base.
 - Stimulate coordination, collaboration, cooperation, and competitiveness in the South African Earth observation sector.
 - Stimulate the development of innovative Earth observation upstream capabilities and information services in the industry.
 - Develop the national capability to further service an African and global market; and
 - Effect tangible contributions to AfriGEO, GEO and CEOS and other international partnerships.
- NEOFrontiers seeks to establish two mechanisms to achieve its objectives, as described above.

Additional Eligibility Criteria

- The applicant or the Principal Investigator (PI) must have a minimum of 5 years' experience in research with a record of research outputs and, where relevant, supervision of students.
- Other stakeholders/entities/organisations may be Co-investigators and are not allowed to apply by themselves.

9.7.4 Support for Rated and Unrated Researchers

9.7.4.1 Rated Researchers

The objectives of the funding instrument (CPRR) are:

- To contribute to the development of a sound fundamental basis to scientific and scholarly endeavour in South Africa, in the Humanities, Natural and Social Science disciplines.
- To contribute to knowledge production across the research spectrum.
- To achieve world-class research and to develop the associated human capacity; and
- To advance or develop paradigms, theories, and methodological innovation across the research spectrum.

Additional Eligibility Criteria

As a competitive funding instrument, the chief eligibility criterion is:

- A valid National Research Foundation (NRF) rating of the principal applicant.

CPRR grant holders may only hold **ONE** CPRR grant as a Principal Investigator at a time. CPRR grant holders with current grant awards that run beyond the end of 2022 are **ineligible** for funding in this round. CPRR grant holders with current grant awards that run to the end of 2022 are **eligible** for funding in this round.

Each new Principal Investigator **may only submit ONE** CPRR application to this call. However, a researcher may participate either as a co-investigator or collaborator in more than one project.

9.7.4.2 Unrated Researchers

The objectives of the funding instrument (CSUR) are:

- To contribute to the development of a sound fundamental basis to scientific and scholarly endeavour in South Africa, in the Humanities, Natural and Social Science disciplines.
- To contribute to knowledge production across the research spectrum.
- To achieve world-class research and to develop the associated human capacity; and
- To advance or develop paradigms, theories, and methodological innovation across the research spectrum.

Additional Eligibility Criteria

- Applicants should not hold a valid NRF rating at the time of application.
- CSUR grant holders will only qualify for **ONE** CSUR grant cycle (3 years). Thereafter, they will be expected to enter the rated stream and or apply for funding to other NRF instruments such as the Competitive Programme for Rated Researchers (CPRR). Current or previous CSUR grant holders are **ineligible** for further CSUR funding.
- Each new Principal Investigator **may only submit ONE** CSUR application to this Call. However, a researcher may participate either as a co-investigator or collaborator in more than one project. Postdoctoral Fellows, students, technical and support staff are NOT eligible to apply.

- All applicants who submitted proposals in the last round of the CSUR Call in 2021 for funding from 2022 and received communication that their research projects were fundable but could not be funded due to insufficient funds, may not re-apply/resubmit the same proposals for this Call.

9.7.5 Thuthuka

Thuthuka is founded on national equity and redress objectives. Specifically, the objectives of the Thuthuka funding instrument are to:

- Promote the attainment of a Doctoral qualification, by early-career academics employed at South African public universities, science councils and other research institutions as recognised by the NRF.
- Promote the research development of early career academics employed at South African public universities, science councils and other research institutions as recognised by the NRF.
- Promote the attainment of an NRF rating by early-career academics, in particular black and female researchers, and persons with disabilities.
- Promote the attainment of an NRF rating by academics that have not been able to realise their potential or sustain their research ability by the lack of an enabling research environment.
- Promote the attainment of an NRF rating by academics that have not been able to realise their potential or sustain their research outputs due to family responsibilities.
- Foster a culture of research excellence, and aid in the development and expansion of the national knowledge-based economy by boosting research outputs and human capital development; and
- Effect transformation in the demographic composition of the established researcher community at public funded HEIs (Higher Education Institutions), science councils and other research institutions as recognised by the NRF, concerning gender, race, and persons with disabilities.

Additional Eligibility Criteria

- The Thuthuka funding instrument awards are limited to academics with academic or joint academic and administrative professional appointments, at NRF recognised public

universities, and researchers at Science Councils and other public research institutions as recognised by the NRF. Applicants that are under the age of 45 years at the time of first application may apply. Applicants in the PhD and Post-PhD Tracks over the age of 45 **should** submit a motivation as to why they were not able to achieve their Doctoral qualification or research capabilities by the stipulated age.

- Female applicants that are appointed on a fixed-term half-day appointment to accommodate family responsibilities are eligible to apply. This is limited to women raising children of four (4) years of age and below.

First-time applicants to Thuthuka **should not** be rated researchers but may become rated during the tenure of the Thuthuka grant. This grant may not be held concurrently with the Black Academics Advancement Programme grant.

9.8 Research Grants: International

9.8.1 Africa/Japan Collaborative Research (AJ-CORE)

With about 10 years left for the world to realise the 2030 Agenda for Sustainable Development Goals (SDGs), the role of science and technology has become increasingly important. The rapid population growth and increasing access to education have created a pool of highly skilled human resources and accelerated economic growth in Africa but it has also brought other societal problems. A partnership between Africa and Japan has an enormous potential to contribute to the kind of sustainable global society we are all currently aiming for.

AJ-CORE, therefore, serves as a national and regional research platform designed to provide the knowledge needed to support transformations towards sustainability. AJ-CORE seeks to:

- Build and connect knowledge to increase the impact of research.
- Explore new development paths.
- Enhance human capacity development in Science, Technology, and Innovation.
- Find new ways to accelerate transitions to sustainable development; and
- Contribute to SDGs.

AJ-CORE aims to bring together partners in society to co-develop the knowledge needed to support decision-makers and societal change at all scales and in diverse contexts, by focusing on the research area contributing to resolving common problems in Africa.

Additional Eligibility Criteria

The submission of an AJ-CORE proposal is only possible by consortia of at least three partner Principal Investigators (PI) from three different countries. At least two African institutions (from two different African countries – one South Africa the other from any of the SGCI African countries) and one Japanese institution must be part of the consortium. Next to these three required project partners, additional consortium partners from other public and/or semi-public sectors and/or industries are allowed as **Associated Partners (AP)**. Associated Partners cannot request financing from the NRF and JST but could be funded by other Funding Agencies, either national, regional, or international, including Development Banks such as the World Bank.

South African-based principal investigator

For South African applicants, the NRF eligibility criteria apply as follows:

- South African applicants must have a PhD.
- The Small and Medium-sized Enterprises (SMEs), private companies/industries, and Non-governmental Organisations (NGOs) cannot serve as principal investigators but can form part of the research consortium.
- It is “*obligatory*” for a South African principal investigator based at historically advantaged institutions to include, as part of the consortium, a research partner from any of the historically disadvantaged institutions. Proposals submitted by an applicant based at a historically advantaged institution without a research partner from a historically disadvantaged institution will be ineligible (and will not be submitted for review). The research partner from the historically disadvantaged institution, in this case, can serve as a co-applicant in the proposal.
- Applicants based at historically disadvantaged institutions are allowed to submit proposals without the involvement of researchers based at historically advantaged institutions if they so wish.

9.8.2 Brazil, Russia, India, China, and South Africa (BRICS) Multilateral Joint Science and Technology Research Collaboration

Aims of the Programme

- To support excellent research in specified research fields identified by the BRICS partners through a multinational approach.
- To provide an opportunity for emerging researchers in the BRICS countries to meet and interact.
- To support the advancement of basic research; and
- To contribute meaningfully to research capacity development.

9.8.3 Global Research Council (GRC) Sustainable Development Goals (SDG)

Aim and objectives:

This call aims for science-based innovative measures that can contribute to the achievement of the SDGs. This call will focus on innovation linked to the economy, governance and/or societal structures to identify/develop innovative ways to utilize and implement applicable research outputs to achieve the societal impact that promotes and/or facilitates the achievement of the SDG's.

This initiative has the following objectives:

- Promoting international cooperation.
- Bringing together consortia that emerge from research projects funded from different funders.
- Enhancing the practical relevance of research outputs and facilitate (the development of) practical implementation of research to advance the Sustainable Development Goals (SDGs); and,
- Strengthening co-design with a diverse range of partners in and outside academia, within the consortia.

Eligibility and national funding modalities (for South Africa):

This call is open to all South African researchers who meet the general eligibility criteria and requirements.

Applications should seek to align the objectives of this Belmont CRA to the national priorities of South Africa as contained in the National Development Plan (NDP) and the Department of Science & Innovation's (DSI) White Paper on Science, Technology, and Innovation. In addition, it is

recommended that any application also prioritises a ‘systems’ approach which is multi-sectoral (natural, environmental, social, economic etc.) and involves several specific Sustainable Development Goals (SDGs) within a local/regional context.

The application should also take cognisance of the Global Change grand challenge as defined by the Global Change Ten-Year Research Plan. Applicants will also be required to meet the specific eligibility criteria as spelt out in the call. All applications will be assessed based on these eligibility criteria as well as the selection criteria described in the call.

9.8.4 NRF/DFG International Research Training Groups (IRTGs) Main Research Call

International Research Training Groups (IRTGs) are structured Doctoral programmes run by German universities in conjunction with universities or research institutions abroad. They are funded by the Deutsche Forschungsgemeinschaft (German Research Foundation – DFG). As bilateral collaborations, they train scientists and academics at various stages of their careers, with a particular emphasis on Doctoral researchers. IRTGs promote systematic research cooperation through joint research and qualification programmes as well as through cooperative cross-border supervision of Doctoral researchers.

Additional Eligibility Criteria

Only South African researchers planning to apply for the NRF/DFG (IRTGs) programme are eligible to apply. Applying researchers should be employed/based at any South African university and should already have established cooperation with the German Partners with consolidated plans for an IRTG.

9.8.5 SA/Switzerland Lead Agency

The NRF is committed to promoting international collaboration in advancing research excellence, reflected through agreements with several strategic partners. Informed by the long-standing knowledge engagement between South Africa and Switzerland, the NRF has formalised a Lead Agency Procedure (LAP) agreement with the Swiss National Science Foundation (SNSF). The principle of the Lead Agency is to allow research funding organisations from two (or more) countries to engage in cooperation in which one of the organisations involved – the Lead Agency – takes a leading role. The Lead Agency organisation would therefore lead the review and evaluation process to recommend applications for approval. The partner organisation makes its formal funding

decision based on the review documentation and the recommendation of the Lead Agency. The respective project parts are then financed by the individual organisations nationally so that no funds need to be transferred across borders.

Eligibility Criteria:

- This funding opportunity is open to researchers/scientists residing in South Africa and affiliated with a recognised South African public higher education or research institution such as a university, university of technology, science council, museum or other research institutions as declared by the Department of Science and Innovation.
- Private higher education institutions are not eligible to apply under this programme.
- Researchers from SMEs, private companies/industries, and NGOs cannot serve as the main applicants, i.e., Principal Investigators (PIs) but can form part of the joint projects and will be expected to meet their own costs of participation in the joint projects. Awarded grants cannot be used to support these researchers.
- South African PIs must have a research partner based in Switzerland who will equally bear the main responsibility for the project including its technical and administrative coordination as well as timely delivery of scientific and financial reports. The research partner from Switzerland serves as a co-applicant therefore, proposals submitted to the NRF without a research partner based in Switzerland will be marked ineligible and will not be submitted for reviews.
- Additional partners (including postdoctoral researchers) based in South Africa and/or in Switzerland can also participate in the collaborative projects.
- The South African PIs and co-applicants must be in possession of a PhD to be eligible.
- South African researchers are not allowed to serve as a research partner on more than 1 project proposal.
- South African PIs based at historically advantaged institutions are required to include, as part of the joint project, a research partner from any of the Historically Disadvantaged Institutions (HDIs) to be eligible. Proposals submitted by an applicant based at a historically advantaged institution without a research partner from an HDI will be ineligible and will not be submitted for review. The research partner from an HDI in this case serve as a co-applicant in the proposal. Please note that co-applicants are also required to be in possession of a PhD. Applicants based at an HDI, science council (including any of the NRF research facilities), and

South Africa's two new universities (i.e., Sol Plaatje and Mpumalanga) can act as PIs and submit proposals without the involvement of and/or partnering with researchers based at historically advantaged and disadvantaged institutions if they so wish.

- Only the following eight universities will be recognised as HDI in line with the Department of Higher Education and Training (DHET) November 2019 Ministerial Statement on university funding: University of Limpopo (UL), University of Fort Hare (UFH), University of Venda (Univen), Walter Sisulu University (WSU), University of the Western Cape (UWC), University of Zululand (UniZulu), Mangosuthu University of Technology (MUT), and Sefako Makgatho Health Sciences University (SMU).

9.8.6 SA/China (MOST) Joint Research Programme (JRP)

This Programme aims to:

- Contribute to scientific advancement in both countries by funding researchers' mobility in the frame of joint research projects in specified research fields.
- Provide an opportunity for researchers to cooperate in an international setting and to develop their scientific careers, especially for early-stage, mid-career as well as female researchers.
- Support the advancement of basic and applied research; and
- Contribute meaningfully to research capacity development.

Additional Eligibility Criteria

- An application must designate two Principal Investigators (PIs), one in South Africa and one in China,
- Project proposals submitted by young, early-stage or mid-career researchers as well as project proposals with involvement of Doctoral students and/or female researchers will be prioritised for funding by both sides; and
- The focus of the Programme lies in new international partnerships. Therefore, follow-up proposals with the same research partners will not be prioritised for funding (if they have already been funded under this Programme).

9.8.7 SA/France (PROTEA) Call for Joint Proposals

This Programme aims to:

- Contribute to scientific advancement in both countries by funding researchers' mobility in the frame of joint research projects in specified research fields.
- Provide an opportunity for **young and emerging researchers** to cooperate in an international setting and to develop their scientific careers, especially for early-stage, mid-career as well as female researchers.
- Support the advancement of basic and applied research; and
- Contribute meaningfully to research capacity development.

Additional Eligibility Criteria

- An application must designate two Principal Investigators (PIs), one in South Africa and one in France, who will bear the main responsibility for the project, including its technical and administrative coordination as well as scientific and financial reporting.
- Project proposals submitted by early- to mid-career researchers as well as project proposals with the involvement of PhD (Doctoral) students and/or female researchers, will be prioritised for funding by both sides.
- The focus of the Programme lies in new international partnerships. Therefore, follow-up proposals with the same research partners will not be prioritised for funding (if they have already been funded under this Programme).

9.8.8 SA/USA (NSF) Biodiversity on a Changing Planet (BoCP)

The Dimensions of Biodiversity Programme aims to characterise biodiversity on Earth by using integrative, innovative approaches to rapidly fill the most substantial gaps in our understanding of the diversity of life. Successful joint projects are expected to develop and incorporate innovative approaches to rapidly reduce unknown dimensions of the biodiversity of our living world. The Programme aims to:

- Build on existing, outstanding, and established research partnerships.
- Support the advancement of basic research.
- Contribute to scientific advancement in both countries through the funding of joint research activities in specified research fields.

- Provide an opportunity for young researchers in the two countries to meet and interact through the funding of researchers' exchange programmes in the frame of joint research projects in specified research fields: and
- Contribute meaningfully to research capacity development.

Additional Eligibility Criteria

Each proposal under this Programme must have one main applicant based in South Africa and one main applicant based in the United States. They are the Principal Investigators (PIs), and they bear the main responsibility for the project including its technical and administrative coordination as well as timely delivery of scientific and financial reports.

South Africa:

The South African applicant must have a PhD.

United States:

NSF Proposal and Award Policies and Procedures Guide (PAPPG) guidelines apply. The complete text of the PAPPG is available electronically on the NSF website at:

https://www.nsf.gov/publications/pub_summ.jsp?ods_key=papp

9.8.9 SA/ Italy (ISARP) Call for Joint Proposals

The specific aims of this Programme are:

- To support the advancement of applied and innovative research.
- To contribute to scientific advancement in both countries through the funding of joint research activities in specified research fields.
- To provide an opportunity for young researchers in the two countries to meet and interact through the funding of researchers' mobility in the frame of joint research projects in specified research fields: and
- To contribute meaningfully to research capacity development.

Additional Eligibility Criteria

- Environmental sustainability

- Potential for further or future international cooperation
- Student involvement through exchange programmes and short-term placements (for Human Capital Development)
- Participation of industry (SMEs) in the joint projects

9.8.10 SA/ Netherlands (NWO) WEF Nexus Call (Closed Call)

Through this programme, South Africa and the Netherlands aim to bring together partners in society to co-create the knowledge needed to support decision-makers and contribute to societal change at all scales and in diverse contexts, by focusing on the Water-Energy-Food (WEF) nexus as the main research area. This nexus is a global, regional, and national challenge that cannot be solved by one country alone. It requires multi-country partnerships, multi- and interdisciplinary research. The collaborative research financed by NWO and NRF in this programme is intended to work towards scientific knowledge and innovative solutions for high scientific and societal impact.

Eligible consortia are composed of researchers based in the Netherlands and South Africa, with active involvement in the project of a senior Principal Investigator (PI) on both the Dutch and the South African sides. Specifically, the Dutch and South African sides of the consortium must fulfil the following requirements:

The Dutch side of the consortium:

- One Principal Investigator who fulfils the requirements.

South African side of the consortium:

- One Principal Investigator who fulfils the requirements.
- If the Principal Investigator is not employed at a historically disadvantaged university, a co-applicant who fulfils the requirements and is employed at a historically disadvantaged university.

On the Dutch side of the South African side of the consortium:

- A collaboration partner from the public, semi-public or private practitioner organisation (for-profit or not-for-profit) who fulfils the requirements.

- The consortium may also include other co-applicants or collaboration partners if they are eligible according to the criteria.

Each Principal Investigator and consortium can only submit one proposal.

9.9 Research Grants: Without Student Support

9.9.1 Support for Y-rated Researchers

The objectives of the funding instrument are:

- To contribute to the development of a sound fundamental basis to scientific and scholarly endeavour in South Africa, in the Humanities, Natural and Social Science disciplines.
- To contribute to knowledge production across the research spectrum.
- To achieve world-class research and to develop the associated human capacity.
- To provide dedicated support to emerging and promising researchers to strengthen their research portfolio and contribute towards their achievement of established researcher status; and
- To advance or develop paradigms, theories, and methodological innovation across the research spectrum.

Rules of participation

- Principal Investigator
 - Only Y-rated researchers based at NRF recognized research institutions in South Africa (as defined above) are eligible to apply as principal investigators (PI) in this funding instrument.
 - The principal investigator (*i.e.*, applicant) must be an active researcher who takes intellectual responsibility for the project, its conception, any strategic decisions required in its pursuit, and the communication of results. The principal investigator may not hold a current Development Grant for Y-rated Researchers.
 - The principal investigator may submit only one Development Grant for Y-rated Researchers application to this Call for proposals.

The research team may also include:

- Co-investigators
- Research Associates/Collaborators

9.10 SARAQ Undergraduate and Diploma Scholarships

9.10.1 SARAQ Undergraduate and Diploma Scholarships

Eligibility for a SARAQ Bachelor in Engineering Technology Scholarship.

The South African Radio Astronomy Observatory (SARAQ) will accept applications from:

- South African citizens or permanent residents.
- Students who wish to study, or are studying, one of the following degrees:
 - Bachelor in Engineering Technology: Electronics; or
 - Bachelor in Engineering Technology: Mechanical.
- Students who have achieved a minimum of 70% in Mathematics and Physical Science in Grade 12, or a minimum average of 60% for Bachelor in Engineering Technology subjects.

Eligibility for a SARAQ Diploma in Engineering Technology Scholarship

The South African Radio Astronomy Observatory (SARAQ) will accept applications from:

- South African citizens or permanent residents.
- Students who wish to study, or are studying, one of the following diplomas:
 - Diploma in Engineering Technology: Electronics; or
 - Diploma in Engineering Technology: Mechanical
- Students who have achieved a minimum of 60% in Mathematics and Physical Science in Grade 12, or a minimum average of 60% for Diploma in Engineering Technology subjects.

9.11 SARAQ Undergraduate Block Grant

9.11.1 SARAQ Undergraduate Block Grant

The objective of SARAQ's Undergraduate Block Grant Programme is to partner with South African universities, to increase the number South African graduates available to pursue postgraduate research in areas relevant to the SKA and MeerKAT radio telescopes.

Eligibility criteria

- SARAO will consider applications from university departments that propose to support between four and eight South African citizens or permanent residents, studying any of the following degrees: Bachelor of Electronic Engineering
- Bachelor of Electrical and Electronic Engineering
- Bachelor of Mechanical Engineering
- Bachelor of Mechatronic Engineering
- Bachelor of Computer Engineering
- Bachelor of Science in Mathematics/Applied Mathematics and Physics
- Bachelor of Science in Physics and Electronics
- Bachelor of Science in Astronomy/Astrophysics and Physics
- Bachelor of Computer Science, with co-major in Mathematics/Applied Mathematics

9.12 Targeted Grants

9.12.1 DSI/NRF Research Development Grants for New Generation of Academics Programme (nGAP) Scholars

The objectives of the grant are to:

- Accelerate the Doctoral level training of nGAP scholars in the PhD track at public universities. Universities.
- Effect transformation in the demographic profile of the emerging researcher community concerning gender, race, and persons with disabilities through support for nGAP scholars in the post-PhD track.
- Provide Research Development Grants for nGAP Scholars in their first and second year of appointment to assist these scholars to develop and submit research grant applications aligned to the Thuthuka PhD and Post-PhD tracks.
- To support nGAP scholars, in the first and second year of appointment, that have a university-approved research project, with start-up research funding while they apply for competitive research grants to the NRF and other agencies.

Additional Eligibility Criteria

To qualify for the grant, applicants must comply with the following eligibility criteria:

- Applicants must be in their first or second year of appointment as nGAP scholars at a public university in South Africa.
- Appointed nGAP scholars must hold a minimum qualification of a Masters degree to apply for the PhD track and a Doctoral degree to apply for the post-PhD track.
- Applicants must be South African citizens or permanent residents.
- Applicants that hold a valid NRF rating are not eligible to apply; and
- Applicants who are currently NRF research grantholders are not eligible to apply.

9.13 Travel, Training and Conference Grants

9.13.1 DSI/NRF Conference Fund

The Conference Fund is intended to support the hosting of international conferences focused on high-quality scientific research that has the potential for socio-economic impact. The funding instrument makes provision for **strategic, large events of an international nature**, hosted in South Africa, or on behalf of South Africa abroad and/or virtually organised events. The fund will typically support ‘global conferences’ of more than 500 participants. Smaller events can be applied for under the Knowledge Interchange and Collaboration (KIC) funding instrument of the NRF, published biannually.

The objectives of this fund are to:

- Promote South Africa as a science destination.
- Increase the competitiveness of the South African National System of Innovation (NSI).
- Showcase South Africa’s scientific endeavours and infrastructure and build capacity within the NSI.
- Enhance networking within the science system.
- Foster international collaboration to improve the quality of research outputs by researchers.

9.13.2 Equipment Related Travel & Training

The Equipment-related Travel and Training Grants aim to support world-class research, enhance research collaborations nationally and internationally, and support the development of specialised skills required to sustainably manage and operate state-of-the-art research equipment.

The objectives of this funding instrument are to make funds available to support:

- The larger research community to access:
 - State-of-the-art research equipment that is not available regionally and/or nationally.
 - Natural science collections such as those located at museums; and
 - Training workshops on the use of specialised equipment or feeder equipment that have been acquired through public funds and high-end equipment donated by the private sector.
- Researchers and postgraduate students in South Africa (SA) to access global research infrastructure located nationally (e.g., SALT) or abroad such as synchrotron radiation facilities.
- Researchers and postgraduate students in SA to access natural science collections for the completion of their dissertations.
- Research institutions hosting equipment-related training workshops on the use of feeder and/or specialised equipment that is acquired either through NRF and/or DSI funds; and
- Hosting of Visiting Expert Instrument Scientists, that can aid research equipment grantholder institutions to build capacity relating to the sustainable management of high-end equipment.

Applicants

All applicants need to hold the position of Academic staff or Research equipment technicians or Operators and Instrument specialists.

9.13.3 European Research Council (ERC) Mobility

Specific aims of the Funding Opportunity:

- To contribute to scientific advancement in both South Africa and the EU through the funding of research visits in thematic fields of mutual interest.
- To provide an opportunity for early mid-career researchers in South Africa to meet and interact with their European counterparts to develop their full research potential.
- To contribute meaningfully to the research capacity development of South African early mid-career researchers by broadening and strengthening their research profile and vision in an internationally competitive research environment.
- To contribute to and ensure that South African researchers are internationally exposed and well networked.

Additional Eligibility Criteria

- Early mid-career researchers (i.e., researchers who are 40 years and younger and in possession of a Doctoral degree) interested in undertaking research visits to ERC-supported teams, are eligible to apply.
- The early mid-career researchers who are interested in applying for this opportunity should be South African citizens and/or permanent residents working in/or affiliated with a recognised South African higher education or research institution such as a university, university of technology, science council or any other research institution as declared by the DSI.
- Further to this, all the early mid-career researchers who are currently undertaking their postdoctoral studies supported through any of the NRF postdoc funding instruments (e.g., postdoctoral research fellowship and the Thuthuka post-PhD track) interested in undertaking research visits to ERC-supported teams are also eligible to apply.

9.13.4 Germany International Research Training Group (IRTGs) Preparatory Workshop

Applications for IRTGs are open to all subject areas, and inter-disciplinarity in joint projects is encouraged. An IRTG should be run by two small teams of Professors in Germany and South Africa, respectively. Each team should have 5 to 10 members with proven expertise both in the IRTG's main research topic and in providing outstanding supervision to Doctoral students. The participating researchers' expertise at the two locations should be complementary and provide added value to the IRTG.

The German and South African teams in an IRTG should jointly formulate a high quality and coherent research and training programme to be implemented on both sides. The teams should have common research interests and objectives, and these must be reflected in a common framework and joint project. Applications are submitted by the host HEIs.

Additional Eligibility Criteria

- Applicants must be researchers with extensive experience in supervising Doctoral students.

9.13.5 International Science Council (ISC) Grants for Travel & Hosting of Events

9.13.5.1 ISC Grants for Travel

To support international travel and attendance (connectivity to) organised events related to ISC research activities such as the presentation and publication of papers and posters, and for hosting experts from abroad.

Additional Eligibility Criteria ISC Grants

- Be a member of an ISC committee or a member of ISC-related working groups, task groups or commissions.
- Capacity building delegates (presently completing a PhD or recently completed a PhD) appointed to the SA committee of a specific Union. Up to two capacity building delegates will be eligible to apply per year.
- Applications will be supported on a competitive basis.
- A maximum of three delegates will be funded to attend a specific ISC international event.
- Delegates will be funded for a maximum of five days.
- Applications are considered on a value-add, representative and strategic basis.
- Additional funding for the same event from other NRF instruments will not be considered.
- Applicant should indicate financial contributions from other sources.

9.13.6 Joint Institute for Nuclear Research (JINR) Student Practice (Off-line)

Objectives

In addressing the lack of science laboratory equipment at the HDIs and related skills-shortage in the students, iThemba LABS, Cape Town (<http://tlabs.ac.za/>) will be hosting a Physics summer school. This will provide students with exposure to techniques and methodologies that will equip them to participate in the SA-JINR student practice. The primary focus of the summer school will be on lectures as well as hands-on training in nuclear-related applications and instrumentation techniques.

Additional Eligibility Criteria

To qualify for consideration, applicants must comply with the following eligibility criteria:

- All applicants must be citizens or permanent residents of an African country.
- All applicants must currently be registered at any South African Higher Education Institution and complete an Undergraduate, Honours, Masters or Doctoral Degree.
- Students must be provisionally accepted for Honours, Masters or Doctoral Degree in the disciplines listed below at any South African or African Higher Education Institution.
- All applicants must be completing their studies in the following disciplines:
 - Physics.
 - Mathematics/Applied Mathematics.
 - Chemistry.
 - Engineering (especially nuclear, materials, electrical, chemical).
 - Computer Sciences; and/or
 - Any related nuclear sciences discipline(s).

Preference will be given to female students and students from historically disadvantaged institutions.

No full-time researcher, who is registered for a part-time postgraduate degree, namely Honours, Masters or Doctoral degree, is eligible to apply.

9.13.7 Knowledge Interchange & Collaboration (KIC)

The KIC funding instrument is aimed at contributing to the following objectives:

- Internationalising South Africa's research platforms.
- Enhancing networking within the global science system, in particular the African science system.
- Fostering collaboration to improve the quality of research outputs by researchers.

Additional Eligibility Criteria

- PhD students (through their supervisors) registered at public South African institutions and all researchers who are full-time employees or on a fixed-term contract.
- The applicants must have at least a PhD degree

9.14 Travel, Training and Conference Grants: Scholarships & Fellowship-holders

The National Research Foundation links travel grants to specific postgraduate and postdoctoral Funding Instruments. The objectives of the travel grant are to:

- Provide opportunities for leveraging on established research networks to directly contribute to the student/fellow's current research.
- Enable the student/fellow to disseminate research findings (for example, through conference presentations etc.).
- Enable students/fellows to participate in conferences and other academic activities directly relevant to their research; and
- Undertake specialist research training directly linked to the student/fellow's research project not available within South Africa.

10 CONCLUSION

It is hoped that this Overview has helped to provide some clarity on the variety of different funding opportunities offered by the NRF.

More detailed information on award opportunities is available on the NRF website at: www.nrf.ac.za.

Grant-related enquiries may be directed by e-mail to: supportdesk@nrf.ac.za.

11 GMSA CONTACT DETAILS

| GMSA | | |
|---|-----------------|------------------------------|
| Staff Member | Tel. No. | Email Address |
| Executive Director | | |
| Dr Gugu Moche | 012 481– 4276 | IO.Moche@risa.nrf.ac.za |
| Directors | | |
| Mrs Anthipi Pouris | 012 481–4240 | A.Pouris@risa.nrf.ac.za |
| Dr Raven Jimmy | 012 481–4069 | R.Jimmy@risa.nrf.ac.za |
| Mr Simon Lotz | 012 481–41250 | SM.Lotz@risa.nrf.ac.za |
| Mrs Thashni Pillay | 012 481–4241 | T.Pillay@risa.nrf.ac.za |
| Support Desk – supportdesk@nrf.ac.za | | |
| Mrs Bettie de Beer | 012 481–4034 | e.debeer@risa.nrf.ac.za |
| Ms Cebisile Makhanya | 012 481–4050 | cn.makhanya@risa.nrf.ac.za |
| Ms Pinky Matjeka | 012 481–4072 | sm.matjeka@risa.nrf.ac.za |
| Ms Sibulele Sibulali | 012 481–4155 | s.sibulali@risa.nrf.ac.za |
| Grant Finance (GMSA) | | |
| Ms Thembi Ramotebele | 012 481–4064 | tc.ramotebele@risa.nrf.ac.za |
| Ms Tebogo Manganye | 012 481–4142 | tg.manganye@risa.nrf.ac.za |
| Ms Thozama Gonya | 012 481–4181 | t.gonya@risa.nrf.ac.za |

Table 1: GMSA Contact Details