



## BRICS Multilateral Joint Science and Technology Research Collaboration National Research Foundation (NRF): 2021 Guidelines

### Applicants are advised to consult the NRF General Application Guide 2022

Pre-proposals are submitted directly to the BRICS Call Secretariat. The NRF Online Submission System will only be opened to those researchers who have been approved to submit a full proposal.

Maximum of 6 joint projects will be funded for this call

On 18 March 2015, the BRICS Ministers of Science and Technology signed a Memorandum of Understanding (MoU) to establish a research and development collaborative programme between the BRICS countries. Following the signing of this MoU, the following 12 BRICS Funding Agencies developed a BRICS Science, Technology and Innovation (STI) Framework for supporting collaborative research projects between researchers of the BRICS countries: National Council for Scientific and Technological Development (CNPq, Brazil), Foundation for Assistance to Small Innovative Enterprises (FASIE, Russia), Ministry of Science and Higher Education (MSHE, Russia), Department of Biotechnology (DBT, India), Department of Science and Technology (DST, India), Ministry of Science and Technology (MOST, China), National Natural Science Foundation of China (NSFC, China), Department of Science and Innovation (DSI, South Africa), Medical Research Council of South Africa (SAMRC, South Africa), National Research Foundation (NRF, South Africa), Technology Innovation Agency (TIA, South Africa) and the Water Research Commission (WRC, South Africa). These BRICS funding agencies are hereby pleased to announce the 5<sup>th</sup> BRICS Multilateral call for 2021, and herewith invite all interested parties to submit their applications, by a date no later than that indicated.

Contained in this document are the NRF national eligibility criteria and funding regulations for South African researchers interested in applying to the NRF for funding.

### Aims of the Programme

This Programme aims to:

- support excellent basic and applied research joint projects submitted in specified research fields identified by the BRICS partners through a multinational approach;
- provide an opportunity for emerging researchers (i.e. postdoctoral fellows) within BRICS countries to meet, interact and establish networks for future joint research; and
- contribute meaningfully to research capacity development and research career pathways for young researchers through reciprocal research visits and/or mini sabbaticals (of 3 - 6 months) by doctoral students to the respective partner institutions.

## Areas of Cooperation

Joint research proposals should be submitted within the following BRICS designated thematic areas prioritised by the NRF:

1. Transient astronomical events and deep survey science.
2. High performance computing and big data for sustainable development: solving large scale ecological, climate and pollution problems.
3. Materials science and nanotechnology for addressing environmental, climate change, agricultural, food and energy issues.
4. Renewable energy, including smart grid integration.
5. Ocean and polar science and technology.

**Please note** the attached “**BRICS STI Framework Document**” for a full description on each thematic area mentioned above. South African researchers interested in submitting applications within the other five BRICS themes should apply directly to the other four South African funders, i.e. DSI, SAMRC, TIA and WRC.

## Duration of projects

Projects will be supported for a period of three years (2022 to 2024).

## Who may apply?

- Working 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 or science council are eligible to apply. South African Principal Investigators (and HDI based research co-applicants) must be in possession of a PhD. South African researchers are not allowed to serve as Principal Investigators (or research partners) on more than 1 project proposal.
- It is **mandatory** for South African PIs based at historically advantaged institutions (and science councils) to include, as part of the consortium, a research partner from a historically disadvantaged institution. 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 collaborator from the historically disadvantaged institution in this case will serve as a co-applicant in the proposal.
- Applicants based at historically disadvantaged institutions including those based at the two new universities, i.e. the Sol Plaatje University (SPU) and the University of Mpumalanga (UMP), can act as PIs and submit proposals without the involvement of and/or partnering with researchers based at historically advantaged institutions if they so wish.
- **Please note** that only the following eight universities are currently recognised as historically disadvantaged in line with the Department of Higher Education and Training 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).
- Private higher education institutions are not eligible to apply under this programme. A multi-institutional/ consortia approach will be preferred. Therefore, applicants are allowed to collaborate with other partners such as NGOs or companies. However, the SMEs, private companies, and NGO participants cannot serve as PIs and are expected to meet their participation costs in the joint project.
- Cooperation projects with the potential to be sustained beyond the funding period will be favourably considered.

- Only joint proposals that involve **at least three or more** partners from the BRICS countries will be considered for funding.
- Joint projects that involve young researchers (through reciprocal research visits and mini sabbaticals), postdoctoral fellows and pay attention to government equity targets by ensuring a balanced involvement of female and black researchers will be positively considered and will receive a higher rating.
- In terms of South Africa's transformation agenda applications from previously disadvantaged individuals and the involvement of historically disadvantaged higher education and research institutions will be prioritised.

### Which activities may I apply for?

The purpose of this call is to support excellent research on priority areas which can best be addressed by a multi-national approach. The initiative should facilitate cooperation among the researchers and institutions in the consortia which consist of partners from at least three of the BRICS countries. Support will be provided for collaborative multilateral basic and applied research projects. Funds can be used to cover the following costs:

- **Research-related costs** - activities to be supported may include expenses relating to field work such as conducting interviews, surveys, laboratory experiments, research-related trips, small equipment (consumables), etc. Airfare, accommodation, ground transport and subsistence should be calculated using rates as stipulated in institutional travel policies.
- **Reciprocal research visits/ mini sabbaticals by young researchers** - the placements should enable the postgraduate students within the project to learn valuable new skills or techniques; access facilities or resources not readily available at home; build relationships with potential new collaborators; and advance complementary collaborative research. The duration of each placement is expected to be 3-6 months with flexibility to split the placement into several shorter visits. Longer placements may be undertaken where this would add value and these should be justified within the application. Placements must enhance, not replace, the standard training and study support that the postgraduate students receive. These placements must be managed to fit within the original funded period of the studentship. Additional funding will not be made available through this call to support studentship extensions for those undertaking international placements. Applicants should include information about how these reciprocal research visits will be managed. Funds within this programme can only be used for these reciprocal research visits/ mini sabbaticals and not for scholarship/ bursary/ students fees. The honours are on the PIs (and doctoral students) to secure funding for educational expenses of participating students. Doctoral students are hereby advised to apply for scholarship through the NRF call for Student Support which opens the beginning of April each year.
- **2-year postdoctoral research support** – Funds within this programme make provision for one postdoctoral position equivalent to the NRF Freestanding Postdoctoral Fellowship. Therefore, PIs are expected to supervise and mentor a postdoctoral researcher who should be allowed to conduct research, either on a pre-specified aspect of the joint project or on their own designed topic within the joint project and should be supported to publish the work. The responsibilities of this position may also include assisting the PI with the management and administration of the joint project. The postdoctoral fellows should be prepared to become principal investigators so they also take on senior responsibilities like mentoring, grant writing, and teaching.
- **Knowledge sharing costs (science engagement)** - in support of project-related activities, such as joint workshops, seminars, conferences, symposia, lecturer presentations, meetings, local and regional dissemination of results to relevant stakeholders.

In the case of meetings, research visits and exchanges of scientists, personnel, and experts, as well as reciprocal visits undertaken as part of joint research projects and the attendance of seminars, symposia

and other meetings funded under this programme, the sending side will be responsible for financing international travel, visas, medical insurance, accommodation and living expenses. Fees relating to the organisation of events (venue, catering, audio-visual equipment etc.) will also be the financial responsibility of the host investigator which is to be paid from his/ her allocation of the joint funding.

The following are **NOT** to be funded from the NRF funds allocation:

- Consultant's fees
- Large equipment
- Project management fees
- Overheads
- Salaries and temporary staff fees
- Educational expenses (scholarships/ bursaries/ student fees/ educational expenses, etc.).  
Doctoral students in need of financial support are advised to apply for scholarship through the NRF call for student support which opens the beginning of April each year.

### How much may I apply for?

The total amount requested from the NRF should not exceed R1.5 mil per project. Funding will be made available for a maximum of 3-years, to be paid in annual installments and exclusively for research activities commencing in 2022.

- R 1 070 000 (R356 667 per annum) for research-related activities; reciprocal research visits/ mini sabbaticals by young researchers and science engagement.
- R430 000 for 1 postdoctoral position at R215 000 per annum for 2-years (R155 000 non-taxable stipend, R45 000 contribution towards research costs, and R15 000 compulsory institutional contribution.

#### **Please Note:**

- Should you be successful you will be funded only for the activities within the scope of these guidelines.
- Scientific and financial reporting on the project is an **obligatory** condition of funding in subsequent years.
- Requested amounts do not necessarily imply that this amount will be awarded upon selection for funding.

### How do I apply?

South African applicants should submit their applications by following the steps below:

#### **Procedure for Submitting a Pre-Proposal:**

- Applicants must submit their pre-proposals (mandatory) directly to the BRICS Call Secretariat. All the information on this process can be found through the link: <http://brics-sti.org/?p=new/30>. The deadline for the submission of pre-proposals to the BRICS Call Secretariat is **Thursday, 14 October 2021, 15:00 Moscow Time (UTC+3)**.
- A project consortia must choose an overall Project Coordinator who will take the responsibility for completing and submitting the Joint Application Form (JAF) to the Call Secretariat (via BRICS STI FP AMS at <http://ams.rfbr.ru/BRICS/>). Other project partners do not have to submit any additional proposals to the Call Secretariat, so only one JAF per single project is required.
- Please note that the submitted pre-proposals will undergo a joint review process and based on the review outcomes project consortia will be invited or not invited to submit a Full Proposal.

#### **Procedure for Submitting a Full-Proposal:**

- Each national researcher (PI) in a project consortium that has been invited to submit a full proposal **must** submit a national application to their respective national funders in accordance with the funders' rules and regulations. For the full proposal stage there is no submission of

any additional proposal to the BRICS Call Secretariat. If any of the national PI of a particular project consortia fails to submit a national component to their respective national funding agency by the due date and time, the full proposal will be considered as not submitted.

- The NRF Online Submission System (<https://nrfs submission.nrf.ac.za/>) will be opened only to those researchers who have been approved to submit a full proposal. The deadline for DA submission to the NRF is **Monday, 28 February 2022, 23:59:59 hours SAST**. South African researchers **must** consult their institutions for internal closing dates. Applications received after the closing dates will not be considered for review and for funding by the NRF.
- **Please note** that failure to submit a full proposal to the NRF will make the entire project consortium ineligible.
- When submitting to the NRF, South African PIs **must** attach the required documents in PDF format in the following order: CVs of partners and budgets of partners. Failure to submit compulsory documents will result in the disqualification of the application and will make the entire project consortium ineligible.
- South African PIs are advised to consult the NRF General Application Guide 2022 available at <https://www.nrf.ac.za/funding/framework-documents/funding-framework-documents> for further details on how to apply for this opportunity and for making use of the NRF Online Submission System.
- Researchers are also advised to ensure that their research partners' applications are submitted (that the JAF has been received by the BRICS Call Secretariat and that the full proposals have been received in the partner countries).
- The call process is highly competitive therefore application does not guarantee funding. The evaluation of full proposals from all countries should have positive ratings before consideration for funding. The NRF and BRICS Call Secretariat will not be held responsible for non-submission, administration or evaluation of the application in the partner countries.
- **Please note** the attached "**Frequently Asked Questions document**" for further details on the application procedure.

### How are applications evaluated?

Following the NRF closing date indicated above, applications will be subject to a scientific peer review. The panel will include recognised local experts in the various fields of research represented by the proposals received. These experts will evaluate each proposal based on the following broad criteria:

- Scientific quality and innovation of the joint research plan.
- Sound project management, methodological approach, feasibility and appropriateness of joint research plan.
- Added value to be expected from the research collaboration.
- Balanced cooperation.
- Competence, expertise and complementarities of the consortium (interdisciplinary/ all necessary expertise).
- Appropriateness of resources and funding requested.
- Expected impact: e.g. scientific, technological, economic, and/or societal.
- Opportunities for young and emerging researchers for capacity building purposes.
- Partnership/ potential partnership with non-academic partners (e.g. industry, NGOs, etc.).
- Potential for promoting equity and redress.

Following local evaluation, a shortlist of projects to be funded will be constituted through consultations between the NRF and the other BRICS partners based on the results of the evaluations done in all countries.



## Project follow-up and reporting

- A final scientific and financial report will be submitted in English by the South African PI and the other project leaders no more than 3 month after the end of the project.
- The report will mention the outputs of the projects compared with the objectives and aims of the proposal.
- The joint publications by the researchers will mention the support from the NRF and partner organisations.

## Science engagement

The NRF supports science engagement through its coordination and implementation of the Department of Science and Innovation's Science Engagement Strategy. The strategy embraces a broad understanding of science, encompassing systematic knowledge spanning natural and physical sciences, engineering sciences, medical sciences, agricultural sciences, mathematics, social sciences and humanities, technology, all aspects of the innovation chain and indigenous knowledge. Within this context, science engagement refers to activities, events, or interactions characterised by mutual learning and dialogue among people of varied backgrounds, scientific expertise and life experiences, who articulate and discuss their perspectives, ideas, knowledge and values. Science engagement is an overarching term for all aspects of public engagement with science, science awareness, science education, science communication and science outreach, which aim to develop and benefit individuals and society. Researchers funded through the NRF programmes are required to contribute to science engagement and report the related outputs in their project's Annual Progress Report.

## Intellectual property

The researchers of each country, particularly the leaders, must take adequate steps to ensure protection and sharing of the intellectual property that could result from the joint projects.

## Ethical Clearance

It is the responsibility of the grant-holder, in conjunction with the institution, to ensure that all research activities carried out in or outside South Africa comply with the laws and regulations of South Africa and/or the foreign country in which the research activities are conducted. These include all human and animal subjects, copyright and intellectual property protection, and other regulations or laws, as appropriate. A research ethics committee must review and approve the ethical and academic rigor of all research prior to the commencement of the research and acceptance of the grant. The awarded amount will not be released for payment if a copy of the required ethical clearance certificate, as indicated in the application, is not attached to the Conditions of Grant. Please also refer to the "Statement on Ethical Research and Scholarly Publishing Practices" on the NRF website at <https://www.nrf.ac.za/media-room/news/statement-ethical-research-and-scholarly-publishing-practices>.

## Where can I obtain more information?

For programme content-related queries	For technical and grant-related queries
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