

South African Bio Design Initiative Funding Guideline

The due date for submission of the EOI is 30 March 2016.

1. Background:

TIA, through the DST is supporting the South African BioDesign Initiative (SABDI) to build and strengthen local capacity in foundational disciplines needed for the Bioeconomy such as synthetic biology, functional genomics, systems biology and structural biology. The main objective of the programme is to develop and integrate the relevant disciplines (synthetic biology, structural biology, systems biology and functional genomics) and their prospective knowledge, product service and process outputs as inputs to the bio-economy. SABDI is a strategic initiative of the DST designed to vitalize and integrate a set of cutting edge complementary disciplines that together are central to the development of the Bioeconomy. The potential of the BioDesign initiative to address concrete problems in health, agriculture, environmental remediation and other global and national challenges is underpinned by the integration of the four above-mentioned disciplines or pillars.

2. Summary:

EOI topics

The Technology Innovation Agency (TIA) is calling for Expressions of Interest (EOI) for later stage research and development projects in the following emerging research areas:

1. Functional Genomics
2. Synthetic Biology
3. Structural Biology
4. Systems Biology

Who can submit an EOI

TIA is keen to support collaborative later stage research and development projects covered in the scope of the South African BioDesign Initiative (SABDI) that will contribute to emerging research knowledge, proof of concept, products and services that will become an input into the bio-economy.

TIA is therefore calling for Expressions of Interest from researchers and innovators at South African Higher Education Institutions (HEIs) and Science Councils (SCs) to submit EOI's within the following criteria:

- That are focused on the SABDI priority areas,
- That are multi disciplinary and multi institutional in outlook, formation and execution.
- Whose outcomes are international in its scope.
- That will lead to the generation of new knowledge.
- That will have definite outcomes such as proof of concept, product and/or services to demonstrate its intended impact and proposed benefits.
- Enable the establishment of concrete infrastructure (Networks / Equipment / Human Capacity Development) around which the project outcomes and implementation of expertise can develop.
- Have a significant impact on human capital development (HCD), with a focus on previously disadvantaged individuals.

A successful proposal will trigger a process to establish a research collaboration to develop the application further and ultimately implement the project if the application is successful. Proposals need to be cognisant of the implications of the Intellectual Property Rights from Publically Financed Research and Development Act on planned collaborations and the use of outputs.

EOI process

The EOI is the first step in a two-stage process. The first step will follow an assessment by TIA, and successful proposals will be invited to submit a more detailed application on a template that will be provided. Each stage of the process is competitive. The invitation to submit applications on TIA's template does not commit TIA to fund any project. TIA may engage applicants after both stages.

The process is as follows:

- Stage 1: Submit EOI
- Stage 2: If successful, the EOI will trigger a process to establish a collaboration on the key topic. This consultative process will be facilitated by TIA. Once established, the collaboration will be invited to submit a full application.

3. Priority Areas

Building on the work of previous Department of Science and Technology (DST) funding, the DST has identified emerging research areas as priority to contribute competencies and capabilities to the bio-economy as defined in the Bio-economy Strategy. The prioritised areas are:

1. Functional Genomics
2. Structural Biology
3. Synthetic Biology
4. Systems Biology

4. Information for all Stages of the Process

Applicants should be aware that the conditions listed below will apply to TIA funded projects.

Application process

- EOIs must be completed online on the Grant Management System portal: <http://gms.tia.org/funding>.
- Proposals received after the due date will not be considered.
- Once proposals are received, TIA will assess that the basic requirements of the initiative have been met by reviewing the proposal.
- Successful proposal will thereafter enter Stage 2 of the process.

Assessment process

TIA will first consider the following primary assessment criteria:

- Whether the application fits with TIA-SABDI call's mandate; i.e. to generate innovations within the Priority Areas that can be translated into novel technology; e.g. energy efficient, pollution free manufacturing and entirely novel devices based on biological principles,
- Whether the proposed project and applying team have a direct link to the HEI or Science Council through employment.

If the primary assessment criteria are not met the project will be deemed un-fundable.

Furthermore, TIA will note secondary assessment criteria:

- Whether the scope of the planned work is multi-institutional and/or multi-disciplinary
- Whether the intended outcomes are internationally relevant,
- Whether new knowledge, establishing proof of concept, a product and/or service are outcomes of the planned work,
- Whether the proposal can enable the establishment of concrete infrastructure.

The second round application on TIA's template may include the following assessment criteria:

- Whether the planned budget and activities will enable the applicant's objectives,
- Whether the planned work will progress the project along the technology readiness level value

chain,

- Whether the project timeline is feasible given the scope of the project,
- Whether the outcomes will add to the valorisation of existing or potential IP that may emerge from the project, and
- Likelihood that the planned outcomes and outputs could qualify for TIA follow on funding from TIA or other funders.

Monitoring and Evaluation

Successful TIA-SABDI recipients of support will be monitored and evaluated as follows:

- Each project will report quarterly to TIA indicating the activities, milestones reached and any notable achievements of the project.
- Please note: Attention to the following application achievements must be reported on and evidence should be submitted to substantiate these: the completion of the intended prototype or technology, market reports, copies of IP registration documents, outcome reports of trials, award letters where applicants have secured follow on funding or additional financial or non-financial support; and license agreements, contracts and/or purchase orders where outputs have been commercialized.
- Projects are encouraged to include any multimedia to demonstrate these where applicable.
- Quarterly reports shall be completed on the TIA template provided.

TIA will conduct an annual evaluation of the project performance and the overall performance of the Funds allocated.