



التكنولوجيا والتنمية العلوم صندوق
Science & Technology Development Fund



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Ministry of Scientific Research

STDF Grants for SUPPORT CENTERS OF SCIENTIFIC EXCELLENCE (STDF-SCSE)

Science and Technology Development Fund

www.stdf.org.eg

Call for Proposals

January, 2018



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I. Scope

STDF's mandated objectives are to improve Egypt's research and development (R&D) environment, to fund S&T activities and to develop the innovation capacity in Egypt. STDF implements its objectives within the context of the National S&T Development Strategy, which is in line with the national “Sustainable Development Strategy: Egypt’s Vision 2030”.

STDF invests significant funds to improve the research and development capacity in universities and research institutions. The SCSE program reflects STDF’s intention to build upon what has been achieved and improve the focus to better utilize and develop the available national research capacities in areas identified to be of national priority (as stated in the National S&T Development Strategy and Egypt vision 2030).

The scope of this call “SUPPORT CENTERS OF SCIENTIFIC EXCELLENCE (SCSE)” is the improvement of the research-supporting environment by improving the research infrastructure. This call targets to provide scientific research equipment for the establishment of Centers of Scientific Excellence in Egyptian institutions, taking into consideration the geographical and socioeconomic aspects. This grant is directed towards institutions and not individual researchers with the intention of upgrading research facilities and supporting the establishment of Mega-scale Research Facilities. The applications shall be submitted by the research institutions. The grant is provided within the framework of the research strategy of the applicant institution. **Each university or research institution can receive funding for a maximum of one Center of Excellence**, irrespective of the number of faculties or research entities of the institution.

The STDF aims at acting as a catalyst to the national Science, Technology and Innovation (STI) institutional and human assets to positively contribute to the increase of the national GDP. STDF’s administration, thus, urges all universities and research institutions aiming at playing a role in the fulfillment of national societal needs to submit proposals/submissions in STDF related calls.



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II. Grant Objectives

The SCSE grant is a targeted capacity building grant fostering state-of-the-art research work serving the community via the following:

- Establishing, based on existing capabilities and competences, accredited Centers of Scientific Excellence in basic and applied research areas that serve the priority areas of Egypt (as listed in **Section III**).
- Promoting top-level research.
- Improving the research quality of Egyptian institutions in national priority areas, thus making Egyptian researchers and institutions more internationally competitive in these areas.
- Supporting the acquisition of major state-of-the-art equipment, thereby improving scientists' access to modern research equipment without duplication of services already provisioned by previous investments.
- Promoting substantive and meaningful partnerships between academia and private sector institutions. Such partnerships have the potential to build capacity and develop industrial sectors with the help of academia in leading research and development efforts.
- Enabling academic-industrial and society collaborations to implement promising research outputs and services to solve actual problems through creating well equipped creditable research environments.
- Acquisition of optional and auxiliary parts related to acquired equipment hence enhancing the capabilities of existing facilities.

III. SCSE Priority Areas:

The long-term plan of the STDF includes the establishment of Centers of Scientific Excellence in the different research areas identified to be of national priority. In this call, funding will only be provided for Centers of Scientific Excellence specialized in the following five research areas:



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1- Energy

- Feasibility study of the operation of resorts using solar energy as an alternative to traditional ones.
- The use of renewable energy in archaeological sites and museums
- Optimize the use of renewable energy technology in agriculture

2- Water

- Monitoring and communication technology use in intelligent management of water resources
- Water desalination technologies; the use of renewable energy in water desalination, etc.
- Rationalization of water consumption
- Exploring and using underground water
- Application of new technology waste water/ industrial waste water treatment

3- Medicine

- New approaches for cancer diagnosis and treatment
- Stem cells in research and therapy
- Cardiology
- Hepatology (HCV and Liver diseases)
- Renal failure
- Diabetes

4- Agriculture and food

- New technology of reclamation and cultivation of new lands
- Agriculture solid waste management
- Development of lakes and fisheries
- Contending livestock diseases
- Formulation of fortified food for malnutrition

5- Technological applications, future technologies and strategic industries

- Future studies for smart cities.
- Supporting future studies
- Supporting innovation projects in the field of mechatronics, microprocessors and robots for rehabilitation
- Nanotechnology applications and safety assessment
- Space and remote sensing
- Bioinformatics

IV. Budget and Eligible Expenses

The STDF offers an unconstrained budget to support of Center of Scientific Excellence. full justification of the budget requested should be provided. Grant



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applications must include a detailed estimated budget in which all expenditures are given in Egyptian Pounds. Budgets should be carefully developed and should not be overestimated. STDF reserves the right to reject a proposal with a budget that is considered as overestimated by STDF's reviewers. **The suitability of the requested budget will be judged based on the importance of the proposed center of excellence, the clarity of the institution's vision, the scope and expected outcomes of the proposed research and action plans (including the economic and social impact of the center), the appropriateness of the requested budget items, as well as fulfilling the different project evaluation criteria (as listed in section V).** The eligible expenditures of the grant must be directly linked to performing the capacity building activities of the Center of Excellence. Accordingly, the project's budget can only be directed towards the following items:

- Cost of equipment, as well as optional and auxiliary parts (including the cost of shipping and handling, as well as applicable taxes and customs).
- Incentives for the research team, including technicians and manual laborers.
- Consumable supplies and materials: including stationery, research supplies (chemicals, kits, glassware, etc.).
- Accreditation requirements costs, including but not limited to; annual training of staff, requirements to fulfill the accommodation and environmental conditions, participation in proficiency tests, equipment annual calibration, maintenance and intermediate check, and all requirements addressed by accreditation body.
- Publishing and report preparation costs.
- Dissemination and marketing of the lab services and research outputs through conferences, workshops, etc. (local).
- Cost of equipment maintenance (for the duration of the project): Equipment shall be maintained by the original equipment manufacturers or their authorized agents/dealers. The cost of equipment maintenance after the



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end of the project should be covered by the research institution from the revenues of the Center of Scientific Excellence, or from any other source.

- Indirect costs (Maximum of 1% of total budget): to be used by the research institution for covering the costs of accountants, administrative staff, as well as the necessary infrastructure (furniture, air conditioning and ventilation systems, etc.), but it does not include building(s).
- Costs of sustainability: After the end of the project all the costs needed for sustainability of the SCSE and continuation of its accreditation shall be totally covered by the research institution from the revenues of the Center of Scientific Excellence, or from any other source.

V. Eligibility Criteria

The following eligibility criteria apply to this grant:

- Any public Egyptian research entity (university, research institution/center...etc.), having well-documented scientific research and development activities, with tangible research outcomes (patents – internationally published papers – prototypes – products) in one of the outlined priority areas, is eligible for funding in accordance with the governing rules and regulations of governmental funding.
- Priority will be given to institutions having excellent research teams in national priority areas and/or related areas of expertise.
- The applying institution has to appoint an Egyptian individual who has a Ph.D. or M.D. degree, and is affiliated to the institution, to act as the project's Principal Investigator (PI). If the proposal is approved for funding, the appointed individual will be the Director/Manager of the Support Center of Scientific Excellence. The institution should also appoint a co-PI, who will replace the PI in case he/she becomes, for any reason, unable to carry on his role as the Director/Manager. Quality manager and the technical manager shall be nominated for each unit within the SCSE.



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- The individual appointed by the applying institution (the PI (Lab Director), co-PI (Deputy of Lab Director), Quality Manager and Technical Manager) must be totally committed to fulfill all the accreditation requirements (technical and managerial) and to support sustainable management of the proposed Support Center of Scientific Excellence. For individuals who are the PIs of an STDF Capacity Building or Center of Excellence project, this program requires that they must have finished their projects successfully or, for running projects, they should give up their positions as PIs to other members of the research team, before they can begin the new awarded Center of Excellence project.
- Including young researchers (under the age of 40) and/or graduate (Ph.D. or M.Sc.) students in the research team is encouraged.
- The proposal must include a description of the research institution's long-term research plan, which has clearly defined objectives and desired outcomes, together with a detailed **need assessment** to determine the addressed needs with full **gap analysis** between the current position and the desired one. Appropriate identification of the needs is requested, and shall be based on the discrepancy between the current condition and desired one. The proposal should also clearly state how the equipment to be purchased will help in achieving these lab scope of accreditation, objectives and desired outcomes.
- The proposal must include the institution's offered **business model** to run the Center of Excellence, together with its policies regarding sustainability, equipment sharing, maintenance, accreditation and cooperation with / support service to the industry.
- An **endorsement letter** from the applying research institution, stating that establishing the Center of Scientific Excellence is in line with the institution's strategic plan, must be submitted with the proposal.
- The implementation period of the project should be 5-6 years.



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VI. Grant Phases

The proposal is to be submitted in three phases. Phase-I pre-proposal should outline the technical plan for all three phases and focus on the budget of phase I only. Upon successful completion of each phase, the PI is required to continue to the following one. Successful project closure requires obtaining accreditation from the accreditation body (EGAC).

Phase-I: Establishment of the Center of Excellence with complete identification of the test methods proposed for accreditation. Phase I may extend for 2-3 years.

Phase-II: Accreditation of a specific scope for the center of excellence to implement all the requirements of accreditation (managerial and technical requirements). Phase-II may extend for 2 years.

Phase-III: extension of the scope of accreditation for the center of excellence to cover all the test methods addressed in the original proposal. Phase III may extend for 1 year.

VII. Timeline

- Launch of Call for Preproposals: 1st of January, 2018
- Deadline for Submission of preproposals: 22nd of January, 2018 at 12:00 am
- Announcement of selected preproposals: 5th of February, 2018
- Deadline for Submission of full proposals: 26th of February, 2018 at 12:00 am
- Funding Decisions will be announced 1st of April, 2018.
- Contracting will be by the first week of April, 2018.

VIII. Proposal Submission and Evaluation Process

All applications must be uploaded to the STDF website (www.stdf.org.eg), to which registration is required. The submission will be a two-stage process, as follows:
The first stage: A pre-proposal is submitted (Please download the pre-proposal template by clicking the following link: [Pre-Proposal Template](#))



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The Second Stage: The applicant principal investigators, whose preproposals were selected in the first stage, will be invited to present their full proposals (full proposal application form will be announced on site after selection).

The proposals will be evaluated by independent experts, and STDF will ensure that the process is transparent, impartial and applicant-supportive.

Proposals submitted to this grant will be subjected to three levels of evaluation:

- I. **Panel of Experts' Evaluation** of the submitted proposals, in light of the selection criteria listed hereafter.
- II. **Interview** and oral presentation.
- III. **Site visit** and meeting with officials of the host institution to assess the facility preparedness for hosting the Center of Scientific Excellence.

The **project evaluation criteria** will be as follows:

- A track record of success in the field (for the institution, the PI and the project team).
- Proven experience in the field of the proposed Center of Excellence.
- The need assessment and the existing relevant research facilities (instruments).
- The host institution's ability and commitment to maintain the Center of Excellence in accordance with international standards, as well as the institution's equipment's services -sharing policy and its ability to enforce it.
- Costumers for the services provided by the Center of excellence should be identified
- A research plan with clear objectives, milestones and expected measurable outcomes.
- Business Model and management plan that ensures sustainability and achievement of accreditation requirement.
- The institution's ability to effectively contribute to the national sustainable development, and/or the socioeconomic development of the region where the Center of Excellence will be established. Cooperation with industry and cooperation with other research institutes is highly encouraged. The proposed Center of Excellence shall address customer requirements and shall add value and credibility in the field of scientific research.



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IX. Payment of Funds

When a project is approved by STDF, a contract will be signed by STDF, the Principal Investigator (PI), and the legal representative of the endorsing University or Research Institution/Center. The project budget will be disbursed as follows:

- In installments: The first installment will be disbursed at the beginning of the project. The following installments will be paid after the receipt and approval of the technical and financial progress reports, which will be submitted to STDF in accordance with a report delivery schedule that will be detailed in the funding contract.
- The disbursement of the final installment of the project (0.5% of the budget) is conditional upon the delivery of the outputs mentioned in the proposal in the scheduled time, and is subject to the internal rules and regulations of STDF.

X. Project Monitoring and Follow-up

Technical progress reports:

Biannual progress reports should be submitted by the PI along the life-cycle of the project, starting after 6 months of project start date. In general, all technical reports should be written using the standard STDF templates.

In cases where modifications in the research team and/or original work plan are necessary, such modifications must be pre-approved by STDF, and the progress reports should include a modified (updated) Gantt chart that takes the approved modifications into consideration.

Final Report and Achievements report:

Within one month following the official end date of the project, the “Final Report” together with an “Achievements Report” must be submitted, using the standard STDF templates for “final reports” and for the “Achievements Report”. Also, short video and a presentation for the achieved objectives will be requested by the end of the project.

Site Visit:

By the end of the project and upon submitting and evaluating the “Final Report” together with the “Achievements report”, a visit by STDF representatives to the



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research institution is expected, with the aim of assessing the final status of the new Support Center of Scientific Excellence.

Evaluation of technical reports:

All submitted reports are evaluated by STDF, and feedback will be sent to the project's PI and host institute.

In the event of receiving a progress report that is rejected by evaluators, the PI may be required to present additional follow-up reports (totally independent from the regular progress reports mentioned above). In the event that the evaluators of progress reports give a justified recommendation to terminate the project (for reasons including scientific misconduct by the PI, lack of seriousness, etc.), STDF reserves the right to terminate the project, in which case STDF will recover all funds and expenses paid prior to the project termination date.

Financial Reports:

According to the financial regulations of the government of Egypt, a financial report for the project must be submitted every three months. Copies of all expenditure vouchers must be attached. The reports, as well as all the attached expenditure vouchers, must be signed and stamped by the official seal of the endorsing institution.

XI. General Terms and Conditions

The following terms and conditions apply to the grant:

- All proposals will be evaluated on a competitive basis.
- The application must include a letter from the implementing institution's legal representative stating the project title, the name, position and affiliation of the PI in charge of the proposal, that the project idea was not funded or submitted to another agency (national or international), or otherwise declare, and that the institution approves the project. This letter must be signed and stamped by the institution.
- All proposals must be drafted using the exact formatting requirements for the current call given in the attached pre-proposal /Application Form. Failure



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to adhere to the exact format required will automatically deem the proposal ineligible.

- All proposals must be uploaded to the STDF website (www.stdf.org.eg); proposals submitted by e-mail or sent as hard copies will not be considered.
- All proposals must be in English.
- The project team must not include any foreign researchers. However, foreign consultants may be allowed, given that the relevant security approval has been obtained.
- Services provided by the Equipment purchased using STDF funds must be made available to all Egyptian researchers.
- A separate bank account for the project should be opened and managed by the host institution.

XII. Ethical Rules:

Applicants to STDF are expected to maintain a high level of scientific honesty and integrity in all aspects of their work. Applicants are expected to refrain from plagiarism, i.e. "the act of taking credit, or attempting to take credit, for the work of another" (quoted from the publication Ethics Policies for Medical Journals, at www.wame.org). Applicants are also expected to avoid self-plagiarism or multiple submission of the same content in more than one document. Multiple reporting of the same data or results in various projects is also considered self-plagiarism and is strongly discouraged. Fabrication of data or results, or suppression of unexpected results is not accepted by STDF. STDF expects all research activities involving human subjects to strictly follow the bio-ethical guidelines.

Breaching the rules of research integrity will result in halting all research funding activities to the involved parties after thorough investigation and judgment by a specialized STDF committee.

Multiple Submissions of a Project Proposal:

At the time of submitting a project proposal to STDF, the PI is required to provide a statement (stamped and signed by his/her institution) declaring that the submitted proposal has not been simultaneously submitted to STDF (neither under the same funding program, nor under any other STDF funding program) or



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to any other funding agency, and that the project proposal will not be re-submitted to STDF for funding (under the same, or any other STDF funding program), or to any other funding agency, until STDF has reached a decision to reject the original project proposal, and has notified the PI of its decision. The above restrictions apply to identical project proposals, as well as project proposals which have similar objectives, methodology, ...etc. as the current project proposal, and which may differ only in title and/or other minor details. The decision whether any two (or more) submitted project proposals are similar (and therefore constitute a breach of this condition) is solely the right of STDF.

In cases where STDF reviewers decide that, in its present form, the proposal cannot be recommended for funding, or that certain modifications are needed in order for the project to be considered for funding, the PI is allowed to re-submit the revised version of the project proposal only once (after making the suggested modifications, if any) in the subsequent cycle of the same funding program, or of any other STDF funding program. At the time of submitting the revised proposal, the PI is required to declare that an older version of the project proposal has been previously submitted to STDF, and that the revised proposal is the only version of the proposal that is re-submitted for funding by STDF. Also, the revised proposal should include substantial modifications that scientifically distinguish it from the original proposal.

Failure to comply with the aforementioned conditions may result in a decision by STDF to ban any cooperation with the PI and/or the PI's institution.

Applicants are also expected to adhere to the highest standards of integrity within the domains of bioethical, bio-safety and animal protection considerations. The following regulations are to be adopted, whenever needed, based on the field or topic of the proposed research:

Bioethical considerations:



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- Projects dealing with human subjects are required to satisfy the STDF requirements of bioethical aspects, and to comply with any other relevant laws. Such projects may include, but are not limited to, experiments on human subjects, testing of new therapeutic, preventive or diagnostic agents, handling human personal information, etc.
- In such cases, it is mandatory that the PI presents an ethical clearance form approved from the ethical committee or institutional review board (IRB), before finalization of the project contracting process. In the case of absence of an IRB in the PI's institution, obtaining an ethical clearance from a national, regional or collaborating body will be subject to consideration and assessment by the STDF.

Bio-safety considerations:

Projects with bio-safety aspects, such as those dealing with genetically modified organisms (GMOs), should strictly adhere to the national bio-safety policies, which may require obtaining special permits and clearances from the relevant authorities.

Animal protection considerations:

STDF strongly rejects the unnecessary exposure of animals to pain, distress or fatality during scientific experimentation. It is the responsibility of the PI and his/her institute that these principles are adhered to. In the case of unacceptable acts of cruelty against animals, the STDF has the right to immediately terminate/suspend the project activities, and to hold the PI accountable for such acts.



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Obtaining permits from relevant authorities:

STDF has the experience that the processing of research proposals involving activities which require special permits from the relevant governmental (or otherwise) authorities may be delayed. In order to speed up the process of handling the applications, the applicant institutions are encouraged to obtain such permits before submitting their applications, and to include them in the project proposal. The following are examples of activities requiring approval from the authorities:

- Conducting surveys,
- Collecting data, or conducting any other research activities near the country's international borders, in the sea or on land,
- Sending genetic and biological samples and/or resources outside the country,
- Ethical issues related to research on living matter (bio-safety, conservation of bio-diversity, research ethics, ... etc.),
- Involvement of or collaboration with foreign researchers in conducting the research activities,
- Dealing with historical objects, or
- Development of patents that may violate the intellectual property rights of other (existing) patent holders.

XIII. Negotiation and Contract Signing

Negotiation and signing of the project's funding agreement will take place shortly after the announcement of the evaluation results. Since the processing and evaluation of the submitted proposals entail significant expenditure of financial and human resources, it is highly discouraged for applicant institution to decline from continuation of the project after proposal submission. Requests asking for project discontinuation by the institution after proposal submission, following contract signing, or during the project life-time will be thoroughly investigated by STDF. STDF has the right to financial compensation and/or to impose a ban period on the university or research institution from participating in STDF-related activities.



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XIV. Intellectual Property Rights (IPR)

The applicant and the endorsing institution(s) shall conform to the STDF-IPR regulations, detailed as a separate document on the STDF website (www.stdf.org.eg).

XV. Contact

If you have any queries, please contact (mahrwan.marwan@stdf.org.eg) at Science Technology and Development Fund (STDF).