

Call for Proposals

Israeli Centers of Research Excellence [I-CORE]

First Term (2010/11)

1. Background

On March 14, 2010, the Israeli Government agreed to adopt a program, established by the Head of the Council of Higher Education (the Minister of Education) together with the Head of the Planning and Budgeting Committee (PBC), to strengthen scientific research in Israel, by gradually establishing up to 30 Centers Of Excellence (COEs) within the next five years (the full version of the decision may be found at: <http://www.che.org.il>). COEs are defined as an association of excellent researchers in a defined scientific field, for the purpose of advancing and deepening innovative, breakthrough research within this field. Each Center will serve as an anchor for scientific infrastructure and research groups in its field, and will enable optimal exploitation of scientific potential in Israel.

2. Program Objectives

- i. Strengthening scientific research in Israel, thereby establishing Israel as a recognized world leader in scientific research;

- ii. Bringing excellent researchers to Israel, as a central means of fortifying the academic staffs and their research abilities in the country's institutes of higher education;
- iii. Creating a critical mass, and intensifying the relative advantages in chosen fields within the institutes;
- iv. Improving and upgrading research infrastructure in the universities;
- v. Encouraging academic innovation, including integration among different research disciplines;
- vi. Establishing and facilitating teaching and advanced training programs in chosen fields;
- vii. Promoting academic interactions between institutes of higher education, universities and colleges.

3. Research Areas for the First Term (2010/11)

- i. According to the Government's decision, and after consulting with research institutes and other relevant entities, the program's steering committee, established by the PBC, decided that the first group of COEs will engage each in one of the four following fields of research (details can be found on the following sites: www.che.org.il and www.isf.org.il):
- ii. Systems-Level Analysis of the Molecular Basis for Human Diseases: From Genomics to Personalized Therapy
- iii. Advanced Approaches in Cognitive Sciences

- iv. Advanced Topics in Computer Sciences
- v. Renewable, Sustainable, and Alternative Sources of Energy

4. Submitting Institutes

- i. Each COE (within the chosen fields) will be established by one university ("the leading institute") that will manage and coordinate the Center, and will preferably incorporate other institutes (colleges, research institutes, hospitals and up to two other universities). Most of the research infrastructure of the Center will be established within the leading university.
- ii. Each institute (including the leading institute) can take part in only one proposal in each of the chosen research areas.

5. The Researchers

- i. The COEs and the various activities to be held and funded within them will become frameworks for researchers with common areas of interest, who will be active in these centers.
- ii. Researchers active in the COE will be academic staff members of the institutes included in the Center, and will be joined by outstanding new researchers who will be appointed as faculty members of the participating institutes.

6. Center Activities

- i. Advancing research within the defined scientific focus of the Center, and intensifying cooperation between its researchers;
- ii. Absorbing new scientists: Funding research programs (up to 5 years) and equipment for these scientists;
- iii. Establishing unique research infrastructures in the leading institute and in the participating institutes when required, for the use of all Center members;
- iv. Promoting co-operation with different institutes and researchers in Israel, as well as with leading researchers and institutes abroad;
- v. Establishing workshops and unique teaching programs, including international graduate programs;
- vi. Supporting research students who are working within the field of the Center.

7. Budget

- i. According to the Government's decision, the total budget of the PBC for up to 30 COEs to be established within the next five years is up to 450 million NIS. Similar budgets are to be added from the participating institutes and from external strategic partners, so that the total mean budget per Center from all sources will reach about 45 million NIS, over a period of five years.
- ii. The PBC's mean budget per Center will be about 15 million NIS for five years, and in all cases, will not exceed 25 million NIS. The PBC is striving to form

agreements with external foundations that will join as strategic partners, and take part in financing the program.

8. Budgetary items to be funded within the Centers

- i. Research grants for new researchers: total grant monies per year within a given Center will not exceed 400,000 NIS. (A new scientist, funded by the Center, can also submit a separate research proposal to the ISF through the regular track, as long as it differs significantly from the one submitted in the framework of the Center);
- ii. A one-time equipment and infrastructure grant to new researchers: the budget will be decided upon in accordance with the researcher's needs, and the equipment's significance to the Center's success;
- iii. Infrastructure for the Center – including purchasing, activation and maintenance of instruments and equipment which will serve all the Center's members, senior as well as new researchers;
- iv. Workshops, conferences and international teaching programs;
- v. Pilot projects within the Center;
- vi. Support for graduate students and post-doctoral scholars;
- vii. Promotion of international co-operation;
- viii. Special needs directly related to the Center's research work.

Detailed guidelines regarding the procedure for submitting and managing the Center's budget will be specified.

Transfer of the funds needed for implementing the research, based on the individual budgets approved for each of the participants, will be the sole responsibility of the leading institute. In the future, policy will be set regarding the possibility of enhancing the COE (for example, by supporting the absorption of additional new researchers from the COE's research area).

New researchers awarded a personal grant within the COE framework will be considered as having been awarded an external research grant, which will entitle them to the special 'research addition B', in accordance with the regulations of the institute into which they will be absorbed.

9. Submission of Proposals*

Submitting COE proposals will be a two-stage process, which will include:

- i. Submission of a pre-proposal; and
- ii. Submission of a full proposal (by those whose pre-proposal was approved).

The Pre-proposal and the full proposals will be submitted via the ISF. The scientific evaluation process will also be performed via the ISF (details regarding the evaluation process may be found in the ISF website www.isf.org.il).

*Should only a single proposal be received in a given research area, the steering committee will consider whether or not to evaluate it.

10. The Pre-Proposal

Pre-proposals shall be submitted electronically via the ISF website, according to the details which will be published therein (www.isf.org.il). The deadline for submission: **September 20, 2010.**

The objectives of the pre-proposals are:

- i. To evaluate the suitability of the suggested Center to the COE program in general;
- ii. To evaluate its suitability to the research areas, as defined by the steering committee;
- iii. To undertake a preliminary review of the Center's suggested work plan, and the suitability of the existing infrastructures in the participating institutes for carrying out the research;
- iv. To examine the readiness of the institutes to financially support the Center's activities.

The pre-proposal should include the following information (up to 9 pages):

- i. Name of submitting (leading) institute and participating institutions;
- ii. Name of the leading researcher in charge of activating the Center;
- iii. Abstract of the Center's research directions;

- iv. Information regarding the new researchers who are to join the center, including an expected time-table.
- v. Information regarding additional researchers who will work within the Center's framework and interact with it;
- vi. Scientific abstracts of new researchers intending to join the Center;
- vii. Equipment and infrastructure needed for absorbing the new researchers;
- viii. General infrastructure needed for the Center's activities;
- ix. Programs of possible research collaborations between the Center's members;
- x. International workshops and/or special graduate teaching programs;
- xi. Anticipated results [contribution(s) to the research field; possible applications in the near/far future].

11. The Full Proposal

Those whose pre-proposals are approved, will be invited to submit full proposals via the ISF's website, in accordance with the guidelines to be published therein (www.isf.org.il). Dead-line for submission: **December 15, 2010.**

12. Evaluation

The proposals will be evaluated and ranked on a competitive basis, considering the relative advantages of each program within the different research areas, and according to the following criteria:

- i. Centrality of the chosen research areas and the degree of innovation, including their potential for significant breakthroughs;
- ii. The institute's existing abilities within the specific research area, including existing infrastructure and past achievements;
- iii. The ability of the involved institutions to recruit new, excellent researchers from abroad to the Center, and the ability to identify potential candidates who have indicated their willingness to join the Center in the future;
- iv. Existing research collaborations with other institutes in Israel;
- v. The ability to create and advance international research interactions within the Center's research area;
- vi. The Center's expected contributions to graduate teaching and training programs;
- vii. The scope of the Center's interface with other research areas;
- viii. Its contribution to Israeli society and to the sustainable growth of the State of Israel, including its interactions with local Industry, and potential to develop it;
- ix. The readiness of involved institutes to financially support the Center's activities for the first five years;
- x. The extent to which the leading institute can identify further resources, whether from within the institute, from internal support, or from external donations, as well as its ability to continue the upkeep of the Center, after the first five-year term has ended .

The proposals will be evaluated by a professional committee that will be established for each of the research areas, and will include leading researchers from around the world in the relevant fields. Evaluating, ranking and choosing the winning grants will be managed, as mentioned, by the ISF.

Governance of the overall process, including reviewal of the approval process and winning grants will be coordinated by the steering committee of the PBC. Lessons from the first Centers will serve to further guide the establishment and the decision-making processes of future submission rounds.

13. Budget Management

- i. Transferring the funds for the COE will be managed by the ISF;
- ii. COEs approved for funding will be able to submit complementary proposals for absorbing additional new scientists, up to the predetermined budgetary ceiling;
- iii. Annual review reports (scientific as well as financial) will be submitted to the ISF.

Transfer of funds enabling the Center's continuing activities will depend on approval of these reports;

- iv. The PBC's steering committee will follow up on the activation of each COE, as well as measure and evaluate the COE in terms of its pre-defined goals and objectives.