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## Press Release

**26 proposals for the establishment of the next ten Centers of Research Excellence (I-CORE) have been submitted. The centers will include 120 senior researchers as well as fifty additional leading researchers who shall return from the world's leading research centers and universities to join the Israeli academia.**

**Minister of Education and Chairman of the Council for Higher Education, Gideon Sa'ar:** "Establishing ten new centers of research excellence in addition to the four that are currently active is another step towards encouraging excellence in Israel's higher-education system and steering it back on track. The Israeli Centers of Research Excellence play a central role in reinforcing Israel's position as a world leader in different academic fields.

Encouraging excellence is the key to Israel's future – the Israeli Centers of Research Excellence will be the fertile ground that will draw Israeli researchers back from leading academic institutes around the world and promote the highest level of scientific-academic cooperation".

**Prof. Manuel Trachtenberg, Chairman of the PBC (Planning and Budgeting Committee):** "The Centers of Research Excellence are rapidly becoming a central part of Israel's higher education system. The four active centers' outstanding achievements include building the advanced infrastructure required for different areas of research, successfully attracting leading Israeli "talents" from around the world and forming international academic partnerships with some of the world's finest institutes. The next ten centers will continue the work that has begun while expanding the variety of academic fields to include additional areas of engineering and Natural Sciences, and new fields in Humanities and Social Sciences."

**Israel's finest researchers from institutes of higher education, research centers and hospitals have worked together to submit full proposals for the second stage of the Centers of Research Excellence project. Ten winners will be selected from the twenty-six submitted proposals to establish the next wave of I-COREs. During the coming months, a team of judges comprised of international experts in the relevant fields will evaluate the proposals and select the winners. Submitters of the winning proposals will establish the centers that will begin to operate during 2013.**

The research teams that will establish the next ten Centers of Excellence will be selected from among the **26** submitted proposals. The proposals cover **18** different topics in a variety of fields of research – from Humanities and Social

Sciences through Life Sciences, Exact Sciences and Engineering. Each proposal was submitted by a team of senior Israeli researchers and new researchers ("returning scholars") who will join the institutes and centers of excellence if their proposals are selected. Approximately **300** senior researchers, representing all of Israel's universities, colleges, hospitals and research centers, took part in the **26** submitted proposals.

Only full proposals were submitted at this stage, selected from the **67** preliminary ones submitted during December **2011**. Over the coming months, the full proposals will be judged and evaluated by the Israel Science Foundation which will appoint professional evaluation committees comprised of internationally renowned researchers from abroad (including several Nobel Prize laureates), who have prior experience in evaluation committees for scientific projects and thoroughly understand the different aspects of the proposals that have been submitted.

The proposals shall be evaluated by assigning scores to each aspect of each application and assessing its advantages and disadvantages. During the next stage, the Center for Excellence steering committee shall discuss the recommendations that it receives, examine all of the procedures involved in the evaluation process and different aspects of each proposal's emphasis', strengths and weaknesses and consider their applicability to the program's policies.

In November **2012**, the steering committee is expected to announce the ten winning proposals. The winners will begin to work over the course of the 2012-13 academic year, as soon as they are announced. The ten proposals selected will join the existing four centers of excellence that were established during the first stage of the project and have been active since October **2011**. Each center shall recruit new researchers (for the centers of excellence and their partner institutes) during its first three years of operation. The new centers are expected to recruit a total of over **100** leading researchers from the world's finest universities and research centers.

According to Dr. **Liat Maoz**, Director of the Centers of Excellence program, lessons learned from the first, pilot stage of the program (in which the first four centers were established) were implemented in the second stage. In an attempt to eliminate the restrictions on each center's composition of researchers, experts in a specific field of research were permitted to submit proposals together, regardless of the institutes with which they are affiliated. Additionally, in order for research at the centers to be focused and to enable real synergy between its members, a very limited number of researchers shall work in each center. The number will be suited to the type of research being done at each center (theoretical or experimental). The number of senior researchers at each center shall be limited to **8-12**. They will be joined by new researchers who will

comprise at least one quarter of the research team at each center. The goal is to create an environment which encourages excellence while promoting genuine competitiveness.

In order to encourage academic partnerships between members of the centers who come from different institutes, the program encourages researchers to advise research students together, regardless of the advisors' institutional affiliations.

Stage two of the program encourages future centers to run three additional types of activities, pertaining to the degree of relevance to its academic field:

1. **Unique International Graduate Programs:** Promote the establishment of unique graduate programs in each center's field of expertise at partner institutes of higher education. The program shall be open to international members and follow a structured curriculum.
2. Maintain and promote cooperation with the relevant industries.
3. Community outreach– for example, by offering lectures for the general public on topics of research or running programs at schools.

Budgets for the new centers will be calculated according to the type of research conducted at each. Theoretical research centers will work with a budget of up to **25** million shekels for **five** years and experimental research centers shall receive up to **50** million shekels for **five** years. The budget covers expenses such as recruiting new researchers, establishing the central infrastructure for research and other expenses such as training graduate and post-doctoral students, international partnerships, conferences, workshops, etc.

#### The First Four Centers

As mentioned, four centers of excellence were established during the first stage of the project and have been active for **10** months. The four centers have already recruited **13** new researchers who have returned to Israel from the world's finest institutes. The centers will continue to recruit additional researchers over the coming years.

**I-CORE in the Study of Alternative Energy Sources:** Led by Prof. Gideon Grader from the Technion, and comprised of researchers from the Technion, Weizmann Institute and Ben-Gurion University, the center has already purchased research infrastructure devices such as photo-electrochemical measurement equipment, chemical adsorption analysis devices, advanced spectrometry equipment and ion chromatography equipment. The center has approved and initiated its first five proposals for research projects to be jointly conducted by multiple institutes. The proposals will study or attempt to develop innovative ideas (as part of the "seed money projects" initiative). In addition, the

center has organized a large international workshop on solar fuels to be held in November, which will be a continuation of the Eilat-Eilat Renewable Energy Conference. Members of the center's research team also give lectures in schools as part of a program to share information and increase energy awareness.

**The Center of Excellence in Algorithms:** Led by Prof. Yishay Mansour of Tel-Aviv University; researchers from Tel Aviv University, Weizmann Institute and Hebrew University conduct research at this center, which has recently announced a new partnership with the Simons Institute at University of California, Berkeley. The institute has begun to operate only very recently, after Berkeley competed against other institutes for a grant offered by the Simons Foundation. The Simons Foundation is directed by Prof. Richard Karp of UC Berkeley, winner of the Turing Award. Its objective is to become a leading international center for the theory of computing. I-CORE in Algorithms and the Simons Institute's first joint initiative is a combined post-doctorate program in which associates receive a shared appointment at both institutes. A joint call for proposals will be published during the current academic year. In addition, the I-CORE has introduced a series of seminars for its own members and for researchers from abroad. The center organizes and sponsors events and conferences for the general public, including the Alan M. Turing Centennial Conference held this year.

**I-CORE in Molecular Medicine:** the I-CORE is led by Prof. Howard Cedar of Hebrew University and includes researchers from Hebrew University, Tel Aviv University, Bar Ilan University, Sheba Medical Center and Hadassah Medical Center. The center has begun purchasing advanced proteomic and genomic equipment and runs a joint advisory program for graduate students in which I-CORE members from different institutes serve as research advisors. The center has also organized and sponsored two large international conferences: the 2nd Scientific Retreat of the Institute for Medical Research Israel-Canada and a symposium on the human genome and future biomedical research, attended by Dan David Prize laureates.

**I-CORE in Cognitive Sciences:** led by Prof. Yadin Dudai of the Weizmann Institute of Science. The team includes researchers from the Weizmann Institute, Bar Ilan University, Tel Aviv University, Sourasky Medical Center and the College of Jezreel Valley and has established a competitive system for promoting new experimental research projects among researchers at the center. This year, the first project developed as part of this program was approved and set into motion. The center has also purchased human-brain imaging equipment capable of covering long durations and vast areas of the brain. Conferences and mini-symposiums have been organized as well.