

14 September 2011

Press Release

**The Second Wave of Excellence Centers (I-CORE) gets under way:**

**A Public call for the Establishment of about ten additional Centers has been issued**

The Minister of Education and Head of the CHE, Mr. Gideon Sa'ar: "The Excellence Centers are going to serve as the spearhead of higher education in Israel. Reinforcing excellence in a variety of well-defined fields is vital to the effort of giving Israel a comparative advantage over the leading countries in the world. Israel has the potential and the ability for leadership in all fields. After several years of excelling in the export of brains to the top universities and research institutes in the World, we are now reversing the trend and bringing back excellence to Israel. The first stage of creating four Excellence Centers has enabled us to bring back 40 leading researchers, and in the present stage we expect the return of many dozens more of researchers".

The chairman of the Planning and Budgeting Committee of the CHE, Professor Manuel Trajtenberg: "This stage of the program is a significant landmark in our efforts to strengthen higher education in Israel and reinforcing its scientific research. The selection of subjects was made in co-operation with the entire academic society in Israel by a process involving more than 1,200 Israeli researchers in Israel and abroad and the heads of the higher education research institutes in Israel. The Centers listed below will deal with a wide variety of subjects, including humanities and social sciences".

The second stage of the Excellence Centers Program has got under way. The Program Steering Committee that is a part of the national initiative of "brain return" has issued a public call for the establishment of about ten additional Excellence Centers in the year 2012-13.

At this stage **18** subjects, representing a wide range of research fields, have been chosen, out of which the best ten or so proposals will be chosen to establish the Excellence Centers (I-CORE: Israeli Centers of Research Excellence). A call for proposals was distributed to research groups in Israel and abroad, to submit proposals for the establishment of I-COREs. The ten new I-COREs will be established as associations of about ten scientists, regardless of their institutional affiliation. It should be noted that the method of selecting the subjects for the current stage implemented some of the lessons and insights learned from the establishment of the first four I-COREs, which served as a pilot.

### The research fields of the new I-COREs

The Steering Committee, headed by Professor **Shimon Yankielowicz**, member of the Planning and Budgeting Committee, formed the list of subjects for the establishment of the next about ten I-COREs after examining the proposals that were submitted by more than **1,200** Israeli researchers from Israel and abroad.

To this purpose four teams were set up in the following fields: Life and Health Sciences; Exact Sciences and Engineering; Humanities and Arts; and the Social Sciences, Education, Law and Business Administration. Each team examined the proposals received, relating to its field (including multi-disciplinary proposals) and chose from among them a list of subjects according to criteria corresponding with the goals of the Program. The subjects were selected after consultation with the International Scientific Advisory Committee, consisting of eleven leading scientists and Nobel Prize winners.

Following this, based upon an evaluation of the proposals, the groups that will establish the I-COREs will be chosen. At this stage, the establishment of about **10** Centers will be approved, representing each field adequately.

### Stage two – Center Operating Model

The design for stage two incorporates some lessons learnt from stage one – the pilot stage – during which the first four I-COREs were established. In order, as far as possible, to remove restrictions in the setting up of teams, the new I-COREs will enable creating associations of leading scientists in specific fields of research, regardless of their institutional affiliation. In addition, and in order to facilitate the focused research and real synergy between the researchers, the number of researchers in each I-CORE will be lower and adjusted to the type of research (experimental or theoretical). These considerations are directed towards the goal of ensuring the encouragement of excellence through a truly competitive process.

The public call was distributed to Israeli researchers in every institution of higher education in Israel and, and to thousands of Israeli researchers all around the world. The preliminary applications will be submitted through the website of the Israel Science Foundation by **1 December 2011** in accordance with the detailed submitting regulations appearing on the Foundation's site ([www.isf.org.il](http://www.isf.org.il)). The evaluation and judgment process will also be handled by the Foundation. Applicants of the preliminary applications that are approved will be invited to submit full applications

by **1 March 2012** in accordance with individual remarks and guidelines that will subsequently be provided by the Steering Committee.

**The 18 selected subjects are as follows:**

Humanities and Arts, Social Sciences, Education and Law:

1. Center for the Study of Modern Jewish Culture
2. Jews, Christians, Muslims: Social and Cultural Encounters of the Abrahamic Religions
3. Language, Language Acquisition, and Discourse in a Multilingual Society
4. Center for the Interdisciplinary Study of the Holocaust and Genocide
5. Education and the New Information Society
6. Empirical Legal Studies
7. Child Development and Welfare
8. Mass Trauma Research Center

Exact Sciences and Engineering; Life and Health Sciences:

9. Basic Laws of Nature and the Structure of the Universe: probing the smallest and largest length scales
10. Information Systems Security
11. Light and Matter – Applications and Development of Novel Light Sources in a Broad Range of the Electromagnetic Spectrum for Basic and Technological Research
12. Advanced Materials - from atomic and molecular building blocks to many molecule systems
13. Chromatin and RNA – from epigenetics to post-transcriptional regulation
14. Mechanisms of Action and Novel Treatment Approaches for Infectious Diseases
15. Plant Adaptation to a Changing Environment: a multidisciplinary molecular approach
16. Disease Model Systems – from development to multi-disciplinary applications
17. Bio-physics and Medical Technologies - from principles to applications
18. Ecology and Sustainability in Land and Sea

## The Excellence Centers Initiative – Background

The initiative to create Excellence Centers (I-CORE: Israeli Centers of Research Excellence) was formulated in the framework of the perennial plan for higher education, and was presented to the Government of Israel by the Minister of Education and Chairman of the CHE, **Mr. Gideon Sa'ar**, and the chairman of the PBC, Professor **Manuel Trajtenberg**, at its meeting on **14 March 2010**.

The plan stipulates the gradual establishment within the next five years of up to **30** I-COREs in various fields of research – Natural Sciences, Humanities and Social Sciences. The overall budget for establishing and operating the I-COREs will be **NIS 1.35 billion** (the funding to be shared equally by the Planning and Budgeting Committee, the strategic partners and the chosen research institutes). Each I-CORE will set up a selected team of leading researchers in a research field – members of staff at various research institutes (universities, colleges, hospitals and research institutes) along with Israeli researchers who will return from abroad (“brain return”) to join one of the research institutes and an I-CORE.

Three months ago, in the framework of the first stage, the first four I-COREs were appointed in the following fields:

1. The Molecular Basis of Human Diseases:

The group selected to establish this I-CORE is led by Prof. Howard Cedar of the Hebrew University of Jerusalem. The Center will engage in the study of genetic regulation of complex human diseases. 19 senior researchers from the Hebrew University, Tel-Aviv University, Bar-Ilan University, the Sheba Medical Center and the Hadassah Medical Center are taking part in this group. During the first year of operation the Center will absorb new additional researchers, returning to Israel from the Broad Institute in Massachusetts, Harvard Medical School, and the Children's Hospital in Boston.

2. Cognitive Science:

The group selected to establish this I-CORE is led by Prof. Yadin Dudai of the Weizmann Institute of Science. The Center will engage in the study of retrieved understanding: from conceptualized to remembered and back. 24 senior researchers from the Weizmann Institute of Science, Tel-Aviv University, Bar-Ilan University, Emek Izrael Academic College, and the Tel-Aviv Sourasky Medical Center are taking part in this group. During the first year of operation the Center will absorb new additional researchers, returning to Israel from UCLA, Harvard Medical School, Massachusetts General Hospital and Stanford University.

### 3. Computer Sciences:

The group selected to establish this I-CORE is led by Prof. Yishay Mansour of the Tel-Aviv University. The Center will engage in the study of algorithms. 24 senior researchers from Tel-Aviv University, the Weizmann Institute of Science and the Hebrew University of Jerusalem are taking part in this group. During the first year of operation, the Center will absorb new additional researchers, returning to Israel from the Microsoft Research Laboratories in New England, Columbia University, Yale University, the University of California at Berkeley, and MIT.

### 4. Alternative Energy Sources:

The group selected to establish this I-CORE is led by Prof. Gideon Grader of The Technion. The Center will be an Israeli consortium for the study of solar fuels. 27 senior researchers from the Technion, the Weizmann Institute of Science and Ben Gurion University of the Negev are taking part in this group. During the first year of operation the Center will absorb new additional researchers, returning to Israel from Harvard University, the university of Michigan and Berkeley University.

The first I-COREs are expected to start their activities by October 2011. Over the coming years they are expected to absorb dozens of additional researchers who will return from the world's leading universities and institutes.

The I-COREs will advance in-depth, ground breaking and innovative research and serve as an anchor for providing research infrastructure and effective co-operation with leading researchers at various research institutes in their field. Each the I-COREs will promote high quality research activity in Israel, and will play a central role in the strengthening and fulfillment of the scientific potential in these fields. The I-COREs will provide the new researchers with a particularly generous support for their research, including, among other benefits, a research grant, amounting to hundreds of thousands NIS per year for a five year period (depending on the character of the subject field) and an initial personal absorption grant for the acquisition of research equipment and the setting up of a laboratory. The program is being managed by a Steering Committee of **11** members, representing the range of academic activity. The chairman of the Committee is a member of the PBC, Professor Shimon Yankielowicz from the University of Tel-Aviv. Dr. Liat Maoz manages the program on behalf of the PBC.

The Israel Science Foundation, led by Professor Benjamin Geiger from the Weizmann Institute, Chairman of the Foundation's Academic Board, and Dr. Tamar Jaffe-

Mittwoch, Director General of the Foundation, is in charge of the judgment procedure and of operating and monitoring the Centers. The program is being monitored by a Scientific Advisory Committee, comprising 11 of the world's leading researchers in the various subject fields, including a number of Nobel Prize winners.