

PRESS RELEASE

THE WINNER TO ESTABLISH THE FOURTH CENTER OF EXCELLENCE - I-CORE IN THE FIELD OF "ALTERNATIVE ENERGIES" HAS BEEN SELECTED

The first four Centers will absorb, in their first year, 14 Israeli researchers who will return from some of the best universities in the world

The Minister of Education and Chairman of the Council for Higher Education, **Gideon Sa'ar**, and the Chairman of the Planning and Budgeting Committee, **Prof. Manuel Trajtenberg**, announced today the group that has been selected to establish the fourth Center of Excellence, in the field of alternative energies.

In the field of **alternative energy sources**, the winner is a group led by **Prof. Gideon Grader** of the **Technion**. **27** veteran researchers from the Technion the Weizmann Institute of Science and Ben-Gurion University of the Negev are part of this group. Already during its first year of operation, the Center will absorb at least **three new additional researchers**, returning to Israel from Harvard University, the University of Michigan and the University of Strasbourg. The Center will be an Israeli consortium for the study of solar fuels.

The chairman of the review committee for the field of alternative energies was Dr. Ellen B. Stechel, who is a researcher at the University of Illinois and department manager for Emerging Energy Technologies at the Sandia national laboratories. Dr. Stechel's research deals with lessening the use of fossil energy and reducing "greenhouse gas" emissions. She has also served as Chair of the Division of Physical Chemistry of the American Chemical Society and Senior Editor of the Journal of Physical Chemistry.

The international review committee stated in its report to the I-CORE Steering Committee that both proposals submitted in the field of alternative energies were of very high research quality and represent different areas of research that should be promoted. It should be noted that the field of alternative energies is of national importance, with far-reaching geo-political, economic and environmental implications.

The announcement of the winner who will establish the fourth Center of Excellence, in the field of alternative energies, concludes the first phase of the I-CORE project with the launching of the first four Centers.

All the proposals to establish Centers that were submitted reflect the strength of Israeli research and its central position in the world in these fields.

The First Phase of the I-CORE Project - Summary

The establishment of the first four Centers of Excellence is a significant landmark in the realization of the national program for Centers of Excellence.

In all of the first four Centers of Excellence together there will be 94 veteran researchers, leaders in their fields, and during the first year they will be joined by at least 14 outstanding researchers from various institutions abroad: Harvard, MIT, Columbia, UCLA, Stanford, Yale, UC Berkeley, Massachusetts General Hospital, the University of Michigan, the Microsoft Research Laboratory in New England, the Broad Institute in Massachusetts, Children's Hospital in Boston and the University of Strasbourg. In coming years, tens of additional new researchers will be absorbed from abroad in these Centers, from a variety of academic and research backgrounds. The Centers selected will promote cooperation in research between leading researchers from different institutions in Israel. The researchers who are associates of a Center are affiliated with six different universities: Tel-Aviv University, the Hebrew University of Jerusalem, the Weizmann Institute of Science, Bar-Ilan University, the Technion and Ben-Gurion University of the Negev, one college: the Max Stern Academic College of Emek Yezreel, and three hospitals: the Sheba Medical Center, the Hadassah Medical Center, and the Tel-Aviv Sourasky Medical Center.

The over-all budget for the first four centers amounts to NIS 235 million, for five years.

The four Centers of Excellence are expected to commence operating in August 2011.

The Centers of Excellence Initiative - Background

The initiative for **I-CORE: Israeli Centers of Research Excellence** was drawn up during the past year as part of the multi-year plan for the higher education system, and was presented to the Government by Minister **Sa'ar** and Prof. **Trajtenberg**, and adopted by it at its meeting on **March 14, 2010**.

The project entails the gradual establishment of up to **30** centers of excellence during the next five years, each one in a different field of research - in the natural sciences, the humanities and the social sciences. The over-all sum of **NIS 1.35 billion** will be made available for the establishment and operation of the Centers of Excellence (financed equally by the Planning and Budgeting Committee, strategic partners, and the institutions involved). Each center will bring together a critical mass of leading researchers in the field - staff members at different institutions (universities, colleges, hospitals and research institutes), as well as outstanding Israeli researchers in the field, returning from abroad ("Brain Return"), who will join one of the institutions and the Center of Excellence.

The Centers of Excellence will promote comprehensive, ground-breaking and innovative research in their fields and will serve as anchors for scientific infrastructure and the effective collaboration of leading researchers in the field from different institutions. The Centers will provide incentives and will promote, each in its own field, the highest quality research activity in the State of Israel and will be a central factor in strengthening and realizing scientific potential in these fields. The Centers will provide new researchers with special improved research support, including, among other benefits, a research grant of hundreds of thousands of NIS for five years (depending on the nature of the field) and an initial absorption grant to purchase research equipment and set up a laboratory.

A steering committee composed of **11** members, who faithfully represent the academic spectrum, coordinates the program. The committee is headed by PBC member **Prof. Shimon Yankielowicz** of Tel-Aviv University. **Dr. Liat Maoz** directs the program on behalf of the PBC.

The Israel Science Foundation, led by **Prof. Benjamin Geiger** of the Weizmann Institute of Science, the Academic Chair of the ISF Academic Board, and **Dr. Tamar**

Jaffa-Mittwoch, Director-General of the ISF, is responsible for the review process and the operation and scientific oversight of the Centers. An International Scientific Advisory Committee, composed of members who are among the leading scientists in the world in various fields, including Nobel prize winners, advises the program.

The First Four Centers of Excellence

In **July 2010**, the I-CORE steering committee announced the first four fields in which Centers of Excellence will be established:

1. Systems-level analysis of the molecular basis for human diseases: from genomics to personalized therapy;
2. Advanced approaches in cognitive sciences;
3. Advanced topics in computer sciences;
4. Renewable, sustainable, and alternative sources of energy

In **September 2010** preliminary proposals to set up each center were submitted, and in December the full proposals were submitted. **Nine** full proposals in total were submitted for the four centers, involving seven research universities, three colleges and three hospitals from throughout Israel. The names of **60** Israeli researchers from the best universities and research centers abroad, who are all willing to come to Israel to take part in the centers, appear in the full proposals.

The Winners of the Three Centers

1. For the Center of Excellence in the field of "**the molecular basis of human diseases**", the winner was a group led by **Prof. Howard Cedar of the Hebrew University of Jerusalem**. 19 veteran researchers from the Hebrew University of Jerusalem, Tel-Aviv University, Bar-Ilan University, the Sheba Medical Center and the Hadassah Medical Center are part of this group and, already during the first year of operation, the Center will absorb at least **four new additional researchers**, returning to Israel from the Broad Institute in Massachusetts, the Harvard Medical School, and from Children's Hospital in Boston. The Center will engage in the study of genetic regulation of complex human diseases.

2. For the Center of Excellence in the field of **cognition**, the winner was a group led by **Prof. Yadin Dudai of the Weizmann Institute of Science**. 24 veteran researchers from the Weizmann Institute of Science, Tel-Aviv University, Bar-Ilan University, the Max Stern Academic College of Emek Yezreel, and the Tel-Aviv Sourasky Medical Center. are part of this group and, already during the first year of operation, the Center will absorb at least **three new additional researchers**, returning to Israel from UCLA, Harvard Medical School, Massachusetts General Hospital and Stanford University. The Center will engage in the study of retrieved understanding: from conceptualized to remembered and back.

3. For the Center of Excellence in the field of **computer sciences**, the winner was a group led by **Prof. Yishay Mansour of Tel-Aviv University**. 24 veteran researchers from Tel-Aviv University, the Weizmann Institute of Science and the Hebrew University of Jerusalem are part of this group and, already during the first year of operation, the Center will absorb at least **four 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. The Center will engage in the study of algorithms.

The Continuation of the Program

The I-CORE steering committee is currently working of the selection of topics for the next phase of Centers of Excellence, which will include an additional 10 centers.

On January 20, 2011 the steering committee published a wide-spread call to the academic community to propose topics for the next phase of centers of excellence. Any group of at least three Israeli researchers from Israel or from abroad, at least one of whom is a senior academic staff member at an Israeli institution of higher education, could propose topics. In addition, the heads of the institutions of higher education were invited to propose topics that indicate their institutional priorities.

The submission of topics concluded at the end of February: about 150 proposals for topics were submitted by over 1,200 researchers from more than 40 institutions in Israel and 30 more institutions abroad. The topics covered a wide variety of subjects in the life sciences, medicine, exact sciences, engineering, social sciences,

education, law, management and the humanities. Broad interdisciplinary collaborations of researchers from different institutions were particularly evident.