

Israeli Centers of Research Excellence

The I-CORE Program

Noa Tal, PBC/CHE

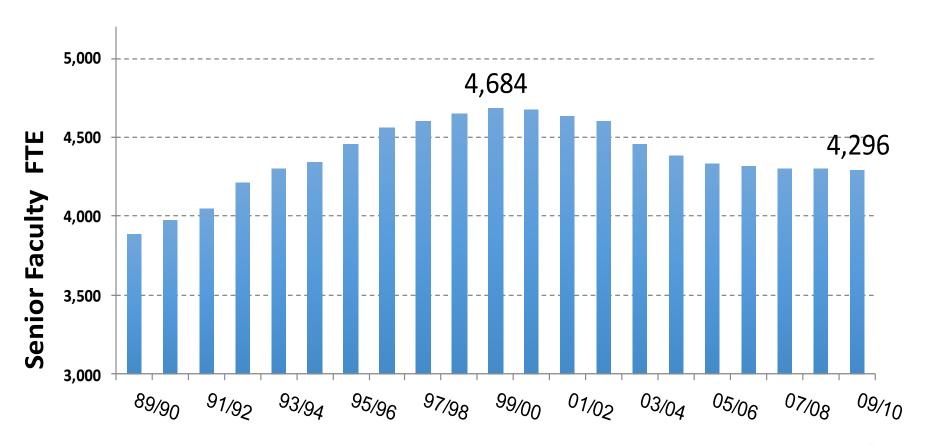
Quantum Universe I-CORE Meeting *Tel Aviv, December 18th, 2013*







Shrinkage in the number of Senior Faculty in the universities: 2009/10







Israeli Higher Education: From Accelerated Growth to Renewed Excellence

Up to mid 1990's: Excellence for the Few

- Elitist system:
 - Low % of students
 - Universities only
- Adequate budgeting
- Impressive accomplishments





Israeli Higher Education: From Accelerated Growth to Renewed Excellence

Up to mid 1990's:
Excellence
for the Few

2000-2009:

The Lost
Decade"

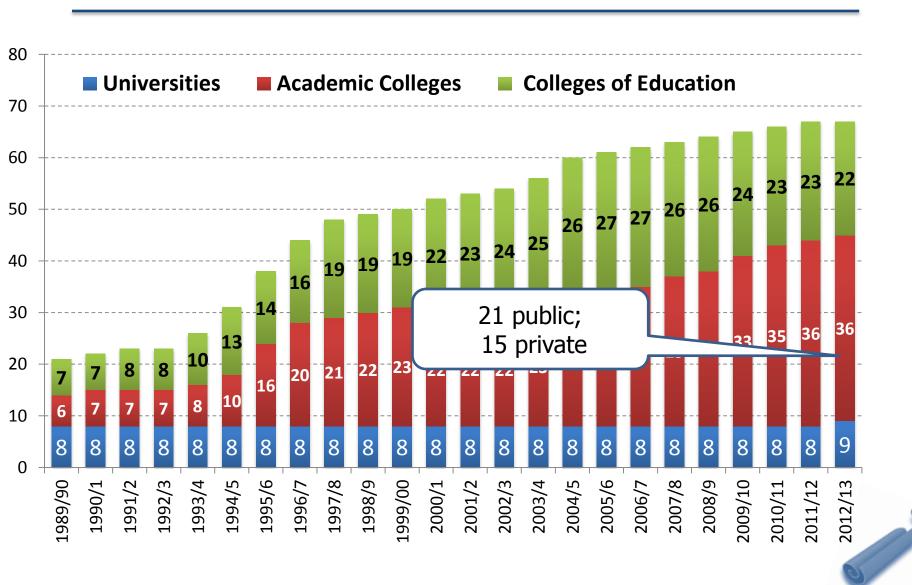
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- Rapid Growth:
 - Number of Students
 - Number & diversity of Institutions

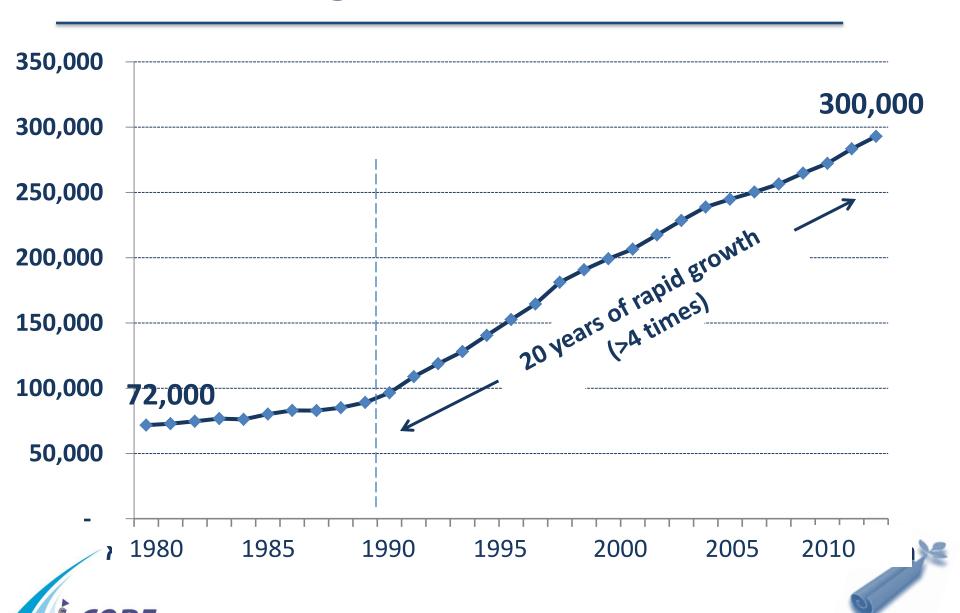




Massive Growth in Number of Colleges



Accelerated growth in number of students



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- Budget Cuts:
 - Shrinking, aging faculty
 - Brain Drain
 - Deterioration of infrastructures





Israeli Higher Education: From Accelerated Growth to Renewed Excellence

Up to mid 1990's:
Excellence
for the Few

2000-2009:

"The Lost Decade"

2010 onwards:

Renewed **Excellence**

- Elitist system:
 - Low % of students
 - Universities only
- Adequate budgeting
- Impressive accomplishments

- Rapid Growth:
 - Number of Students
 - Number & diversity of Institutions
- Budget Cuts:
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- Multi-year plan & budget increase
- I-CORE Program





The Multi-Year Reform Plan in Higher Education: Main Pillars

Promoting Excellence

- •Recruit top faculty
- •Increase research funding

Improving Access

- Ultra-orthodox
- Minorities

Supporting Platforms

- Increased budget
- Improved budgeting model





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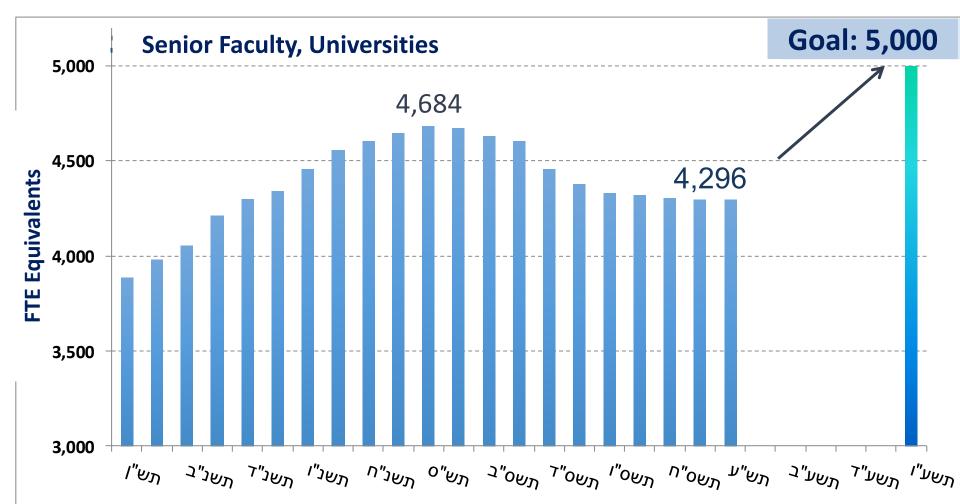
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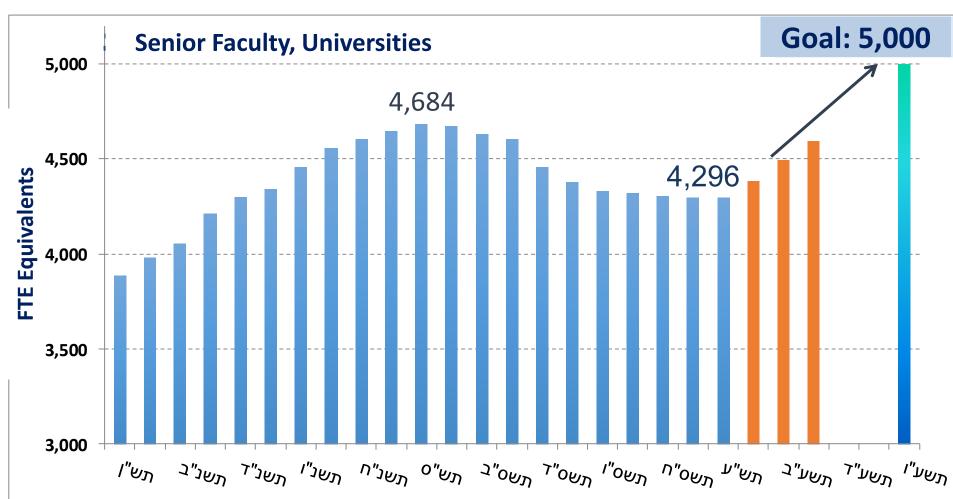
Main Goal: Recruitment of New Faculty







Recruiting Senior Faculty – So Far



In 3 years:

Universities +300 Net; +650 Gross Colleges +380 Net; +430 Gross





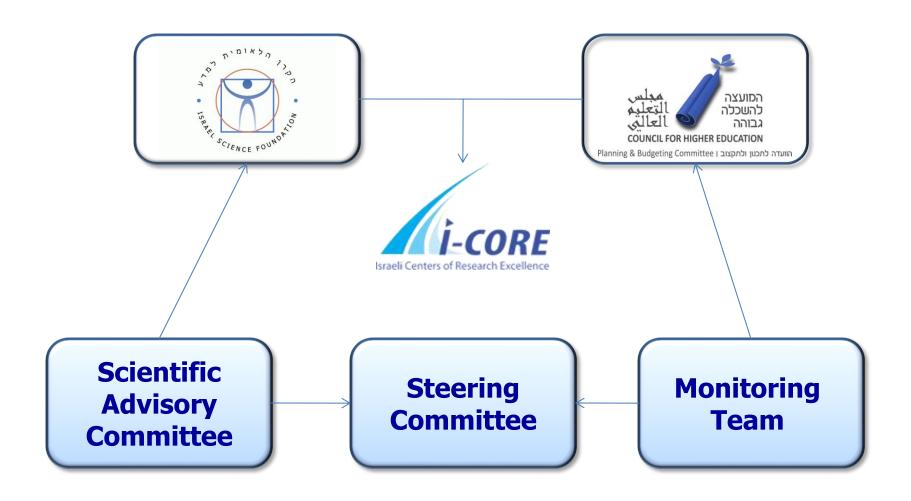
Israeli Centers of Research Excellence

The Flagship of the Multi-Year Reform Plan – Goals:

- Reinforcing scientific research in Israel, world leadership
- Assisting excelled & Long-Term to Israel
- Encouraging resDirect&aIndirectamong institutions
- Creating critical mass and leveraging relative advantages
- Encouraging academic innovation and inter-disciplinary research



Leading Organs





Members of the Scientific Advisory Committee

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Biology

Aaron Ciechanover



Medicine

David K. Cohen



Education & Public policy

Linda Gregerson



English
Language and
Literature

David J. Gross



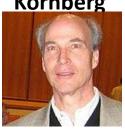
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Judaic studies

Roger Kornberg



Biology

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Business & Economics

Eric S. Lander



Biology

Moshe Y. Vardi



Computer Science

Ada E. Yonath



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Dan Shechtman



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Members of the Steering Committee

Shimon
Yankielowicz
SC Chairman

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Aharon Beth-Ha'Lachmi

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Economics

Cell Biology

Past PBC member

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Computer Sciences

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Zohar Laslo



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Engineering and
Management

Rachel Levy-Schiff



Psychology

Sophia Menacahe



General History

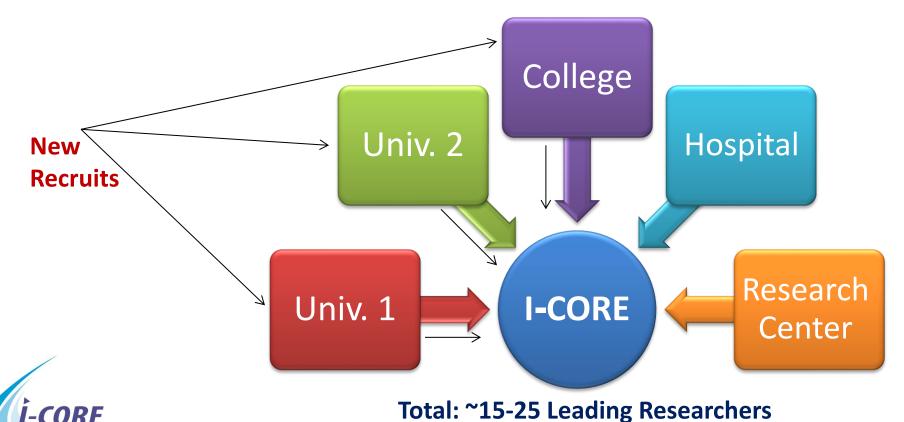
Aviad Raz



Sociology and Anthropology

What is an I-CORE?

"An Association of excellent researchers in a defined scientific field, for the purpose of advancing and deepening innovative, breakthrough research within this field"



Phase I: The First Four I-COREs

Established October 2011

	I-CORE	Scientific Director	Affiliations
100 100 100 100 100 100 100 100 100 100	Life Sciences: Gene Regulation in Complex Human Disease	Prof. Howard Cedar , Hebrew University	 The Hebrew University Tel Aviv University Bar-Ilan University Sheba Medical Ctr. Hadassah Medical Ctr.
	Energy: Israeli Solar Fuel Consortium	Prof. Gideon Grader, Technion	The Technion,WeizmannBen Gurion University
	Brain Research: Cognition – Study of the Reconstructive Mind	Prof. Yadin Dudai , Weizmann	 •Weizmann •Bar-Ilan University •Tel Aviv University •Emek Izrael College •Sourasky Medical Ctr.
	Computer Science: Algorithms	Prof. Yishay Mansour, Tel Aviv University	Tel Aviv UniversityWeizmannHebrew University

The second wave: 12 new I-CORE's

Established May 2013

Mass Trauma Research Empirical Legal Studies Education and the New Information Society

Social Sciences & Law

Abrahamic Religions Study of Modern Jewish Culture

Humanities

Astrophysics: from the Big Bang to Planets The Quantum
Universe:
Particles and
Astro-particles

Light and Matter

Exact Sciences & Engineering

Structural
Biology of the
Cell - Biophysics
and medical
technology

Plant Adaptation to Changing Environment

Chromatin and RNA Gene Regulation

Physical
Approaches to
Dynamic
Processes in
Living Systems

Life
Sciences
&
Medicine

The I-CORE's Main Activities

New Recruits

- Annual research grants for 5 years (150-400K NIS / year)
- Personal equipment / lab: (20K 2M NIS)
- Salaries for 5 years
- TOSEFET BET for 5 years

Major shared Research Infrastructures

Ongoing Activities





The I-CORE's Main Activities

New Recruits

Major shared Research Infrastructures

• Serving all I-CORE members

Ongoing Activities





The I-CORE's Main Activities

New Recruits

Major shared Research Infrastructures

Ongoing Activities

- Activities of Senior researchers: scholarships to PhD's and postdocs, personal equipment, technical HR,
 - ...
- **International collaborations**: conferences, workshops, visits, ...
- Other: I-CORE meetings, ...





What can I-CORE promote beyond research? examples from the first 4 I-COREs

- International collaboration leveraging global branding
 - Postdoc program with Italy
 - Joint program: algorithm I-CORE & Simons institute at Berkeley
- Acquiring advanced equipment & infrastructures
- Resources for postdocs
- New inter-institutional collaborations in Israel (incl. PhD students, postdocs)
- > Financing experimental projects with breakthrough potential



What else?

- International Joint Graduate Programs
- Collaborations with industry
- Community outreach

Large flexibility for your ideas...



Evaluation & Monitoring

- Annual budget report
- Scientific report every 2 years
- Updates on the Quantum Universe website &

I-CORE website



Updates on the I-CORE website

http://www.i-core.org.il/

