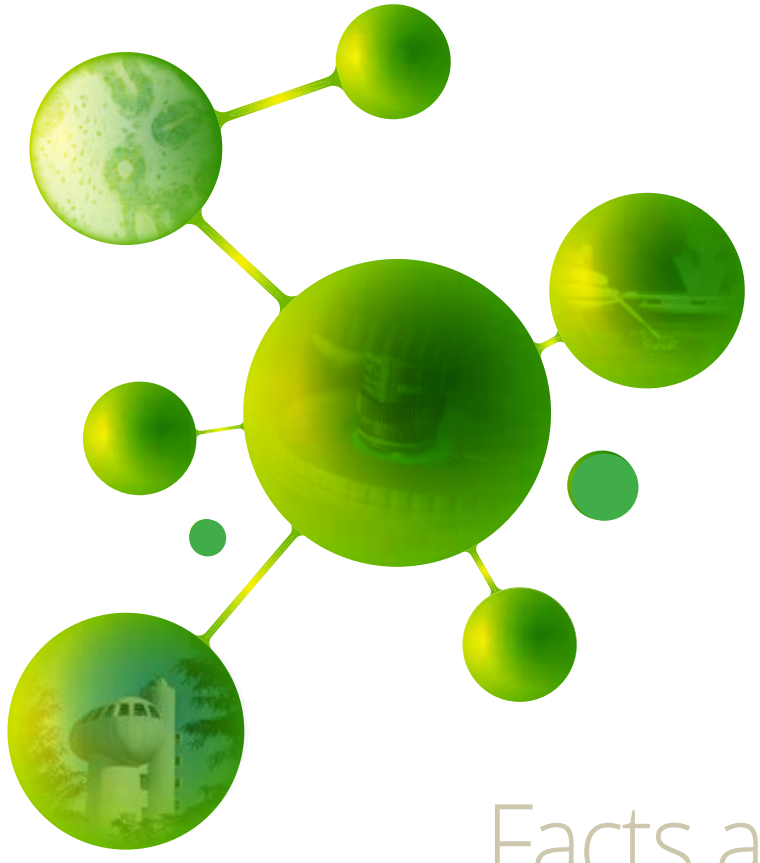
מכון ויצמן למדע
WEIZMANN INSTITUTE OF SCIENCE



Facts and Figures

The Weizmann Institute of Science at a glance

2017

Our Roots

The Weizmann Institute of Science opened in 1949 with **44** scientists, **17** administrators, and **69** technicians

In 1941, Dr. Weizmann established the first pharmaceutical company in Israel, Palestine Pharmaceutical Products, Ltd.

For over 80 years–first as the Daniel Sieff Research Institute, then renamed in honor of **Dr. Chaim Weizmann**, a Zionist pioneer who served as President both of the Institute and of the newborn State of Israel–the Weizmann Institute of Science has contributed thousands of landmark breakthroughs.

Dr. Weizmann developed the process for producing acetone through bacterial fermentation, which was of great importance to the British during World War I. He worked with Lord Arthur James Balfour to write the Balfour Declaration in support of the establishment of the State of Israel, and met with U.S. President Harry Truman. Dr. Weizmann's residence, on the Institute campus, is now a national museum.

The Weizmann Institute of Science was the first to introduce cancer research in Israel and the first to build **particle accelerators**.

200,000 Dr. Chaim Weizmann's archives contain more than documents including letters from **Albert Einstein** and **Lord Arthur James Balfour**

*WEIZAC, **the first computer in Israel**, and one of the first in the world, was designed and built at the Weizmann Institute in 1954.*

Discover the Weizmann Institute of Science. One of the world's top-ranking centers of theoretical and experimental research, the Weizmann Institute of Science is dedicated to curiosity-driven discovery. The Institute's mission is to increase knowledge about our natural world, for the benefit of all humanity.

At the Weizmann Institute, exceptionally talented people are given a precious gift: the freedom to follow their dreams.

Faculty of Biology
Biological Regulation
Immunology
Molecular Cell Biology
Neurobiology
Life Sciences Core Facilities

Faculty of Chemistry
Chemical Physics
Earth and Planetary Sciences
Materials and Interfaces
Organic Chemistry
Structural Biology
Chemical Research Support

Faculty of Biochemistry
Biomolecular Sciences
Molecular Genetics
Plant & Environmental Sciences
Life Sciences Core Facilities

Faculty of Physics
Condensed Matter Physics
Particle Physics and Astrophysics
Physics of Complex Systems
Physics Core Facilities

Faculty of Mathematics and Computer Science
Computer Science and Applied Mathematics
Mathematics

Department of Science Teaching

Scientific Archeology Unit

274 Laboratories

82 Donor-funded Centers and Institutes

5 Faculties

18 Departments

3 Core Facilities

2,400 Faculty and staff

Discovery

Our research labs lead the world in fighting disease and hunger, solving important problems in mathematics and computer science, probing the physics of matter and the universe, creating novel materials, and developing new strategies for protecting the environment.

The Weizmann Institute sets the global standard for excellence in scientific achievement. We invite you to join us.

Prof. Daniel Zajfman, President

Average temperature
July/Aug: 22-32 C (71.6-90 F)
Jan/Feb: 8-19 C (46.5-64.5 F)

Campus

The Institute is a green oasis dotted with outdoor sculptures—a perfect environment for creative discourse, and a place that scientists, staff, and their families are proud to call home.

Dr. Weizmann envisioned a campus in which scientists would work in a pristine, natural environment. Interacting with one another in labs and outdoors, a place where scientist would cross disciplinary boundaries with ease and thereby advance fresh and innovative ideas to further scientific research.

The proximity of faculty housing to the research labs and childcare facilities helps Weizmann Institute scientists enjoy ***a full family life and a productive research career****.*

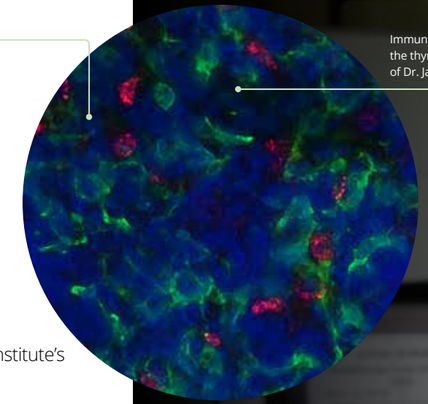
There are 164 children of Weizmann scientists and staff–aged four months to five years–in the Institute's on-campus childcare.

There are about **1,000** active competitive grants funding research on campus at any given time

46% success rate for European Research Council starting grants, the highest rate in Europe

Best working place

Consistently rated among the best places to work in academia outside the U.S. according to *U.S. News and World Report*



Immunofluoresence of the thymus from the lab of Dr. Jakub Abramson

For deciphering the structure and mechanism of ribosomes, the Weizmann Institute's **Prof. Ada Yonath** won the 2009 **Nobel Prize in Chemistry**.

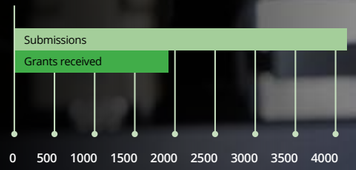
Profs. David Givol, Moshe Oren, and **Varda Rotter** revealed the importance of the major tumor suppressor protein, p53. The seminal work involved cloning and characterizing the gene that encodes the p53 protein, what has since become the most-studied protein in cancer research.

Profs. Avigdor Scherz and **Yoram Salomon** devised a **treatment for prostate cancer**, called Vascular Targeted Photodynamic Therapy in concert with TOOKAD® Soluble (TS-VTP), which eradicates cancerous growth while preserving function. The therapy has shown dramatic results in clinical trials, and is being tested for other cancer types.

An immune-system-based approach to cancer treatment, developed by **Prof. Zelig Eshhar**, involves genetically modifying immune system cells and reintroducing them into leukemia patients. Clinical trials have shown a 94% success rate.

The **RSA encryption** algorithms that allow secure Internet monetary transactions and a myriad of computer-based transactions were co-invented by **Prof. Adi Shamir**.

Weizmann scientists have a nearly 50% success rate obtaining scientific grants, 2009-2016



Over the past decade, Weizmann Institute scientists have been awarded **$830** million in competitive grants

erc **$150** million in ERC grants in the past decade

33 Israel Prize winners

3 Turing Awards

2 Japan Prizes

7 Wolf Prizes

Excellence

*In 2013, Prof. Shafi Goldwasser was awarded a **Turing Award**, often referred to as the "Nobel Prize of computing." She is the third member of the Weizmann Institute to receive this honor; the others are the late Prof. Amir Pnueli (1996) and Prof. Adi Shamir (2002).*

International Collaborations

International collaborations are the lifeblood of modern science—partnerships that enrich scientific research at the Weizmann Institute of Science and beyond. Such collaborations include peer-to-peer initiatives, joint grants, and formal institutional collaborations.

Over **565** joint grants were initiated over the past five years, linking Weizmann Institute labs to leading research institutions all over the world.

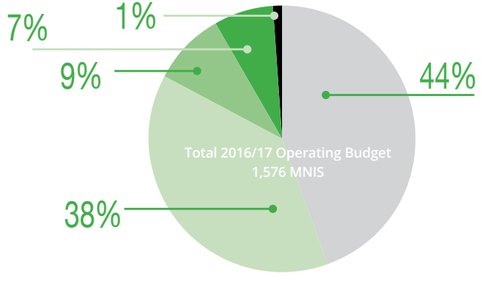
Weizmann Institute scientists collaborate with colleagues at:

Harvard Medical School (*USA*)
Memorial Sloan Kettering Cancer Center (*USA*)
Max Planck Institute (*Germany*)
University of Oxford (*UK*)
The University of Science and Technology of China
California Institute of Technology (Caltech) (*USA*)
École Polytechnique Fédérale de Lausanne (EPFL) (*Switzerland*)
RIKEN Brain Science Institute (*Japan*)
Stanford University (*USA*)
Yale University (*USA*)
Pasteur Institute *(France)*
Massachusettes Institute of Technology (*USA*)
McGill University *(Canada)*
University of São Paulo *(Brazil)*

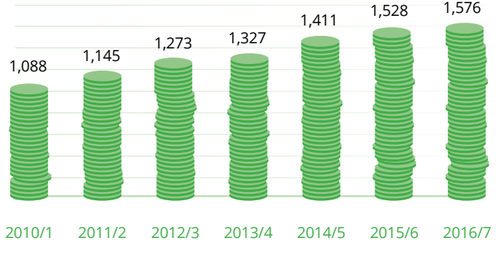
and more...

The Garvan-Weizmann Centre for Cellular Genomics *in Sydney, Australia, will advance genomics research using sophisticated sequencing tools to investigate and advance the understanding of complex diseases.*

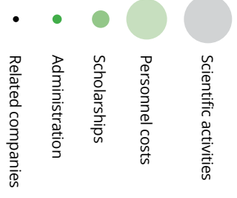
Budget



Operating Budget (MNIS)



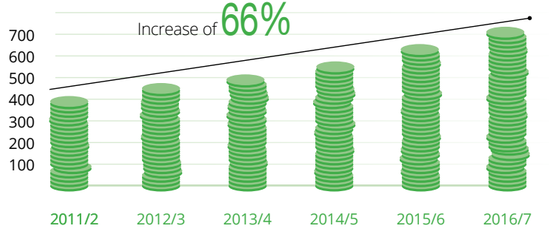
2016/17 Operating Budget



The operating budget of the Weizmann Institute of Science is around 1.5 billion NIS per year. A third of this funding comes from the government of Israel. The rest of the Institute's income is generated through competitive grants, private philanthropy, and scientific services offered by Institute core facilities to academic and industrial partners.

Scientific discoveries also generate significant income from licensing agreements made through YEDA, the Institute's technology transfer arm.

Scientific Expenses Budget (MNIS)



The 66% increase in scientific expenditures is due, in part, to the rise in volume and cost of state-of-the-art instrumentation, ensuring that Weizmann Institute scientists can conduct research at the highest level. As a result of the growing importance and expense of this equipment, the Institute has more than doubled its expenditure on instrumentation, to NIS 182 million in 2016 from NIS 75 million in the previous year.

*World-leading science depends on **top-of-the-line scientific infrastructure**. Core facilities available to Weizmann scientists include advanced microscopy and imaging, pre-clinical testing, genomic and protein profiling, computational science, and experimental physics infrastructure.*

People

The most important asset of the **Weizmann Institute of Science** is its people. The Institute recruits some of the world's most outstanding investigators in the natural and exact sciences, and then invests in them, supporting the new research directions that lead to world-changing breakthroughs.

Every year, the Institute hires approximately 10 new scientists, based solely on excellence in their respective fields rather than on a department-specific quota. Weizmann scientists are the recipients of the most prestigious awards in their fields and serve as editors of the top scientific journals.

Since 2007, 106 female PhD students have received fellowships for postdoctoral studies as part of the ***Israel National Postdoctoral Award Program for Advancing Women in Science****.*

A full 78% of these fellowship recipients returned to Israel for jobs in academic research. Ten recipients have joined the Weizmann Institute faculty.

Institute scientists have published over **55,000** research studies in professional journals

Members of the **Weizmann Institute faculty** publish highly influential research in the world's top scientific journals. Trailblazing discoveries made in Institute labs drive the discussion at international scientific conferences, and inspire fruitful collaboration with colleagues in Israel and abroad.

Basic science breakthroughs made at the Institute have resulted in a wide range of patented technologies that make the world a better, safer, and healthier place. Its research has led to key insights that have expanded the body of knowledge across the scientific spectrum.

25% of Israel's PhDs in science and math were trained at the Weizmann Institute

120 patents are granted annually

Top-selling drugs that emerged from Weizmann labs:
- **Copaxone®**
- **Rebif®**
- **Urbitux®**
- **Tookad®**

Weizmann Institute research was cited by other scientists **33,000** times in 2016

Over the past five years, Institute scientists have published an average of **1,430** studies per year

World-changing technologies:
- **RSA Internet security algorithm**
- **solid lubrication for machinery**
- **biomolecular computers**
- **new methods of laser microscopy**

Impact

Fighting disease and hunger, producing advanced materials and energy, protecting the environment, and revolutionizing computers, it's no wonder that ***the Institute's tech-transfer company–YEDA–ranks number one in the world****.*

Pictured above: Copaxone®, a major revenue driver of the Israeli pharmaceutical industry.

Flagship projects

Over 60 labs devoted to cancer research are supported by the Moross Integrated Cancer Center (MICC).

82 Donor-supported Centers and Institutes

At the **Moross Integrated Cancer Center** (MICC), Weizmann Institute scientists are harnessing the power of basic research to promote cancer prevention, early diagnosis, and ultimately, a cure.

The Nancy and Stephen Grand Israel National Center for Personalized Medicine (G-INCPM) is a national facility that offers state-of-the-art genomics, protein profiling, drug discovery, bioinformatics, and medicinal chemistry research platforms to academic, clinical, and commercial clients.

The Schwartz/Reisman Science Education Center at the **Ruth and Uriel Arnon Science Education Campus** offers high-level physics and chemistry coursework to outstanding high-school students. The Center is a unique regional model of science education that will ensure the future success of Israeli science and technology.

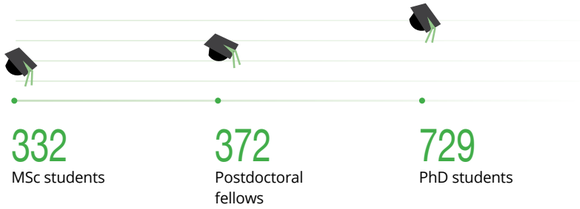
The Azrieli National Institute for Human Brain Imaging and Research is a leading-edge facility that serves the entire Israeli scientific community.

The Israel National Program for Advancing Women in Science ensures that more women fill leading positions in academia and industry.

The Rothschild-Weizmann Program grants MSc degrees to science and math teachers, enriching science education in the classroom.

The David Lopatie Conference Centre and the **Dimitris N. Chorafas Fund for Scientific Exchange** host and support over 70 international conferences per year, solidifying the Institute's role as a global hub of scientific research.

*The future **André Deloro Building** will house the **Center for Advanced and Intelligent Materials**, where scientists will conduct research on materials with applications in medicine and medical devices, aerospace and defense, and beyond.*



332
MSc students

372
Postdoctoral fellows

729
PhD students

A core mission of the Weizmann Institute is to train the next generation of scientific leaders. At the Feinberg Graduate School, a highly select group of students studies in English, in one of five research schools, acquiring the skills they need to take their place at the forefront of scientific advancement.

Supervised by the Institute's faculty members, Weizmann Institute graduate students make important contributions to research and are highly sought-after for post-graduate positions in academia and industry.

The research schools:

André Deloro Research School of Physical Science
Solo Dwek and Maurizio Dwek Research School of Chemical Science
Lorry I. Lokey Research School of Biochemical Science
Ekard Research School of Biological Science
Moross Research School of Mathematics and Computer Science

7,000 Alumni since the establishment of the Feinberg Graduate School

1,061 Students

335 Students and postdocs from abroad study and work in Weizmann labs

1,518 Degrees granted *between 2012 and 2016*

Students

*Weizmann Institute **alumni are leaders in industry and academia** around the world. In Israel, they are major drivers behind the country's reputation as the "start-up nation".*

Pictured above: Theoretical astrophysicist Prof. Mario Livio (MSc '72), an expert on supernovae and a best-selling author, frequently lectures on campus.

Each year the *Science on Tap* series brings popular science lectures to **50** Tel Aviv bars.

Over **3,000** students have participated in the Dr. Bessie F. Lawrence International Summer Science Institute.

3,000 teachers are trained by the Davidson Institute annually.

Scientific progress depends on an educated society.

The Davidson Institute of Science Education offers more than **70** programs that inspire young people to build science into their future.

The Clore Garden of Science is an outdoor facility designed to give children hands-on exposure to the excitement of science. **115,000** people visit the Clore Garden of Science every year.

The Department of Science Teaching conducts research on science education and generates curricula and textbooks for Israeli schools.

The Rothschild-Weizmann Program for Excellence in Science Teaching offers masters degrees to Israeli math and science teachers. Since it began, **208** teachers have received an MSc through the program.

Perach, a national program founded in 1974 at the Weizmann Institute, has matched **50,000** at-risk children with **21,000** university student mentors.

The Davidson Institute of Science Education's online activities reach **2.1** million unique visitors annually.

350,000 Israeli students and teachers participate in educational programs at the Weizmann Institute each year.

4 National teacher centers established: **Chemistry, Physics and Earth Sciences, Biology and Environmental Sciences, and Science and Technology for the Middle School.**

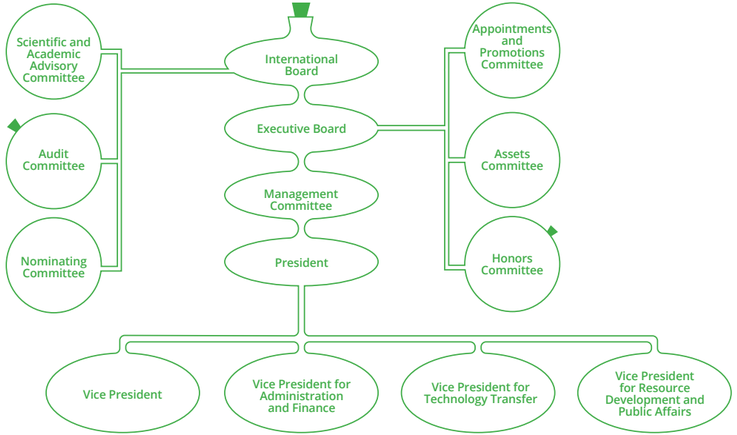
Science literacy

The Sparks of Science Program in Memory of Moshe Pergament *is a unique four-year enrichment program for* ***Israel's Ethiopian community****, focusing on building skills in mathematics, computer sciences, chemistry, physics, biology, and English. Over 300 high school-age students have graduated from the program since its inception in 2001.*

Leadership

Setting policy, driving progress—the management of the Weizmann Institute is led by brilliant, highly experienced senior investigators, together with a robust International Board, and a global community of supporters who share a vision of science for the benefit of humanity.

Committees around the world represent the Institute's interests, by forging connections with individuals, families, foundations, and the business community, and by educating the public about the latest discoveries emerging from Institute labs.



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VP, Administration and Finance

Abraham Ben-Naftali,
Chair, International Board

Ido Dissentshik,
Chair, Executive Board

"Miracles
sometimes occur,
but one has
to work terribly hard
for them."

Dr. Chaim Weizmann

Vision

Join us in
working
hard for
tomorrow's
miracles....

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