



PRESIDENT'S REPORT

53rd Annual
General Meeting
of the
Board of Governors

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of the 53rd Annual General Meeting
of the Board of Governors
Covering the period 1988-2001

Haim Harari, President

Ladies and Gentlemen, Dear Friends,

Let me begin my address by extending my congratulations to Professor Ilan Chet, the new President-elect. Ilan, you have 17 more days of peace and quiet, and after that I wish you all the best in your new endeavor. Like all Board members, I pledge my support. Unlike the others, I also pledge never to interfere. I will always be available to you whenever you want, and will do everything possible to help you and to continue contributing to the Institute.

Although they have not yet been officially appointed, I would like to congratulate the new Vice-Presidents, Sam Safran and Haim Garty, and the rest of the new leadership team, and to wish them all the best.

Once more, I congratulate the eight Ph.D. honorees who received their degree yesterday: Robert Asher, Lawrence Blumberg, William Davidson, Professor Sidney Drell, Maurizio Dwek, Rabbi Abraham Firer, Professor Arnold Levine, and Professor Alice Shalvi. Most of you are my very good personal friends, and, for me, this last ceremony was very emotional. I hope it was for you too.

I also want to convey my good wishes to the new members of the Board who were elected for the first time today: Professor Zvi Artstein, Professor Ilan Chet, Helen Diller, Professor Mildred S. Dresselhaus, Stuart E. Eizenstat, Mauricio Gerson, Professor Michael B. Green, Joseph Hollander, Marvella Koffler, Professor Albert Libchaber, Roselyn Meyer, Dr. Joseph Owades, Professor Carla J. Shatz, and Professor Yosef Yarden.

Forty-eight years ago, this week, I celebrated my Bar Mitzvah. I was called to the Torah but did not make a speech. Now, on concluding 13 years as President of the Institute, this may finally be the time to give my Bar Mitzvah speech. You might also describe this address as “the swan song of a lame duck.”

I'd like to share with you several thoughts and a few figures on what took place here over the past 13 years, and to conclude - before my final thanks - with a few thoughts on the Institute's future - a sort of farewell challenge for the new administration.

These 13 years make up a full quarter of the 52-year history of the Weizmann Institute. Much has changed in this period. Thirteen years ago, the Soviet Union was still a world power, and the influx to Israel of one million new immigrants from that part of the world was not even a dream. We lived through the Gulf War, made peace with Jordan, and signed the Oslo Agreement - which, while leading to various negative results, has opened the door for the Weizmann Institute to the Far East and to Eastern Europe. We now host numerous scientists from these parts of the world, a previously unimaginable benefit. The European Union, too, has changed completely, and Israel has joined its research programs. During these 13 years we have faced terror and two *intifadas*, through which we have continued to carry out research and to build the Institute.

The world of science and technology experienced two major revolutions in this period. The first is related to computers, electronics, the Internet, lasers, and a huge variety of products derived from physics, mathematics and computer science. Moving rapidly into the high-tech and commercial worlds, this revolution translated intellectual property - both real and virtual - into money, creating a network of ties between the world of research and academia, and that of business and finance.

At the Weizmann Institute, we have fully participated in this revolution by developing the areas of computer science and semiconductor research, and by getting into such fields as laser research, nanophysics, nanochemistry and materials science. A whole variety of scientific fields were developed at the Institute with considerable investment and a great deal of new talent.

The second revolution has not yet peaked. It has to do with genes and proteins, and through them with medicine and health, agriculture

and food production - in short, it is the biotechnology and life sciences revolution that began in laboratories such as ours. Many new ideas that originated here were picked up by the pharmaceutical industry, by small biotechnology firms, and by various start-ups. In these fields we have been tremendously active, developing the Faculties of Biology and Biochemistry in numerous directions, translating what we do in the laboratory into practical results.

Perhaps the most exciting thing to have happened during these 13 years is the great development of a multidisciplinary and interdisciplinary thrust through the marriage of the above two revolutions, the first symbolized by the plastic computer mouse, the second by the experimental laboratory mouse. It is the conceptual amalgamation of these two mice that has created the tremendously exciting third revolution, which has led to fields such as bioinformatics, namely the merger of biology and its genome project with computer science and informatics; biological physics, for which we have created a new center that fosters the applications of physics methods to biological problems; structural biology, where a complicated biological molecule is subjected to a whole battery of diagnostic tools that apply computing and physics methods to the study of chemistry; and, finally, neurobiology, the understanding of the human brain, an exciting exercise in biology and medicine, intimately related to issues in computer science, robotics, theoretical physics and biochemistry.

There is also a vast new field of “nano:” nanophysics, nanochemistry, nanobiology, nanomechanics and, as a whole, nanotechnology. The Institute has entered this field from a number of directions and by combining disciplines, none of which, I may add, was a low-cost enterprise.

An entirely different multi-disciplinary field in which we have made great strides is environmental science and energy research. The environment perhaps cannot figure in my earlier count of scientific revolutions, but it certainly looms on the horizon as a major crisis. For the first time, humanity is producing energy and pollution in

quantities that endanger our planet. Every prominent research Institute must take up leadership in this field, something we too have done, amongst other initiatives, by creating a new special department and by recruiting excellent young scientists.

The last 13 years have indeed seen major changes in the world of science and technology, and in the way that academic research interacts with the rest of the world. In the language of yesterday's keynote address, we are no longer an ivory tower, but a lighthouse - provided one knows where to shine the light. I trust we have learned this over the past 13 years.

None of this is cheap. We had to build major facilities, such as a submicron center for semiconductor research which required a \$16 million investment, of which \$14 million came from donors and only \$2 million - not even enough to cover the value added tax - from the Israeli government.



Scientists at the Joseph H. and Belle R. Braun Center for Submicron Research

We acquired an array of magnetic resonance machines that study everything from molecules to tissues to animals, and, with the functional MRI facility currently under construction, people too. These all serve fields from cancer research to structural biology, from chemistry to brain research, as well as a whole range of curiosity-driven research. Here, our investments exceeded \$20 million. We also established facilities for studies in the genome and post-genome (or proteomics) era, as well as several ultra-modern facilities for transgenic animals. These are mice to which a certain amount of genetic information has been added or from which it has been removed, in order to study the relationships of such genes to diseases, behavioral patterns and other features.

We have totally rebuilt and refurbished our Electron Microscopy Unit, serving the entire Institute. Our high-energy physics team is a major participant in the construction of the largest accelerator in the world, currently being built in Geneva, Switzerland.

Each of the items on this list, which is by no means exhaustive, called for an investment of at least \$10 million. Such investments do not guarantee success, but without them we simply cannot compete. They merely enable us to enter the competition. If an athlete enters the Olympic race for the 100-meter gold medal, the first thing he needs is professional running shoes - an item so basic, so elementary, it hardly bears mentioning. Then come talent, training, effort, and luck. In our operation, the running shoes are analogous to a \$10 million investment in facilities alone. The competition is tough and we have to run very fast just to stay in place.

We have also built on the concept of research centers, which originated during the presidency of Professor Michael Sela. It is a brilliant idea, involving the creation of intellectual centers rather than physical entities, sometimes enhancing the work in one department, more often creating bridges between departments, between faculties, and between different fields. We have more than tripled the number of centers in these 13 years, and have also created supercenters, which we call institutes, of which six have been established.

The Arthur and Rochelle Belfer Institute of Mathematics and Computer Science provides us, for the first time, with a large endowment for research in these fields. The Ilse Katz Institute supports materials science and magnetic resonance research, mostly in chemistry. The M.D. Moross Institute for Cancer Research, a gift of Mandy Moross, creates a framework for all the groups engaged in cancer research at the Institute, leading to collaborations between departments, disciplines and approaches. The Y. Leon Benoziy Institute for Molecular Medicine aims to bridge the gap between our research in biology and the field of medicine.



The Carl and Micaela Einhorn-Dominic Institute for Brain Research serves as an umbrella entity for our efforts in brain research and related topics in neurobiology. Last but not least, there is the Davidson Institute of Science Education, designed to become the cornerstone of our efforts to bring better science education to children, to schools, and to the general public, both in Israel and beyond.

All these magnificent institutes were established in the last five years, together providing a tremendous financial, conceptual and intellectual boost to our work.

In developing and building all of these facilities, centers and institutes during the last eight years, I was fortunate to have had an extraordinary partner, first in his capacity as Vice-President and then as Deputy President. If ever there was a team of two people who worked as one, it is Professor Yoram Groner and myself. I am under strict orders from Yoram not to talk about him, so I will just say that Yoram's contribution to the Institute over this period has been beyond belief. Many of the scientists know how important it has been, and those of you on the Board who do not, should be aware of it. I thank Yoram wholeheartedly.

Now I would like to share with you some statistics about the Institute's growth between December 1, 1988 and December 1, 2001.

First, the people: We have grown from 188 tenured professors to 196, a very minor increment. But of the 196 professors active today, 100 became professors during the last 13 years and a similar number retired. From this point of view, it is an entirely new Institute. This new generation is just as good as the founders they have replaced. Indeed, some fantastic young people have joined us in every discipline.

It has been our policy not to increase the number of tenured professors, but to provide each with more research facilities and resources, as subsequent figures will show. The number of Ph.D.-holding scientists at the Institute increased by 30 percent, from 420 to 540, and the number of graduate students has increased by 44 percent. We experienced a revolution in postdoctoral fellows, whose number grew from 60 to 150. They are a very international group, the backbone of scientific research - and we should have more of them. All in all, there are many more young scientists on campus.

Perhaps the secret of our financial success is that we expanded everything - more than tripled the number of research centers and institutes, doubled the number of buildings, increased the number of scientists, initiated numerous new activities, and all of this with 17 percent fewer non-scientific employees. The number of non-scientific

employees fell by 200 at a time when, essentially, everything else on campus has almost doubled. Each such non-scientific position can be regarded as corresponding to a \$1 million endowment or more, since the \$50,000 to \$60,000 annual income from a \$1 million endowment is the average cost of such an employee to the Institute. So, if we save 200 positions, it is as though we have raised a \$200 million endowment. Actually, it is much more than \$200 million because, with all the growth and expansion, nobody would have faulted us if we had added 200 employees, rather than deducted. In short, if I had to pinpoint one secret to our financial success, it is this reduction in the non-scientific staff.

OVERVIEW

	1988	2001	Change
Professors	188	196	+4%
Ph.D.s	421	546	+32%
Students	547	786	+44%
Non-Scientists	1286	1073	-17%
Annual Budget	\$88M	\$185M	+110%
Deficit	\$50M	0	-100%
Endowment	\$129M	\$580M	+350%
Research Grants	\$27M	\$48M	+78%
No. of Grants	650	1093	+68%
Research Centers	14	38+6=44	+214%
Royalties	\$1M	\$59M	+5800%
Buildings	44	91	+107%
Built Area	134,000 Sq.m.	190,000 Sq.m.	+42%
Electricity	28MW-hr	52 MW-hr	+85%

At this point, I wish to acknowledge the two Vice-Presidents, Professor Ruth Arnon and later Professor Yoram Groner, who headed the so-called “Personnel Committee,” and saw to it that every staff position was scrutinized with the ever-present thought in mind that each person hired was worth a \$1 million endowment. I also thank the Vice-Presidents for Finance and Administration, especially David

Schlachet, and, most recently, Yaakov Naan, my good friend, colleague, partner, and most loyal and devoted member of the administration. Likewise, I cordially thank the Director of Human Resources Yaakov Geva and his predecessors.

The annual budget in 2001 - for nearly the same number of research groups as in 1988 - has more than doubled, from \$88 million to \$185 million. Discounting an inflation rate of about 30 percent during those years, the growth is still impressive, and means that much more money was spent per research group than ever before.

The deficit - which in 1989 totaled almost \$50 million (over \$30 million accumulated deficit in the operating budget, over \$10 million in the development budget, and almost \$10 million in the first year of operation due to a budget that was not balanced) - is completely gone. Not only is it gone for the Institute itself, but I am happy to announce that the loans taken on our behalf by the American and European Committees have all been paid. This historic debt is now a closed chapter, and I hope we thrive for many years to come without so much as saying the word "deficit."

The endowment has risen from \$129 million to at least \$580 million, an increase of 350 percent, which really gives us breathing space. It is a magnificent achievement - by the donors, by the Board, and by everyone involved in the effort.

The total value of the research grants obtained by our scientists, which were \$27 million per annum in 1988, have almost doubled, and so did their number. Here I should clarify that all our employees are either paid by the Institute or by these research grants. Today, we have 300 more people paid by research grants, and 150 fewer people paid directly from Institute resources. This is another important factor contributing to our ability to purchase equipment, invest in maintenance, and successfully run a complex science operation.

PERSONNEL

	Paid by the Institute			Paid by Research Grants			Total		
	1988	2001	Change	1988	2001	Change	1988	2001	Change
Scientists	302	294	(-8)	60	100	(+40)	362	394	(+32)
Nonscientists	1011	832	(-179)	275	241	(-34)	1286	1073	(-213)
Total Employees	1313	1126	(-187)	335	341	(+6)	1648	1467	(-181)
Postdoctoral Fellows	49	66	(+17)	10	86	(+76)	59	152	(+93)
Graduate Students	370	388	(+18)	177	398	(+221)	547	786	(+239)
Total	1732	1580	(-152)	522	825	(+303)	2254	2405	(+151)

And now to royalties. Thirteen years ago we received \$1 million in royalties. Last year alone we earned \$59 million.

The number of buildings on campus has approximately doubled, with the built-up area increasing by 40 percent. Electricity consumption, too, has almost doubled.

In summary, everything has increased by at least 30 percent, and sometimes by 100 percent or more, except the number of research groups and professors, which has not changed, and deliberately so. The only items that have been reduced are non-scientist employees, and the deficit. This balance sheet testifies to the totally different situation in which the Institute finds itself today.

I draw your attention to the enclosed map, which illustrates the physical transformation of the campus. Numerous buildings are entirely new (in red). Others are thoroughly rebuilt and newly designated (orange), or just renovated within their previous designation (yellow). There are new roads (blue), and several large areas of land purchased by the Institute in recent years (light blue), giving us tremendous room for future development. We will have no shortage of land for generations to come.

CONSTRUCTION



■ New Bldg. ■ Redirected ■ Renovated ■ New Road ■ New Area

This extensive construction and development involved many partners, but principally responsible was Avraham Dines, Chief Engineer of the Weizmann Institute, who has essentially built every building on campus. It was also the collaboration between Dines and myself that produced the new Weizmann Institute architectural technique, which works as follows: whenever an architect makes a grave error, we plant big, beautiful trees in front of the building to cover it up. But, jokes aside, the campus is beautiful thanks not only to the trees, but primarily to the talent of its great architects, builders and landscape designers.



One of the main functions of the Board is to help raise funds for the Institute. The results of our efforts over the last 13 years are quite amazing. I could give you a good approximation of the total amount raised, but I prefer to give you a slight underestimate, because the actual total is not a round number. This slightly smaller figure is \$1 billion. Just a billion dollars. Of that, \$200 million went towards buildings, infrastructure and major facilities, \$450 million was endowed, \$210 million were direct donations to operations, and, since it costs money to raise \$1 billion, \$140 million of this sum was the cost of it all.

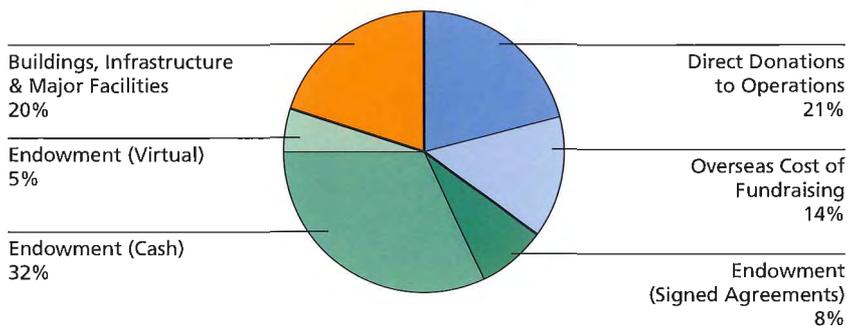
One billion dollars is a significant amount for an Institute such as ours. Even more significant are the people behind this great achievement.

First and foremost, there is a group of 16 people, each of whom gave us more than \$10 million in just these 13 years. Four of them are with us here today: Mandy Moross was the first ever to give us a \$10 million gift in one pledge; Vivien Clore Duffield, who, with the Clore Foundation, exceeded \$10 million in her gifts over the last 13 years; Donald Sussman, likewise, exceeded \$10 million in this period, and, last but not least, Bill Davidson, who gave us more than \$20 million - actually over \$22 million.

There are also eight others who gave us huge gifts: the late Ted Arison and his daughter Shari, through the Arison Foundation; the Belfer family, through our Board member Bob Belfer; Dan Koshland, our Board member; Helen and Marty Kimmel, who were on their way here for this meeting but were forced to cancel when Marty fell ill. We send him our best wishes. There is also Nella Benozio and her late husband Leon; the Botnar family, the late Octav and his wife Marcela; the Wolfson Foundation, starting with Sir Isaac, and, in the past 13 years, his son Leonard; and, finally, an anonymous gift offered to the Weizmann Institute through the extraordinary services of Robert Parienti.

There are also four people who are no longer with us and who left us very large sums: Ida Kohen; our Board member Ilse Katz, who recently passed away but whose trustees are here today; Sasha Bond, our oldest donor, who passed away recently at the age of 104; and the Müller family from pre-World War II Berlin, whose vast property in East Berlin eventually devolved upon us in an unimaginable sequence of events.

JUST A BILLION DOLLARS



But these are only 16 people, and it takes many more to raise \$1 billion. In total, 38 people gave us \$5 million or more. I cannot mention all their names but you can “meet” most of them at the Jubilee Plaza courts.

Perhaps even more amazing are the 175 people who gave us \$1 million or more, most of whom contributed to the endowment.

In cash we now have an endowment of \$450 million. We have another \$50 million in a “virtual” endowment that is held by donors, who are under firm contractual obligation to forward the income to us. Sometimes the donors invest better than we can, so why not?

We have another \$80 million in firm signed pledges to be paid over the next few years. That makes a solid \$580 million. To that we can add another \$100 million in either oral promises - most of which, though not all, will materialize - or irrevocable wills and bequests. We are therefore in very good shape.

These achievements are the result of a great deal of hard work and dedication, and our supporting committees present a formidable team. The United States has brought in a little over 50 percent; Europe has contributed about 30 percent; Israel really came into its own as a funding source during these years and is now a major contributor; and then come the UK, Canada, and Latin America.

I cannot mention all the people who worked on our committees and made extraordinary contributions during these years. But I do want to mention six very special people: On the American Committee, the late Bernie Samers, who embraced me as a new President and taught me how to navigate the American fundraising scene; then Marty Kraar, my good friend, the Committee’s outstanding Executive Vice-President today; and the very special, eternal Rabbi Novick of Chicago. There were, of course, many other fundraisers in the United States - Executive Directors, Regional Directors and staff at all levels - many wonderful people to whom we owe a great deal, and many of whom have become my friends.

FUNDRAISING

Just a Billion Dollars

\$10M or more - 16 different donors

\$5M or more - 38 different donors

\$1M or more - 175 different donors

Total Endowment

Cash	\$450M	\$500M	\$580M	\$680M
"Virtual"	\$50M			
Firm Pledges		\$80M		
Irrevocables and Probables			\$100M	

In Europe there have also been many, but the three who meant the most are Robert Parienti, the one and only; Dov Keren-Ya'ar, who spent some of the 13 years here and some of them in Europe, and who has been extremely successful; and Avner Idan, who spent most of these 13 years in Europe. All three have performed miracles.

There were four Executive Directors in Britain, four in Israel, several in Canada, Latin America and various European countries. I am deeply indebted to each one of them, and I cherish my friendship with many of them.

I cannot mention by name all the outstanding lay leaders of all the committees. Their devotion, loyalty and friendship are legendary.

There are donors who, with great goodwill, leave money to the Institute as a bequest. Bequests have become a very important part of our income. There have also been cases - too many, regrettably, in recent years - where bequests intended for us, often involving substantial amounts, have been challenged or diverted away by trustees, relatives and others. It is our policy not to fight the family of

the deceased except when there is clear evidence of malicious intent or criminal activity. Our legal counsel Gad Kober has been valiantly fighting these behind-the-scenes battles for us all over the world, helped by local lay leaders and attorneys. Sometimes these cases go our way, sometimes they do not.

Three years ago, I accepted this Board's election to a full third term, but announced that I would only serve three years. In my address to the Board I then said:

"... we need to create for the Institute a solid financial future. This is the reason that I have agreed to remain President for three more years, so that I can undertake one more task: to increase dramatically the Institute's endowment to at least \$500 million, hopefully more. This is the only way to establish a solid foundation for the future, so that between government support, income from the endowment, ongoing donations, research grants that the scientists bring in, and royalties from industry, we will have a healthy financial situation and the ability to do practically anything we want. The rest will depend on the talents of the scientists.

If we can accomplish this, you the Board, I as President, and my colleagues in the management of the Institute will have done our duty. We can then tell the scientists: "Go do the work" - and I assure you, they will!"

The endowment in 1997 was \$230 million, and royalties \$11 million per year. The endowment is now \$580 million, and royalties an annual \$59 million.

This brings me to the subject of the technology transfer revolution. According to 1999 statistics, the institutions at the top of the league in royalty income in the United States are Columbia University with \$89 million, followed by the University of California system (eight campuses) with a combined \$74 million, then Florida State University with \$57 million (mainly from one product), Sloan Kettering, Yale, the University of Washington, Stanford, and Michigan State. No one else receives above \$20 million.

All of the above are huge institutions. Columbia University's research volume is six times greater than ours, the University of California system's is 38 times greater, and so on. And yet among these giants we, the Weizmann Institute, are No. 3 in the world in royalty income.

How did this happen? This is the result of three factors, each contributing equally. The first is the scientists' brilliance, without which there would be no patents and no inventions. Then there is the Institute's insistence on patenting, developing, and making the most of Yeda. Whereas a certain leading institute in the US spends \$15 million to make \$16 million, Yeda spends \$1 million to generate \$59 million. Perhaps we should spend \$2 million, but we have a very lean operation. The third component is that we fight our battles as they are fought in the business world. At least one-third, possibly one-half of our royalties would not be ours had we not fought the industries that tried to pocket our intellectual property.

THE ROYALTY LEAGUE (USA) AND THE WEIZMANN INSTITUTE

Columbia Univ.	\$89M	(x6)
Univ. of Calif. System	\$74M	(x38)
Weizmann Institute	\$59M	
Florida State Univ.	\$57M	(x3)
Sloan Kettering	\$43M	(x2)
Yale	\$41M	(x7)
Univ. of Washington	\$28M	(x10)
Stanford	\$28M	(x9)
Michigan State	\$24M	(x4)

No one else above \$20M	
MIT	\$16M
Harvard	\$10M
Cal. Tech	\$7M
Cornell	\$6M
Princeton	\$1.5M



We are scientists and we love to do scientific work, but we must fight for what is ours. The business world is not an easy world for us, but we have learned how to do battle in it, and have been successful. We have engaged in three major legal battles over the past 13 years, and won all three - victories that have earned us huge amounts. The heroes in this arena are the two Vice-Presidents for Technology Transfer, Professors David “Chico” Mirelman and Zvi Artstein, assisted by Yeda’s Board of Directors and a large group of people. It is an incredible success story, which begins with the wisdom of Professor Israel Dostrovsky, later President of the Institute, who, as an Institute scientist and inventor, paved the way toward the establishment of Yeda in 1959.

We were almost before our time in establishing a body such as Yeda, when few universities in the world realized this potential, and today we are the first in the world to receive such royalties relative to our size. Now, our having reached this unique position has led us to make a revolutionary recommendation to the Board.

A committee which I chaired is going to present to the Board a proposal, which will no doubt take time to implement, but is, I believe, crucial. Since income from royalties is so high and our inventors receive such large sums - and rightly so - it is also important that the Institute and Yeda, from their portion, share a certain amount of the income with all the other Institute employees - and I mean *all*. How to do this legally and properly? That has to be worked out. The committee made this recommendation unanimously and we hope it will be implemented before too long.

I want to finish covering this aspect of our work by saying something about the quality of our basic research. After all, our main product is not money, royalties, or patents, but scientific publication. There's a new sport in the world of science today called citation impact, which means counting the average number of times scientific publications are quoted by other scientists, and so getting an idea of the impact of an idea on the scientific world. It's an approximate measure of quality, not an accurate one. Sometimes you publish a piece of technical work and 100 people quote it. That does not mean it's great science. You can publish incorrect data, and 100 people quote it to correct the error. There is no perfect measure of quality, but it does give you some idea of a scientist's standing among his or her peers.

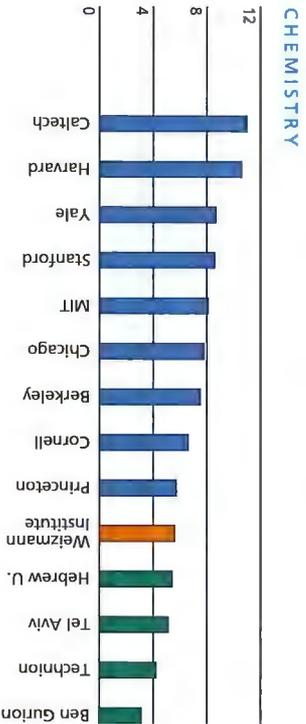
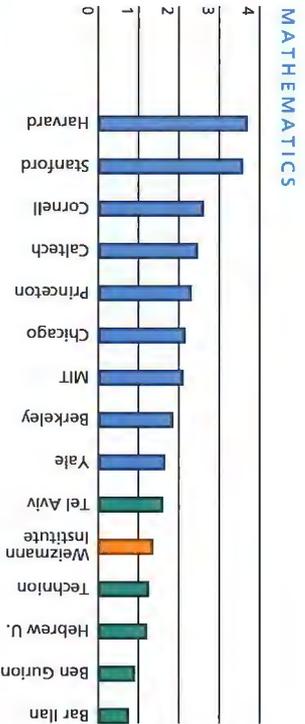
I've asked a colleague, Prof. Gideon Czapsky from the Hebrew University, to take ten top universities in America (Harvard, Stanford, Yale, Princeton, Cornell, Chicago, Rockefeller, MIT, UC Berkeley and Cal Tech), all the Israeli universities that engage in scientific research, and the Weizmann Institute, and to plot each one's citation impact over the period January 1, 1995 - January 1, 2000. I hasten to add that the results should be taken only as a general guide, indicating our approximate overall standing. It should not be viewed as an accurate quality rating of any of the relevant institutions in any of the indicated fields.

CITATION IMPACT

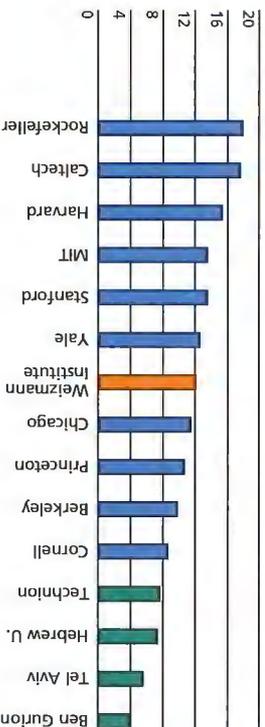
January 1, 1995 - January 1, 2000

(Average number of citations per scientific publication)

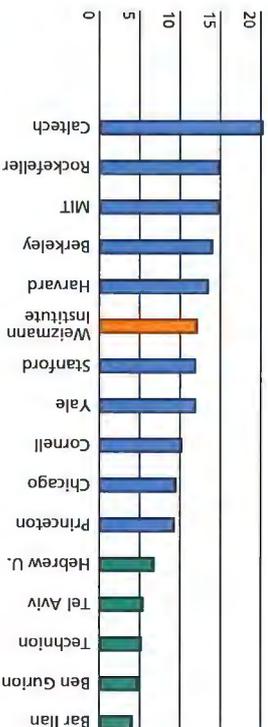
■ US ■ Israel ■ Weizmann Institute



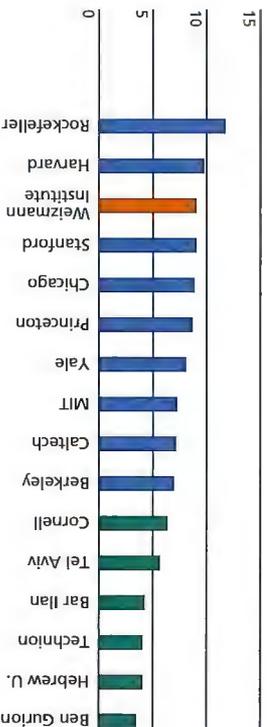
BIOLOGY & BIOCHEMISTRY



NEUROSCIENCE



PHYSICS



In mathematics, the top ten American universities are ahead, and all the Israelis are behind. Within Israel, we come second, after Tel-Aviv University. In chemistry, the Israelis are still behind the top ten American universities, though the Weizmann Institute is highest in Israel, and on a level with Princeton. In biology and biochemistry, our Institute is ahead of Chicago, Princeton, Berkeley and Cornell, behind Yale, Stanford, MIT, Harvard, and far ahead of all other Israeli institutions.

Moving on to the neurosciences, the Weizmann Institute is ahead of Stanford, Yale, Cornell, Chicago and Princeton. Last but not least is physics. Here we find only Harvard and Rockefeller ahead of the Institute, leaving the rest of the competition in the U.S. and in the Middle East far behind. This does not mean that the Weizmann Institute is better than Stanford in physics. In fact, I am sure it is not. But the fact that we are hanging in there with the top ten American universities in all scientific fields is not bad at all. It can be taken as some measure of the quality of the basic research conducted here.

Before I conclude, I take the liberty of making ten recommendations, not quite Ten Commandments, to the new administration - to Ilan, to the Institute, and to the Board:

1. Remind yourselves every morning that we are an institute of basic research. Yes, we like to make money and receive royalties; yes, we know how to raise funds; but we are, first and foremost, an institute of basic research.
2. Exploit the multi-disciplinary strength of the Institute. We have here a paradise for multidisciplinary research. That all the disciplines exist within a relatively compact campus is a great, perhaps even a unique, advantage.
3. Exploit technology transfer aggressively - don't let anyone run away with our intellectual property or avoid paying for it. Nurturing intellectual property is as important as invention itself, in the same way that marketing a product is as important as creating it.

4. When you receive donations, always emphasize the endowment. It is sometimes easier to spend the money immediately, but the endowment is the only source of financial security for the future.
5. Optimize the way we invest our endowment. I have accepted the suggestion made by the Board and by Ilan to remain active on this issue - I think it's a very important one, almost as important as raising new endowment gifts.
6. Carefully watch and develop the Institute's land - one of its greatest treasures. Major developments are expected over the next few years in this domain.
7. Don't neglect the units that deal with science education. Science education is not the Institute's main mandate, and never will be. But if not for the Weizmann Institute, there would be no one to bring enlightened science education to the Israeli public and to schoolchildren.
8. For every new activity initiated, discontinue something else that is no longer at the forefront of science. Otherwise, we expand beyond our means and create deficits. Convert old departments; close some and open others.
9. Remember that every employee slot is worth a \$1 million endowment. Be very stingy with employee slots, though within reason.
10. Finally, it is very important that the Weizmann Institute attempt to reach economic independence. I do not know how long the government will continue to support us.

INDEPENDENCE

Assume that every year:

New \$25M from Yeda
<u>New \$35M gifts to endowment</u>
<u>4% of total return plowed back</u>
<u>No inflation</u>

Then 13 years from now (2014):

<u>Endowment of \$1.8 Billion</u>

A small exercise in arithmetic is in order here: Let's assume that for the coming years, the Weizmann Institute will have an annual net \$25 million from Yeda to add to the endowment. This is realistic. Let's also assume that we will raise \$35 million in donations to add to the endowment each year. This is less than we did in recent years, and again, realistic. Let us further assume that the endowment is invested in such a way that it enables us to spend five or six percent on the budget and to plow back into the endowment an additional four percent of the total return. This is less than the average U.S. endowment of a similar size, and again, realistic. Finally, let's assume, just as a mathematical exercise, that there is no inflation. You then find that 13 years from now, in the year 2014, the endowment will reach \$1.8 billion - the sum we would need today to be completely independent. Assuming that the inflation is not zero, all the above numbers need to be revised upward, but the result is not drastically different.

I am not saying that the goal of economic independence can be easily achieved, or that it can be achieved in one Presidential term. But, in the long run, it is within sight. This is not a pipe dream; I see this as a serious proposition to consider, and as a major goal for future Presidents.

Having said all that, I, again, wish Ilan and the new administration every success. I will be very happy to help.

It is now time for personal thanks. First to Marcus Sieff, our former Chairman and beloved Chancellor, who is no longer with us. To me he was a guiding light.

To my two Chairmen, Murray Koffler and Gershon Kekst. Murray chose me, and I chose Gershon. I enjoyed an excellent relationship with them both. I cannot think of one moment over the past 13 years in which the Chairman and I had even a semi-serious conflict. I thank both of you for this. I thank Gershon, especially, for the last eight years, which were, thanks to him, a wonderful adventure. Gershon is a dream Chairman - supportive, wise, devoted and a true friend.

I thank the three Chairmen of the Executive Council: Moshe Porath, Eli Hurvitz and Joshua Maor. Each in his own term was a tremendous, almost daily, help.

I also want to thank the 12 Deputy Chairmen of the Board during these years. You are too many to mention, but each one of you knows how much I appreciate what you have done.

I would like to thank all the members of the Board. I have made many good friends among you, to whom I will stay very close, and you all know how much I appreciate your help and support.

I want to say a very warm thank you to the members of the Scientific and Academic Advisory Committee, those scientists who drop whatever they are doing to come here once a year, sometimes twice, to review our scientific work. You are a tremendous help to us. Among you are my colleagues, friends, and teachers. It has been an amazing experience working with you.

I want to thank my Vice-Presidents: Professor Ruth Arnon, who served for five wonderful years as No. 2, and later, in a different capacity, as Vice-President for International Scientific Relations.

And Professor Yoram Groner, the real hero of the last eight years, and the most superb No. 2 an organization could hope for. It's too bad he did not want to be No. 1, but that was his choice.

There were also the three Vice-Presidents for Finance and Administration: Gideon Elrom, David Schlachet, and Yaakov Naan. It was Yaakov Naan who accompanied me through good and bad times in the last few years - and especially through the very good and very bad times of the last year. I salute you, Yaakov, for your tremendous friendship, collaboration and leadership.

Professors "Chico" Mirelman and Zvika Artstein, were the two Vice- Presidents for Technology Transfer, who presided over the tremendous achievements of Yeda. I salute both.

Professor Yossi Yarden, who has served as Vice-President for Academic Affairs for the last two years, has made an important contribution.

And then there are the two Hanans: Bar-On in the first few years, and Alon in the last few. Each, with his own style and in his own way, has led the entire international science and fundraising operation.

I appointed 19 deans and two heads of the Division of Information Systems, all of them very successful, with two serving longer than others: Professor Itamar Procaccia, who reshaped Chemistry, for twelve years; Professor Zvika Artstein, in Mathematics, for nine. I cannot mention all the others, but I salute them all. Every faculty was totally reorganized during these years, and all the deans have been indispensable partners in this process.

I want to mention my old and good friend Danny Tamari, head of Logistics and Research Services. I have already mentioned Gad Kober, our legal counsel; likewise, the heads of all the administrative departments. Finally, the small group of people who, although they

do not report directly to me, worked personally with me: the academic secretaries, Drs. Arie Nissenbaum and Boaz Avron; the group we call “the third floor”, mostly Gila Shmueli, who performs incredible services for the Institute; the tremendously devoted Gila Yagur; the one and only Ilana Eisen; Dov Keren-Ya’ar in his eight years of service with me here as the man of all seasons and all trades, in tireless contact with donors and endless devotion and energy; Yivsam Azgad, our Spokesman and very capable head of our publications and media relations over the last few years; and Navit Kopelis and her excellent team in the Levinson Visitors Center.

And, last but not least, Dina Lavi, who has saved me from an infinite amount of trouble, protected me, helped me, led me, yelled at me, and gave me orders - the only Institute employee who dared to do so quite comfortably. Dina, thank you very much.

I do not, as a rule, believe that a person should thank members of his family in public. This is better done in private. But I would like to thank Elfi on behalf of the Weizmann Institute for what she has done for the Institute. It will be years before the facts are known, if ever.

I want to tell you, Ilan, that you are not alone. You are taking with you into your journey as Institute President 2500 people, the employees and students of this Institute - and they are an amazing group. Among them, for example, is a retired employee who quietly, without telling anybody, decided to contribute 20,000 shekels of his retirement package to the Institute; and a graduate student who last year decided she did not need her scholarship, and donated it to the Institute. Among them, too, is a member of the academic staff who anonymously contributed a significant portion of well-deserved royalties to the welfare of certain employees in need.

These are people who, in 1993-1994, agreed to forfeit a percentage of their salaries to save the Institute - and they did. These are also people who, when you chat with them in an elevator or in the cafeteria, give you the feeling that this is their home. When the Institute is successful,

they are proud, when it is not, they are devastated. They are full participants in the achievements of the Institute. I have been to many places in the world, but I have never seen such spirit. Ilan, this is your greatest asset.

With that, I say thank you to all of you.

Haim Harari
President

November 13, 2001



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