



Compugen Ltd.

NOTICE OF ANNUAL GENERAL MEETING OF SHAREHOLDERS

To be held on Wednesday, September 27, 2006

Notice is hereby given that an Annual General Meeting (the "Meeting") of the Shareholders of Compugen Ltd. (the "Company") will be held at the Company's offices at 72 Pinchas Rosen Street, Tel Aviv, Israel, on Wednesday, September 27, 2006, at 10:00 a.m. (Israel time) for the following purposes:

1. To elect three directors to serve during the upcoming year.
2. To ratify the appointment of Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, as the independent external auditors of the Company for the year ending December 31, 2006, and to approve the terms of their compensation.
3. To discuss the Company's audited financial statements for the year ended December 31, 2005.

Shareholders of record at the close of business on August 22, 2006, will be entitled to notice of, and to vote at, the Meeting. All shareholders are cordially invited to attend the meeting in person.

Shareholders who do not expect to attend the meeting in person are requested to mark, date, sign and mail the enclosed proxy as promptly as possible in the enclosed stamped envelope. Beneficial owners who hold their shares through members of the Tel Aviv Stock Exchange ("TASE") may either vote their shares in person at the Meeting by presenting a certificate signed by a member of the TASE which complies with the Israeli Companies Regulations (Proof of Ownership for Voting in General Meetings) — 2000 as proof of ownership of the shares, or send such certificate along with a duly executed proxy to the Company at 72 Pinchas Rosen Street, Tel Aviv 69512, Israel, Attention: General Counsel.

By Order of the Board of Directors,

A handwritten signature in black ink, appearing to read "Martin S. Gerstel", written over a horizontal line.

Compugen Ltd.
Martin S. Gerstel
Chairman

Date: August 23, 2006

PROXY STATEMENT

COMPUGEN LTD.
72 Pinchas Rosen St.
Tel Aviv, 69512 Israel
Tel. 972-3-765-8585

ANNUAL GENERAL MEETING OF SHAREHOLDERS **To be held on Wednesday, September 27, 2006**

The enclosed proxy is being solicited by the board of directors (the "Board of Directors") of Compugen Ltd. (the "Company") for use at the Company's Annual General Meeting of Shareholders (the "Meeting") to be held at the Company's corporate offices, located at the address set forth above, on September 27, 2006, at 10:00 a.m. (Israel time), or on any adjournment thereof. Upon the receipt of a properly executed proxy in the form enclosed, the person named as proxy therein will vote the ordinary shares, par value New Israeli Shekel ("NIS") 0.01 each, of the Company (the "Ordinary Shares") covered thereby in accordance with the directions of the shareholder executing the proxy; in the absence of such instructions, the Ordinary Shares represented thereby will be voted in accordance with the recommendations of the Board of Directors.

With respect to the proposals set forth in the accompanying Notice of Meeting, a shareholder may vote in favor of any of the proposals or against any of the proposals or may abstain from voting on any of the proposals. Shareholders should specify their choices on the accompanying proxy card. If no specific instructions are given with respect to the matters to be acted upon, the shares represented by a signed proxy will be voted FOR the proposals set forth in the accompanying Notice of Meeting.

The Proxy solicited hereby may be revoked at any time prior to its exercise, by means of a written notice delivered to the Company, by substitution of a new proxy bearing a later date or by a request for the return of the proxy at the Meeting. The Company expects to solicit proxies by mail and to mail this proxy statement and the enclosed form of proxy to shareholders on or about August 25, 2006. Directors, officers and employees of the Company may also solicit proxies by telephone, facsimile and personal interview.

The Company will bear the cost of the preparation and mailing of its proxy materials and the solicitation of proxies. Copies of solicitation materials will be furnished to brokerage firms, nominees, fiduciaries and other custodians for forwarding to their principals, and the reasonable fees and expenses of such forwarding agents will be borne by the Company. Only holders of record of Ordinary Shares at the close of business on August 22, 2006 are entitled to notice of, and to vote at, the Meeting.

On August 22, 2006, 27,955,178 Ordinary Shares were outstanding and entitled to vote (the "Outstanding Ordinary Shares"). Each Ordinary Share is entitled to one vote on each matter to be voted at the Meeting. Two or more shareholders, present in person or by proxy, who hold or represent at least $33\frac{1}{3}\%$ of the Outstanding Ordinary Shares constitutes a quorum for the Meeting. If within an hour from the time appointed for the Meeting a quorum is not present, the Meeting will stand adjourned for one week, to Wednesday, October 4, 2006, at the same time and place, without it being necessary to notify the shareholders thereof. At such

adjourned meeting, any two shareholders present in person or by proxy shall constitute a quorum.

Proposal 1 with respect to the election of three directors and proposal 2 relating to the appointment and remuneration of independent public accountants, to be presented at the Meeting requires the affirmative vote of the shareholders present in person or by proxy and holding Ordinary Shares amounting in the aggregate to at least a majority of the votes cast with respect to such proposal.

PRINCIPAL SHAREHOLDERS

The following table sets forth certain information regarding beneficial ownership of the Ordinary Shares as of December 31, 2005, by each person who is known by the Company to own beneficially more than 5% of the Outstanding Ordinary Shares. The voting rights of the Company's major shareholders do not differ from the voting rights of other holders of the Ordinary Shares.

<u>Beneficial Owner</u>	<u>Number of Shares Beneficially Owned</u>	<u>Percent of Ownership</u>
AXA Assurances I.A.R.D. Mutuelle ⁽¹⁾	4,718,037	16.9
Clal Industries and Investments Ltd. ⁽²⁾	3,056,274	11
Martin S. Gerstel ⁽³⁾	1,692,568	6.1

(1) This disclosure is based on information disclosed by AXA Assurances I.A.R.D. Mutuelle on Form 13G, filed with the SEC on February 14, 2006.

(2) Includes 10,526 shares held by Clal Industries & Investments Ltd. and 3,045,748 shares held by Clal Biotechnology Industries Ltd. Clal Industries & Investments Ltd.'s address is 3 Azrieli Center, Tel Aviv 67023, Israel. This disclosure is based on information disclosed by Clal Industries & Investments Ltd. on Form 13D, filed with the SEC on May 19, 2003.

(3) Includes 550,000 shares held by Shomar Corporation, an affiliate of Mr. Gerstel, 1,142,568 shares held by Merrill Lynch IRA for Martin Gerstel, of which Martin Gerstel is the beneficiary. Based on information disclosed by Mr. Martin Gerstel on Form 13G, filed with the SEC on February 6, 2006.

1. ELECTION OF DIRECTORS

The Board of Directors has nominated Mr. Martin S. Gerstel, Mr. Ruben Krupik and Mr. Alex Kotzer for election as directors, to serve until the next annual general meeting of shareholders, and until their respective successors are duly elected and shall qualify.

In addition, the Board of Directors consists of Dr. Orna Berry and Mr. David Schlachet, both of whom were elected at the 2004 Shareholders' General Meeting to serve as the Company's outside directors for a term of three years.

In the absence of instructions to the contrary, the persons named in the enclosed proxy will vote the Ordinary Shares represented thereby FOR the election of the nominees listed below. If any of such nominees is unable to serve, the persons named in the proxy shall vote the Ordinary Shares for the election of such other nominees as the Board of Directors may propose. The following nominees have advised the Company that they will serve as directors if elected.

The following table provides certain relevant information concerning the nominees, including their principal occupation during at least the past five years.

<u>Nominee</u>	<u>Age</u>	<u>Principal Occupation</u>
Martin S. Gerstel	65	Martin Gerstel has served as the Company's chairman since August 1997. Prior to relocating to Israel in 1994, Mr. Gerstel was co-chairman and CEO of ALZA Corporation, which he helped found in 1968. Mr. Gerstel is also the Chairman of Evogene Ltd. and Keddem Bioscience Ltd., co-founder and co-chairman of Itamar Medical, and serves as a director of Symyx Technologies, Yissum Ltd., Yeda Ltd. and the Foundation for the National Medals of Science and Technology. He is a member of the Board of Governors and the Executive Committee of The Weizmann Institute of Science and The Board of Governors of The Hebrew University of Jerusalem, and is an advisor to the Burrill Life Science Funds and the board of the Israel-US Bi-national Industrial Research and Development (BIRD) Foundation. Mr. Gerstel holds a B.S. from Yale University and an MBA from Stanford University.
Alex Kotzer	60	Alex Kotzer joined Compugen in September 2005 as President and Chief Executive Officer and a director. Mr. Kotzer brings with him over thirty years of senior managerial experience in various industries. Prior to joining Compugen, he served for twelve years at Serono (NYSE: SRA), a global biotechnology leader, headquartered in Switzerland. During his tenure at Serono, Mr. Kotzer held several senior positions, most recently as Vice President of Biotechnology Manufacturing. Previously, Mr. Kotzer was President and Chief Executive Officer of InterPharm, Serono's Israeli affiliate. Before joining Serono, he held a variety of managerial positions in the food and chemical industries. Mr. Kotzer received his B.Sc. in Chemical Engineering from the Technion, Israel Institute of Technology.
Ruben Krupik	55	Ruben Krupik joined Compugen in 2003. Mr. Krupik serves as the President and CEO of Arte Venture Group Ltd., which provides a framework of business development, investments and management for various large investment entities in Israel. Mr. Krupik serves as the Executive Director of Clal Biotechnology Industries, the general manager of Biomedical Investments, the active chairman of Steps Ventures, and the manager of the Arison Group's technology division. From 1991 to 2000 Mr. Krupik held a number of positions, including the President and CEO of RDC (Rafael Development Corporation Ltd.). Prior to that, Mr. Krupik held a number of senior management positions at Tadiran Communications Group. Mr. Krupik holds an LL.B. in law from the Tel Aviv University and a BA in Economics and Political Science from the Hebrew University, Israel.

In addition to the above-mentioned nominees, each of Dr. Berry and Mr. Schlachet serves as an outside director on our board of directors for a fixed term, which expires in June 2007.

Orna Berry 56 Orna Berry, Ph.D. joined the Board of Directors as an outside director in June 2001. She is a Venture Partner at Gemini Israel Funds, and the Chairperson at Lambda Crossing, Ltd. and at Adamind Ltd. From 1997 to 2000, she was the Chief Scientist of the Ministry of Industry and Trade of the Government of Israel. Dr. Berry was the co-founder of ORNET Data Communication Technologies Ltd. She served as the Chief Scientist of Fibronics and as a senior research engineer in several companies, including IBM and UNISYS. Dr. Berry received her Ph.D. in computer science from the University of Southern California and her M.A. and B.A. degrees in statistics and mathematics from Tel Aviv and Haifa Universities, respectively.

David Schlachet 61 David Schlachet joined the Board of Directors as an outside director in June 2001. He is a managing partner of BioCom Management and Investment (2002) Ltd, which serves as the managing company of BioCom venture capital fund, focused on life sciences and since July 2004 has been the CFO of Syneron Medical Ltd. He also serves on the Boards of Directors of: Poalim Capital Markets & Investments Ltd., Harel Capital Markets Ltd., Taya Investment Company Ltd., United Studios Ltd., Pharmos Ltd., Edgar Development and Investment Ltd., ProSeed Venture Capital Fund Ltd., and Israel Discount Bank Limited. From 1997 to July 2000, he was Chairman of the Board of Directors of Elite Industries Ltd. From 1996 to January 2000, Mr. Schlachet served as Vice President of the Strauss Group of companies. From 1990 to 1996, he was Vice President, Finance and Administration at the Weizmann Institute of Science. Mr. Schlachet holds a B.Sc. in chemical engineering from the Technion, Israel Institute of Technology and an MBA from Tel Aviv University.

The Company's Articles of Association specify that the number of directors will be at least five but not more than fourteen.

Remuneration of Directors and Senior Management

The aggregate compensation paid by us and by our wholly-owned subsidiaries to all persons who served as directors or senior management for the year 2005 (12 persons) was approximately \$1,461,000. This amount includes approximately \$36,000 paid to all of our non-employee directors (such fees are adjusted semi-annually to reflect changes prescribed by regulations under Israel's Companies Law, 5759-1999, for payment to outside directors) and approximately \$86,000 set aside or accrued to provide pension, severance, retirement or

similar benefits. All non-employee members of our board of directors are reimbursed for their expenses for each meeting attended and are eligible to receive share options under our share option plans.

During 2005, we granted a total of 944,000 options to purchase ordinary shares to our directors and senior management, as a group. These options are exercisable at a range of between between \$3.20 and \$6.10 per share, and expire from six to ten years after their respective date of grant. As of December 31, 2005, there were a total of 2,533,420 outstanding options to purchase ordinary shares that were granted to our directors and senior management.

The shareholders of the Company are requested to adopt the following resolution:

RESOLVED, to appoint the directors as nominated above.

2. PROPOSAL TO RATIFY THE APPOINTMENT OF INDEPENDENT PUBLIC ACCOUNTANTS

The Board of Directors, in accordance with the recommendation of the Audit Committee, has appointed the accounting firm of Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, as the external auditors of the Company for the year ending December 31, 2006. Kost Forer Gabbay & Kasierer, has audited the Company's books and accounts and performed other accounting services for the Company since 2002.

The fees for audit services for the year 2006, which will be paid to Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, as the external auditors of the Company, are US \$70,000.

The fees paid to Kost Forer Gabbay & Kasierer, for services other than audit services for 2005 were \$12,120.

The shareholders of the Company are requested to adopt the following resolution:

RESOLVED, to approve and ratify the appointment of Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, as the external auditors of the Company for the year ending December 31, 2006 and the payment to them both of fees in the amount of US \$70,000 for audit services in 2006 and fees in the amount of \$12,120 for services other than audit services provided during 2005.

The Board of Directors recommends that the shareholders vote FOR the approval and ratification of the appointment of Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, as the external auditors of the Company and of their fees.

3. DISCUSSION OF FINANCIAL STATEMENTS

At the Meeting, there will be a discussion of the Company's audited financial statements for the year ended December 31, 2005.

Management is not aware of any other matters to be presented at the Meeting. If, however, any other matters should properly come before the Meeting or any adjournment

thereof, the proxy confers discretionary authority with respect to acting thereon, and the person named in the enclosed proxy will vote on such matters in accordance with his or her best judgment.

Shareholders are urged to complete and return their proxies promptly in order to, among other things, insure action by a quorum and to avoid the expense of additional solicitation. If the accompanying proxy is properly executed and returned in time for voting, and a choice is specified, the shares represented thereby will be voted as indicated thereon. If no specification is made, proxies received by the Company will be voted in favor of each of the proposals described in this Proxy Statement.

By Order of the Board of Directors



Martin S. Gerstel

Chairman

Date: August 23, 2006