

**Notice of Annual Meeting of Stockholders  
to be held on August 14, 2012  
and Proxy Statement**

The Annual Meeting of Stockholders of Spherix Incorporated (the "Company") will be held on August 14, 2012, at 9:00 a.m. Eastern time, at the Bethesda Marriott Suites, 6711 Democracy Boulevard, Bethesda, Maryland 20817.

The items of business are:

- (1) Election of six (6) Directors.
- (2) Authorization to issue securities in one or more non-public offerings in accordance with NASDAQ Marketplace Rule 5635.
- (3) Amendment of Amended and Restated 1997 Stock Option Plan.
- (4) To approve an amendment to the Company's Certificate of Incorporation, as amended (the "Amendment"), which will authorize a reverse stock split of the Company's issued and outstanding common stock at a ratio to be designated by the Board of Directors within a range of 1:5 to 1:20 and will reduce the number of authorized shares of common stock at a corresponding ratio (the "Reverse Stock Split").
- (5) Ratification of the appointment of the independent accountants.
- (6) Authorization to adjourn the Annual Meeting if necessary or appropriate, including to solicit additional proxies in the event that there are not sufficient votes at the time of the Annual Meeting or adjournment or postponement thereof to approve any of the foregoing proposals.
- (7) Transaction of other business that may properly come before the Meeting.

These items are more fully described in the following pages, which are hereby made part of this Notice.

The Company's Proxy Statement, Proxy Card, and Annual Report on Form 10-K accompany this Notice.

Pursuant to the By-Laws of the Company, the Board of Directors has fixed the close of business on June 15, 2012, as the Record Date for determination of Stockholders entitled to Notice and to vote at the Annual Meeting and any adjournment thereof. Only common stockholders of record on the date so fixed are entitled to vote.

**Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held on August 14, 2012.** Our Proxy Statement is attached. Financial and other information concerning the Company is contained in our Annual Report on Form 10-K for the year ended December 31, 2011, including financial statements. Under rules issued by the Securities and Exchange Commission ("SEC"), we are providing access to our proxy materials both by sending you this full set of proxy materials, including a Proxy Card, and by notifying you of the availability of our proxy materials on the internet. The Proxy Statement and our Annual Report on Form 10-K are available on <http://spherix.com/investors.html>.

If you have any questions or need assistance voting your shares of our common stock please contact our proxy solicitor, Eagle Rock Proxy Advisors LLC, 12 Commerce Drive, Cranford, NJ 07016, by calling toll free 855-816-0624.

**BY ORDER OF THE BOARD OF DIRECTORS  
Katherine M. Brailer, Corporate Secretary**

***PLEASE EXECUTE AND PROMPTLY RETURN THE ENCLOSED PROXY CARD WHETHER OR NOT YOU EXPECT TO ATTEND THE MEETING. IF YOU DO ATTEND THE MEETING AND VOTE PERSONALLY, YOUR PROXY WILL AUTOMATICALLY BE REVOKED AT THAT TIME.***

## PROXY STATEMENT FOR ANNUAL MEETING OF STOCKHOLDERS AUGUST 14, 2012

This Proxy Statement is being mailed on or about June 18, 2012, with the solicitation of Proxies in the accompanying form by the Board of Directors of Spherix Incorporated, a Delaware Corporation. The Annual Meeting of its Stockholders will be held on August 14, 2012, at 9:00 a.m. Eastern time, at the Bethesda Marriott Suites, 6711 Democracy Boulevard, Bethesda, Maryland 20817. The cost of solicitation of Proxies will be borne by the Company. The Company will reimburse brokers, banks, and other custodians, nominees, and fiduciaries for reasonable expenses incurred by them in sending Company-supplied Proxy materials to the beneficial owners of the common stock. In addition to solicitations by mail, Directors, Officers, and employees of the Company may solicit Proxies personally or by telegraph or telephone without additional compensation.

All shares represented by Proxy will be voted at the Annual Meeting in accordance with the choices specified on the Proxy, and where no choice is specified, in accordance with the recommendations of the Board of Directors. Thus, where no choice is specified, the Proxies will be voted for the election of Directors, for the authorization to issue securities in one or more non-public offerings, for the amendment of the Amended and Restated 1997 Stock Option Plan, for the amendment to the Company's Certificate of Incorporation to authorize a reverse stock split, for ratification of the appointment of independent accountants, and for authorization to adjourn the Annual Meeting if necessary or appropriate. A Stockholder giving a Proxy will have the power to revoke it at any time before it is exercised. A Proxy will be revoked automatically if the Stockholder who executed it is present at the Annual Meeting and elects to vote in person.

Each Stockholder will be entitled to one vote for each share of common stock, \$.01 par value per share ("Common Stock"), held by the Stockholder at the close of business on June 15, 2012. At that time, there were 4,159,776 shares of Common Stock outstanding.

In accordance with the laws of the State of Delaware and the Company's Certificate of Incorporation and By-Laws, a majority of the outstanding shares of Common Stock will constitute a quorum at the Annual Meeting. Abstentions and broker non-votes are counted as present and entitled to vote for purposes of determining a quorum for the transaction of business. A broker non-vote occurs when a nominee holding shares for a beneficial owner does not vote on a particular proposal because the nominee does not have discretionary voting power with respect to that item and has not received instructions from the beneficial owner. Abstentions and broker non-votes are not counted for purposes of the election of Directors. An abstention will generally be counted as a vote against the approval of any other matter to come before the Annual Meeting. Broker non-votes will not be voted for any other matter scheduled to come before the Annual Meeting.

**It is anticipated that the Directors and Officers will vote their shares of Common Stock *in favor of the Nominees for election to the Board of Directors listed herein; for the authorization to issue securities in one or more non-public offerings; for the amendment of the Amended and Restated 1997 Stock Option Plan; for the amendment to the Company's Certificate of Incorporation to authorize a reverse stock split; for ratification of the appointment of independent accountants listed herein; and for authorization to adjourn the Annual Meeting if necessary or appropriate.***

### ELECTION OF DIRECTORS (Item 1 on the Proxy Card)

Directors are to be elected at the Annual Meeting to serve until the next Annual Meeting of Stockholders. The Board of Directors has currently fixed the number of Directors at six (6). Unless otherwise instructed, the persons named in the accompanying Proxy intend to vote the shares represented by the Proxy for the election of the six (6) Nominees listed below. Although it is not contemplated that any Nominee will decline or be unable to serve as a Director, in such event, Proxies will be voted by the Proxy holder for such other persons as may be designated by the Board of Directors, unless the Board of Directors reduces the number of Directors to be elected. Election of a Board of Directors requires a plurality of the votes cast at the Meeting.

The current Board of Directors consists of Mr. Douglas T. Brown, Dr. Claire L. Kruger, Dr. Robert A. Lodder, Jr., Mr. Aris Melissaratos, Mr. Thomas B. Peter, and Dr. Robert J. Vander Zanden. The Board of Directors has determined that a majority of its members, being Messrs. Brown, Melissaratos, Peter, and Vander Zanden, are independent Directors within the meaning of the applicable NASD rules.

The following table sets forth the Nominees for Membership on the 2012-2013 Spherix Board of Directors. It also provides certain information about the Nominees as of June 15, 2012.

**Nominees for Election to Board of Directors**

Name	Age	Position	Director Since
Douglas T. Brown	58	Director	2004
Claire L. Kruger	53	Director, and Chief Executive Officer	2007
Robert A. Lodder, Jr.	53	Director, and President	2005
Aris Melissaratos	68	Director	2008
Thomas B. Peter	59	Director	2009
Robert J. Vander Zanden	66	Director, and Chairman of the Board	2004

Mr. Douglas T. Brown, a Board Member since 2004, is Senior Vice President and Manager of the Corporate Banking Government Contracting Group for PNC Bank N.A., Washington, DC. Mr. Brown has been with PNC and its predecessor bank, Riggs Bank, since 2001 and previously worked for Bank of America, N.A. and its predecessor banks for 16 years as a Loan Officer, as well as a manager of Loan Officers in the Mid-Atlantic region. Subsequent to 1990, the majority of Mr. Brown’s customers are companies that provided services to the Federal Government and State governments. Mr. Brown holds a B.A. degree in Political Science from American University and a graduate degree from The Stonier Graduate School of Banking at the University of Delaware. He is not now, nor has he been for the past five years, a director of a public, for-profit company other than Spherix.

Dr. Claire L. Kruger was elected to the Spherix Incorporated Board of Directors in August 2007, and was also elected Chief Executive Officer and Director of Health Sciences at that time. Dr. Kruger received her Ph.D. in Toxicology from Albany Medical College, and her B.S. in Biology from Clarkson College. With more than 20 years of consulting experience, her primary areas of expertise are in foods, consumer products and pharmaceuticals, where she provides scientific, regulatory, and strategic support to clients in both the US and international regulatory arenas. Dr. Kruger has conducted toxicity evaluations of foods and food contaminants, as well as health risk assessments and exposure assessments of drugs, cosmetics, and pesticides. Her clients include food, drug, and dietary supplement manufacturers, agricultural producers, biotechnology companies, trade associations, and law firms. In her role as a consultant, Dr. Kruger has been involved in the safety evaluation of a variety of consumer products, providing oversight of product compliance with current and emerging scientific and regulatory guidance. She is not now, nor has she been for the past five years, a director of a public, for-profit company other than Spherix.

Dr. Robert A. Lodder, Spherix Incorporated Board Member since 2005, was elected President in August 2007. He served as a Professor of Pharmaceutical Sciences at the College of Pharmacy, University of Kentucky Medical Center, and holds joint appointments in the Department of Electrical and Computer Engineering and the Division of Analytical Chemistry of the Department of Chemistry at Kentucky. Dr. Lodder received his B.S. degree cum laude in Natural Science in 1981, and his M.S. in Chemistry in 1983 from Xavier University, Cincinnati, Ohio. He received his Ph.D. in Analytical Chemistry in 1988 from Indiana University. He was a founder of InfraReDx, Inc. in 1998 and Prescient Medical, Inc. in 2004. Neither of these companies are public, and they do not engage in business with Spherix. He is not now, nor has he been for the past five years, a director of a public, for-profit company other than Spherix.

Mr. Aris Melissaratos was elected to the Spherix Board of Directors in February 2008. He currently serves as Senior Advisor to the President of The Johns Hopkins University with responsibilities for technology transfer, corporate partnerships, and enterprise development. From 2003 to 2007, he served as Secretary of Business and Economic Development for the State of Maryland, driving the state’s unemployment figures to an impressive 3.6% and positioning Maryland for leadership in the emerging “knowledge economy.” He worked for Westinghouse Electric Corporation for 32 years, culminating as the corporation’s Chief Technology Officer and Vice President for Science and Technology, responsible for running Westinghouse’s research and development functions. He also served as the Chief Operations Officer for the company’s Defense Electronics Group, where he was responsible for managing 16,000 employees (9,000 engineers) and \$3.2 billion dollars of sales. After Westinghouse, he became Vice President of Thermo Electron Corporation and CEO of its Coleman Research Corporation and Thermo Information Solutions subsidiaries. He formed Arnel Scientifics, LLC, which invested in over 30 start-up companies in Life Sciences and Advanced Technology. He holds a B.E.S. in electrical engineering from The Johns Hopkins University, a Master of Science in engineering management from George Washington University, and has

completed the program for Management Development at the Harvard University School of Business. He completed the course work for a Ph.D. in International Politics at the Catholic University of America but did not complete the dissertation. Mr. Melissaratos currently serves as a member of the Board of Directors of Avatech Solutions, Inc. in Owings Mills, MD, a software and technology firm; and as a member of the Advisory Board of Stronghold Advisors, a middle-market advisory firm in the Mid-Atlantic region, in Columbia, MD. Neither of these companies engage in business with Spherix.

Mr. Thomas B. Peter was elected to the Spherix Board of Directors in May 2009. He spent his entire 33-year career in the pharmaceutical industry. Most recently he served as a Regional Vice President for GlaxoSmithKline (GSK). Prior to that, Mr. Peter had significant experience dealing with managed care organizations, serving as Director of National Accounts Sales at GSK, and before that position, worked as a Group Marketing Director. Mr. Peter is a biology major graduate of Gettysburg College and a Master's graduate of St. Joseph's University in Philadelphia. He is not now, nor has he been for the past five years, a director of a public, for-profit company other than Spherix.

Dr. Robert J. Vander Zanden, Board Member since 2004, was elected Chairman of the Board in 2009. Having served as a Vice President of R&D with Kraft Foods International, he brings a long and distinguished career in applied technology, product commercialization, and business knowledge of the food science industry to Spherix. Dr. Vander Zanden holds a Ph.D. in Food Science and an M.S. in Inorganic Chemistry from Kansas State University, and a B.S. in Chemistry from the University of Wisconsin – Platteville, where he was named a Distinguished Alumnus in 2002. In his 30-year career, he has been with ITT Continental Baking Company as a Product Development Scientist; with Ralston Purina's Protein Technology Division as Manager Dietary Foods R&D; with Keebler as Group Director, Product and Process Development (with responsibility for all corporate R&D and quality); with Grupo Gamesa, a Frito-Lay Company, as Vice President, Technology; and with Nabisco as Vice President of R&D for their International Division. With the acquisition of Nabisco by Kraft Foods, he became the Vice President of R&D for Kraft's Latin American Division. Dr. Vander Zanden retired from Kraft Foods in 2004. He currently holds the title of Adjunct Professor and Lecturer in the Department of Food, Nutrition and Packaging Science at Clemson University, where he also is a member of their Industry Advisory Board. His focus on achieving product and process innovation through training, team building and creating positive working environments has resulted in his being recognized with many awards for product and packaging innovation. Dr. Vander Zanden is not now, nor has he been for the past five years, a director of a public, for-profit company other than Spherix.

The Board of Directors has determined that each of Messrs. Brown, Melissaratos, Peter, and Vander Zanden, constituting a majority of the Nominees, are independent Directors within the meaning of the applicable NASD rules.

The by-laws provide that a Stockholder of the Company entitled to vote for the election of Directors may nominate persons for election to the Board of Directors by providing written notice to the Secretary of the Company not less than 10 and not more than 30 days prior to the Annual Meeting. Such notice shall include (i) the name and address of the Stockholder and of each person to be nominated, (ii) a representation that the Stockholder is a holder of record of stock of the Company entitled to vote at such Meeting and intends to appear in person or by proxy at the Meeting to nominate each person specified, (iii) a description of all understandings between the Stockholder and each nominee and other person (naming such person) pursuant to which the nomination is to be made by the Stockholder, (iv) such other information regarding each nominee as would be required to be included in a proxy statement filed pursuant to the proxy rules of the Securities and Exchange Commission had the nominee been nominated by the Board of Directors and (v) the consent of each nominee to serve as a Director of the Company if so elected. The Chairman of the Meeting may refuse to acknowledge the nomination of any person not made in compliance with the foregoing procedures.

Except as noted above, no Director serves as a director of any other publicly-held company. There is not and has not been for the previous two fiscal years any relationship between the Company and any company in which any Director has a 1% or greater interest.

The Company's Board of Directors held three (3) regular meetings from August 31, 2011 through June 15, 2012; and eight (8) special meetings. The Board of Directors has six (6) Committees: Audit, Compensation & Benefits, Executive, Nominating, Pricing, and Strategic Planning. The Committees generally meet quarterly.

The Audit Committee members are Mr. Brown, Chair; Mr. Melissaratos, and Dr. Vander Zanden. The Committee has authority to review the financial records of the Company, deal with its independent auditors,

recommend to the Board policies with respect to financial reporting, and investigate all aspects of the Company's business. There were five (5) Audit Committee meetings during this time period. The Audit Committee Charter is available on the Company's website at [www.spherix.com](http://www.spherix.com). Each member of the Audit Committee satisfies the independence requirements and other established criteria of the NASD and the Securities and Exchange Commission. The Board of Directors believes that, while the members of its Audit Committee have substantial financial and management experience and are fully qualified to carry out the functions of the Audit Committee, none of its members meets the requirements of an audit committee financial expert as defined in the Securities and Exchange Commission rules.

The Compensation & Benefits Committee oversees the Company's executive compensation and recommends various incentives for key employees to encourage and reward increased corporate financial performance, productivity and innovation. Its members are Mr. Melissaratos, Chair; Mr. Peter, and Dr. Vander Zanden. There was one (1) meeting during this time period. The Compensation Committee Charter is available on the Company's website at [www.spherix.com](http://www.spherix.com)

The Executive Committee may act on behalf of the Board of Directors on matters requiring action in the interim between meetings of the full Board. Its members are Dr. Vander Zanden, Chair; Dr. Kruger, and Dr. Lodder. Twelve (12) meetings were held by this Committee during this time period.

The Nominating Committee recommends to the Board, for adoption by the Board, the proposed Board for election by the Stockholders. Its members are Mr. Peter, Chair; Mr. Brown, and Mr. Melissaratos, who held one (1) meeting during this time period. The Nominating Committee Charter is available on the Company's website at [www.spherix.com](http://www.spherix.com). The Nominating Committee does not have any formal minimum qualifications for Director candidates. The Nominating Committee identifies candidates by first evaluating current members of the Board who are willing to continue in service. If any member of the Board does not wish to continue in service or if the Board decides not to re-nominate a member for re-election, the Nominating Committee then identifies the desired skills and experience of a new candidate(s).

Among other factors, when considering a prospective candidate, the Nominating Committee considers a candidate's business experience and skills, science and technology attributes pertinent to Company business, personal integrity and judgment, and possible conflicts of interest. To date, the Nominating Committee has not utilized the services of any search firm to assist it in identifying Director candidates. The Nominating Committee's policy is to consider Director candidate recommendations from its Stockholders which are received prior to any Annual Meeting, including confirmation of the candidate's consent to serve as a Director. Upon receipt of such a recommendation, the Nominating Committee will solicit appropriate information about the candidate in order to evaluate the candidate, including information that would need to be described in the Company's Proxy Statement if the candidate were nominated. Candidates recommended by Stockholders will be evaluated on the same basis as other candidates.

The Pricing Committee acts as the Board's agent to evaluate and approve potential Placement Agent, Securities Purchase, Warrant, and other stock sale agreements. Its members are Mr. Brown, Chair; Mr. Melissaratos, and Dr. Vander Zanden, and Mr. Peter serves as an alternate. There were three (3) Pricing Committee meetings during this time period.

The Strategic Planning Committee uses the experience and expertise of its members to assist the Board of Directors by presenting for approval strategic long-term plans for our businesses. All members of the Board of Directors are also members of the Strategic Planning Committee. One (1) meeting of this Committee was held and attended by all members.

Any Stockholder may communicate in writing by mail at any time with the entire Board of Directors or any individual Director (addressed to "Board of Directors" or to a named Director), c/o Spherix Incorporated, ATTN: K. Brailer, 6430 Rockledge Drive, Suite 503, Bethesda, MD 20817, or via e-mail at [info@spherix.com](mailto:info@spherix.com). All communications will be promptly relayed to the appropriate Directors. The Corporate Secretary will coordinate all responses.

It is the policy of the Board of Directors that its members are encouraged to attend the Annual Meeting. The 2011 Annual Meeting was attended by all Directors.

The Company has adopted a worldwide Code of Ethics, which is available on the Company's website at [www.spherix.com](http://www.spherix.com).

### **Corporate Governance**

The Audit Committee members are Mr. Brown, Chair; Mr. Melissaratos, and Dr. Vander Zanden. The Audit Committee Charter is available on the Company's website at [www.spherix.com](http://www.spherix.com). Each member of the Audit Committee satisfies the independence requirements and other established criteria of NASDAQ and the Securities and Exchange Commission. The Board of Directors believes that, while the members of its Audit Committee have substantial financial and management experience and are fully qualified to carry out the functions of the Audit Committee, none of its members meets the requirements of an audit committee financial expert as defined in the Securities and Exchange Commission rules.

### **Executive Officers**

The Executive Officers of the Company are elected annually by the Board of Directors. Certain information about the Executive Officers as of June 15, 2012 is listed in the following table.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Robert L. Clayton	49	CFO and Treasurer
Claire L. Kruger	53	Chief Executive Officer and Chief Operating Officer
Robert A. Lodder	53	President

Drs. Kruger and Lodder's professional experience are discussed above.

Mr. Robert L. Clayton was elected to the Office of CFO in August 2007, and was elected Director of Finance and Treasurer in May 2005. Mr. Clayton previously served as Controller. Prior to joining Spherix, he was a Senior Auditor for the public accounting firm Rubino & McGeehin Chartered. Mr. Clayton holds a B.S. in business and management from the University of Maryland and a C.P.A. from the District of Columbia. He is not now, nor has he been for the past five years, a director of a public, for-profit company other than Spherix.

### **Compliance with Section 16(a) of the Exchange Act**

#### **Section 16(a) Beneficial Ownership Regarding Compliance**

Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), requires the Company's Directors and Executive Officers, and anyone who beneficially owns ten percent (10%) or more of the Company's Common Stock, to file with the Securities and Exchange Commission initial reports of beneficial ownership and reports of changes in beneficial ownership of Common Stock. Such persons are required by regulations of the Securities and Exchange Commission to furnish the Company with copies of all Section 16(a) forms they file.

Based solely upon a review of (i) copies of the Section 16(a) filings received by the Company during or with respect to 2011 and (ii) certain written representations of its Officers and Directors, the Company believes that each filing required to be made pursuant to Section 16(a) of the Exchange Act during and with respect to 2011 and 2012 to date was filed in a timely manner.

### **Code of Ethics**

The Company has adopted a worldwide Code of Ethics, which is available on the Company's website at [www.spherix.com](http://www.spherix.com).

## EXECUTIVE COMPENSATION

In 2007, the Compensation Committee hired an outside company, Equilar, Inc., to compare the total compensation of our executives to the total compensation of fourteen (14) companies identified by Equilar, Inc. to be peer companies to us. The Equilar Report on Executive Compensation showed that our executives are not compensated at the same level as colleagues in peer companies. Based upon our fiscal health, however, it has been determined by the Compensation Committee that no special efforts should be made to bring executive total compensation to equivalent levels of those in peer companies. The Compensation Committee recommended to the Board the salary adjustments for our executive officers. In 2011, the Board approved annual salaries for Dr. Kruger, Dr. Lodder and Mr. Clayton of \$286,443, \$233,398, and \$212,180, respectively.

The following Summary of Compensation table sets forth the compensation paid by the Company during the two years ended December 31, 2011, to all Executive Officers earning in excess of \$100,000 during any year.

### Summary of Compensation

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Award (\$)	Option Award \$(1)	Non-Equity Incentive Plan Compensation \$(2)	Change in Pension Value and Non- Qualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
C. Kruger CEO and COO	2011	278,100	-	-	531	139,050	-	-	417,681
	2010	270,000	-	-	-	135,000	-	-	405,000
R. Lodder President	2011	226,600	-	-	273	90,640	-	-	317,513
	2010	220,000	-	-	-	88,000	-	-	308,000
R. Clayton CFO and Treasurer	2011	206,000	-	-	273	72,100	-	-	278,373
	2010	200,000	-	-	118	70,000	-	-	270,118

- (1) On November 15, 2011, C. Kruger, R. Lodder and R. Clayton were granted stock options for 10,000, 5,000, and 5,000 shares, respectively. On February 17, 2006, R. Clayton was granted stock options for 2,000 shares. Information regarding forfeiture and assumptions made in the valuation are disclosed in Note 7 of the Company's Annual Financial Statements.
- (2) Awards pursuant to the May 12, 2005 Spherix Incorporated Incentive Compensation Plan.

### Outstanding Equity Awards at Fiscal Year-End

Name	Option Awards				Stock Awards	
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock that have not Vested (#)	Market Value of Shares or Units of Stock that have not Vested (\$)
C. Kruger	-	10,000	\$ 2.00	11/14/2016	-	-
R. Lodder	-	5,000	\$ 2.00	11/14/2016	-	-
R. Clayton	-	5,000	\$ 2.00	11/14/2016	-	-

### Potential Payment Upon Termination or Change in Control

We have agreed to pay our officers one year salary and health and welfare (COBRA) benefits upon termination by us or following a change of control.

Unless otherwise agreed by the Board of Directors, the other staff members would be entitled to severance upon termination of employment pursuant to the Company's severance policy. The policy provides:

Completed Service Years	Severance Pay
Less than 1 year	10 days
1 but less than 2 years	15 days
2 but less than 3 years	20 days
3 but less than 4 years	25 days
4 or more years	30 days

No other named Executive Officer has any commitment for payments upon a change of control of the Company.

### Director Compensation

The following table summarizes the compensation paid to non-employee directors during the year ended December 31, 2011.

Name	Fees Earned Paid in Cash (\$)	Options (\$)	All Other Compensation (\$)	Total (\$)
Douglas T. Brown	22,800	8,550	-	31,350
Aris Melissaratos	21,400	8,550	-	29,950
Thomas B. Peter	17,800	8,550	-	26,350
Robert J. Vander Zanden	32,400	8,550	-	40,950

Non-employee directors receive the following annual compensation for service as a member of the Board:

Annual Retainer	\$5,000	To be paid in cash at May Board Meeting annually.
Stock Options	\$10,000	To be calculated by dividing \$10,000 by the closing stock price the day the Stock Options are awarded; and at the May Board Meeting annually thereafter. The Options will vest in full on the day of award and will be exercisable for a period of five (5) years.
Board Meeting Fees	\$2,500	To be paid for all in-person Board Meetings. Members must be present to be paid.
Committee Meeting Fees	\$800	To be paid for all in-person Committee Meetings. Members must be present to be paid.
Teleconference Fees	\$300	To be paid for all teleconferences called by either the Chairman of the Board, the President, or by the Chairman of the relevant Committee. Members must be on-line to be paid.
Additional Retainer for the Chairman of the Board	\$5,000	To be paid in cash upon election annually.
Additional Retainer for the Chairman of the Audit Committee	\$1,000	To be paid in cash at May Board Meeting annually.



## Beneficial Ownership of Common Stock by Executive Officers and Directors

The following table sets forth the shares of Common Stock beneficially owned by all Executive Officers and Directors as a group as of May 15, 2012.

Title of Class	Name of Beneficial Owner	Amount and Nature of Ownership	Percent Of Class
Common	Douglas T. Brown	15,386 (1)	*
Common	Robert L. Clayton	- (1)	*
Common	Claire L. Kruger	3,000 (1)	*
Common	Robert A. Lodder, Jr.	2,285 (1)	*
Common	Aris Melissaratos	13,133 (1)	*
Common	Thomas B. Peter	12,171 (1)	*
Common	Robert J. Vander Zanden	14,486 (1)	*
Common	All Executive Officers and Directors as a Group	60,461 (1)	1.5%

\* Less than 1% of the outstanding shares of our Common Stock.

(1) Included in the number of shares beneficially owned by D.T. Brown, R.L. Clayton, C.L. Kruger, R.A. Lodder, A. Melissaratos, T.B. Peter, R.J. Vander Zanden and All Executive Officers and Directors as a Group are 11,505, 0, 0, 0, 11,505, 11,505, 11,505 and 46,020 shares, respectively, which such persons have a right to acquire within 60 days pursuant to stock options.

All directors and executive officers as a group, beneficial owners of 60,461 shares of Common Stock, owned 1.5% of the 4,159,775 outstanding shares. With the exception of Cede & Co., the holder of record for certain brokerage firms and banks, no other person is known by us to own beneficially more than 5% of our outstanding Common Stock.

In December 2010, the Company and American Stock Transfer and Trust Company, LLC, as Rights Agent, entered into a First Amendment to Rights Agreement to amend the Rights Agreement dated as of February 16, 2001 between the Company and the Rights Agent. The Amendment extends the term of the Rights Agreement. The Rights Agreement was scheduled to expire on December 31, 2010. The Amendment extends the term of the Rights Agreement through December 31, 2012.

The Rights Agreement provides each Stockholder of record a dividend distribution of one "right" for each outstanding share of the Company's Common Stock. Rights become exercisable at the earlier of ten days following: (1) a public announcement that an acquirer has purchased or has the right to acquire 10% or more of the Company's Common Stock, or (2) the commencement of a tender offer which would result in an offeror beneficially owning 10% or more of the outstanding Common Stock of the Company. All rights held by an acquirer or offeror expire on the announced acquisition date, and all rights expire at the close of business on December 31, 2012. Each right entitles a Stockholder to acquire, at a stated purchase price, 1/100 of a share of the Company's preferred stock, which carries voting and dividend rights similar to one share of its Common Stock. Alternatively, a right holder may elect to purchase for the stated price an equivalent number of shares of the Company's Common Stock at a price per share equal to one-half of the average market price for a specified period. In lieu of the stated purchase price, a right holder may elect to acquire one-half of the Common Stock available under the second option. The purchase price of the preferred stock fractional amount is subject to adjustment for certain events as described in the Agreement. At the discretion of a majority of the Board and within a specified time period, the Company may redeem all of the rights at a price of \$0.001 per right. The Board may also amend any provisions of the Agreement prior to exercise.

### Certain Relationships and Related Transactions, and Director Independence

The current Board of Directors consists of Mr. Douglas T. Brown, Dr. Claire L. Kruger, Dr. Robert A. Lodder, Jr., Mr. Aris Melissaratos, Mr. Thomas P. Peter, and Dr. Robert J. Vander Zanden. The Board of Directors has determined that a majority of its members, being Messrs. Brown, Melissaratos, Peter, and Vander Zanden, are independent Directors within the meaning of the applicable NASDAQ rules. The Company's Audit, Compensation, and Nominating Committees consist solely of independent Directors.

## Audit Committee Report

The following report of the Audit Committee does not constitute soliciting material and should not be deemed filed or incorporated by reference into any other Company filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent the Company specifically incorporates this report by reference therein.

During fiscal year 2011, in overseeing the preparation of the Company's financial statements, the Audit Committee met with both management and the Company's outside auditors to review and discuss all financial statements prior to their issuance and to discuss significant accounting issues. Management advised the Committee that all financial statements were prepared in accordance with generally accepted accounting principles, and the Committee discussed the statements with both management and the outside auditors. The Committee's review included receipt of written disclosures and letters from the outside auditors as well as a discussion with the outside auditors of matters required pursuant to Statement on Auditing Standards No. 114 (Communication With Audit Committees).

The Audit Committee has received the written disclosures and the letter from the independent auditors required by applicable requirements of the Public Company Accounting Oversight Board regarding the auditors' communications with the Audit Committee concerning independence, and has discussed with the independent auditors the independent auditors' independence.

On the basis of these reviews and discussions, the Committee recommended to the Board of Directors that the Board approve the inclusion of the Company's audited financial statements in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2011, for filing with the Securities and Exchange Commission.

This report is submitted by the Audit Committee of the Board of Directors:

Douglas T. Brown, Chair  
Aris Melissaratos  
Robert J. Vander Zanden

## Independent Public Accountants

The following table sets forth the fees paid by the Company to Grant Thornton LLP for audit and other services provided in 2011 and 2010:

	<u>2011</u>	<u>2010</u>
Audit fees	<u>\$154,000</u>	<u>\$130,000</u>
Audit related fees	<u>22,000</u>	<u>16,000</u>
Tax fees	<u>-</u>	<u>-</u>
<b>Total</b>	<b><u>\$176,000</u></b>	<b><u>\$146,000</u></b>

The Audit Committee considered whether the provision of services referenced above is compatible with maintaining Grant Thornton's independence. The Audit Committee's policy is to pre-approve all audit and permissible non-audit services provided by the independent auditors. These services may include audit services, audit-related services, tax services and other services. Pre-approval is generally provided for up to one year. The Audit Committee may also pre-approve particular services on a case-by-case basis.

**AUTHORIZATION TO ISSUE SECURITIES IN ONE OR MORE NON-PUBLIC OFFERINGS IN  
ACCORDANCE WITH NASDAQ MARKETPLACE RULE 5635  
(Item 2 on the Proxy Card)**

Our Common Stock is currently listed on The NASDAQ Capital Market and we are subject to the marketplace rules of The NASDAQ Stock Market LLC. NASDAQ Marketplace Rule 5635(d) requires us to obtain shareholder approval prior to the issuance of our Common Stock in connection with certain non-public offerings involving the sale, issuance or potential issuance by the Company of Common Stock (and/or securities convertible into or exercisable for Common Stock) equal to 20% or more of the Common Stock outstanding before the issuance. Shares of our Common Stock issuable upon the exercise or conversion of warrants, options, debt instruments, preferred stock or other equity securities issued or granted in such non-public offerings will be considered shares issued in such a transaction in determining whether the 20% limit has been reached, except in certain circumstances such as issuing warrants that are not exercisable for a minimum of six months and have an exercise price that exceeds market value.

We intend to seek additional capital to implement our business strategy and enhance our overall capitalization. We have not determined the particular terms for such prospective offerings. Because we may seek additional capital that triggers the requirements of NASDAQ Marketplace Rule 5635(d), we are seeking shareholder approval now, so that we will be able to move quickly to take full advantage of any opportunities that may develop in the equity markets.

We are seeking shareholder approval for the potential issuance of shares of our Common Stock, or securities convertible into our Common Stock, in one or more capital-raising transactions, or offerings, subject to the following limitations:

- The aggregate number of shares issued in the offerings will not exceed 10 million shares of our Common Stock, subject to adjustment for any reverse stock split effected prior to the offerings (including pursuant to preferred stock, options, warrants, convertible debt or other securities exercisable for or convertible into Common Stock);
- The total aggregate consideration will not exceed \$10 million in cash;
- The maximum discount at which securities will be offered (which may consist of a share of Common Stock and a warrant for the issuance of up to an additional share of Common Stock) will be equivalent to a discount of 20% below the market price of our Common Stock at the time of issuance;
- Such offerings will occur, if at all, on or before August 14, 2014; and
- Such other terms as the board of directors shall deem to be in the best interests of the Corporation and its shareholders, not inconsistent with the foregoing.

The issuance of shares of our Common Stock, or other securities convertible into shares of our Common Stock, in accordance with any offerings would dilute, and thereby reduce, each existing shareholder's proportionate ownership in our Common Stock. The stockholders do not have preemptive rights to subscribe to additional shares that may be issued by the Company in order to maintain their proportionate ownership of the Common Stock. The board of directors has not yet determined the terms and conditions of any offerings. As a result, the level of potential dilution cannot be determined at this time, but as discussed above, we may not issue more than 10 million shares of Common Stock in the aggregate pursuant to the authority requested from shareholders under this proposal (subject to adjustment for any reverse stock split). It is possible that if we conduct a non-public stock offering, some of the shares we sell could be purchased by one or more investors who could acquire a large block of our Common Stock. This would concentrate voting power in the hands of a few shareholders who could exercise greater influence on our operations or the outcome of matters put to a vote of shareholders in the future. Although we do not anticipate that the issuance of Common Stock pursuant to the offerings will result in a "change in control" (as used in NASDAQ Marketplace Rule 5635), in the event it does, shareholder approval of the offerings will also constitute approval of any change of control for the purposes of NASDAQ Marketplace Rule 5635 and no additional shareholder approval will be required or sought.

We cannot determine what the actual net proceeds of the offerings will be until they are completed, but as discussed above, the aggregate dollar amount of the non-public offerings will be no more than \$10 million. If all or part of the offerings is completed, the net proceeds will be used for general corporate purposes, including our continuing development efforts and possible acquisitions of other drug candidates or other companies. We currently have no arrangements or understandings regarding any specific transaction with investors, so we cannot predict whether we will be successful should we seek to raise capital through any offerings.

We sought and obtained comparable authority from our Stockholders in 2010 and effected a sale of Company securities in October 2010 based upon this authority. We sought and obtained comparable authority from our Stockholders in late 2011, but did not effect any sales of Company securities pursuant to this authorization, which expired in mid-May 2012.

Assuming a quorum is present, approval of these prospective securities offerings requires the affirmative vote of a majority of the total votes cast on this matter (in person or by proxy by the shares of Common Stock entitled to vote at the Meeting), in accordance with NASDAQ Marketplace Rule 5635(e)(4).

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS VOTING “FOR” APPROVAL OF THE AUTHORIZATION TO ISSUE SECURITIES IN ONE OR MORE NON-PUBLIC OFFERINGS IN ACCORDANCE WITH NASDAQ MARKETPLACE RULE 5635.**

**AMENDMENT OF AMENDED AND RESTATED 1997 STOCK OPTION PLAN  
(Item 3 on the Proxy Card)**

The Board of Directors recommends that the Stockholders approve an amendment to the Company's Amended and Restated 1997 Stock Option Plan (the "Plan").

The Plan is designed to promote our success and enhance our value by linking the interests of our Officers, employees and Directors to those of our Stockholders and by providing participants with incentives for performance. The Plan is further intended to provide flexibility in our ability to motivate, attract and retain employees and Directors upon whose judgment, interest and special efforts our business is largely dependent.

The Plan was initially adopted by the Board of Directors in late 1997 and ratified by the Stockholders in May, 1998. The Plan was amended by the Board of Directors and the Stockholders in 2001 to increase the maximum number of shares of Common Stock issuable thereunder. In 2005, the Plan was amended and restated, which included an extension of the term of the Plan through December 31, 2010. The Plan has been further extended through December 31, 2015.

In May 2011, the Company effected a 1 for 10 reverse stock split; all of the numbers of shares of Common Stock below have been restated to reflect this reverse stock split.

*Proposal*

This amendment of the Plan would increase the maximum number of shares of Common Stock issuable under the Plan from 100,000 shares to 500,000 shares. At present, the Company has no shares available for issuance under the Plan.

The purpose of the Plan is to provide long-term incentives and rewards to relevant individuals, to assist the Company in attracting and retaining individuals with experience and/or ability on a basis competitive with industry practices and to associate the interest of these individuals with those of the Company's Stockholders by providing for the issuance of stock-based awards ("Awards"). The Company grants Awards to both employees and members of the Board of Directors. Awards are granted to employees to both incent and reward such employees in their pursuits on behalf of the Company. Awards are provided to members of the Board of Directors as a regular component of annual compensation. Stock options, valued at \$10,000, are awarded to each non-employee Board member in May of each year; provided, however, that in 2012 the Company did not have sufficient shares available in the Plan to fully compensate the Board members. Accordingly, the Company issued stock options to each non-employee director with a value of \$4,278 instead of the \$10,000 in stock options as required under its directors' compensation plan. In such an event, each of the non-employee directors will receive \$5,722 of options valued at the date the Stockholders approve the amendment to the Plan. Assuming the Company's stock price is \$0.75 per share at that time, the non-employee directors will be awarded stock options under the Plan as follows:

<u>Name and Position</u>	<u>Dollar Value</u>	<u>Number of Shares</u>
Douglas T. Brown	\$5,722	7,629
Aris Melissaratos	\$5,722	7,629
Thomas B. Peter	\$5,722	7,629
Robert J. Vander Zanden	\$5,722	7,629
All Non-Employee Directors	\$22,888	30,516

If the Stockholders approve this amendment, the Company will award the remaining stock options. If the Stockholders do not approve the amendment, the Company will satisfy this obligation to its Directors in cash.

The amendment of the Plan must be approved by the holders of at least a majority of the outstanding shares of the Company's Common Stock present, or represented by proxy, and entitled to vote at the annual meeting.

Following below is a description of the Plan, as amended. The only material difference between the existing Plan and the amended Plan, assuming it is approved by our Stockholders, is the number of shares available for issuance under the Plan. This description is qualified in its entirety by the terms of the amended Plan, a copy of which is attached to this Proxy Statement as Appendix A and is incorporated herein by reference.

### *Administration*

The Plan is generally administered by the Compensation Committee. The Compensation Committee has the power to determine the select employees of the Company to whom Awards shall be made (the "Select Employees"). The Plan confirms that the Committee will generally grant Awards to Select Employees following achievement of pre-established performance goals and objectives, although some grants may be made as reward for exemplary performance outside of any pre-established objectives. The Board of Directors also has the power to determine and administer Awards to the Directors.

Each Award under the Plan is made pursuant to a written agreement between the Company and the recipient of the Award (the "Agreement"). In administering the Plan, the Compensation Committee/Board of Directors has the express power, subject to the provisions of the Plan, to determine the terms and conditions upon which Awards may be made and exercised and to determine the terms and provisions of each Agreement.

The members of the Compensation Committee are indemnified by the Company against the reasonable expenses incurred by them, including attorneys' fees, in the defense of any action, suit or proceeding, or any appeal therein to which they may be a party by reasons of any action taken or failure to act under the Plan.

Subject to the terms, conditions and limitations of the Plan, the Compensation Committee/Board of Directors may modify, extend or renew outstanding Awards, or, if authorized by the Board of Directors, accept the surrender of outstanding Awards and authorize new Awards in substitution therefor, but may not substitute Awards with lower exercise prices than the surrendered Awards. The Compensation Committee/Board of Directors may also modify any outstanding Agreement, provided that no modification may adversely affect the rights or obligations of the recipient without the consent of the recipient.

The Board may terminate, amend or modify the Plan from time to time in any respect without Stockholder approval, unless the particular amendment or modification requires Stockholder approval under the Internal Revenue Code of 1986, as amended (the "Code"), or the rules and regulations of the exchange or system on which the Common Stock is listed or reported or pursuant to any other applicable laws, rules or regulations. Currently the Code and regulations governing ISOs (as herein defined) require Stockholder approval of any amendments which would (i) materially increase the benefits accruing to participants, (ii) materially increase the number of securities which may be issued or (iii) materially modify the requirements as to eligibility for participation.

The Plan expires on December 31, 2015.

### *Eligibility*

Employees of the Company and its subsidiaries who are deemed to be Select Employees by the Committee or Directors selected by the Board are eligible for Awards under the Plan. Select Employees include Officers or other employees of the Company and its subsidiaries who, in the opinion of the Committee, contribute significantly to the growth and profitability of, or perform services of major importance to, the Company and its subsidiaries. Unless specified below in the description of the particular Awards available under the Plan or in the Plan itself, the prices, expiration dates, consideration to be received by the Company, and other terms of each Agreement shall be determined by the Committee/Board. Awards to the Directors are likely to be made on an annual basis to supplement cash compensation paid to the Directors.

### *Types of Awards*

The Plan allows the award of stock options and shares of stock (including but not limited to restricted stock). Stock options granted under the Plan may be either incentive stock options qualifying under Section 422 of the Code (an "ISO") or non-qualified stock options (a "NQSO").

### *Stock Options*

The Plan authorizes the grant of ISOs and NQSOs (collectively, "Options"). The terms applicable to such Options will be determined by the Committee/Board, but an Option generally will not be exercisable after ten years from its grant. All Options granted as ISOs shall comply with all applicable provisions of the Code and all other applicable rules and regulations governing ISOs. All other Option terms will be determined by the

Committee/Board in its sole discretion. Options may be transferable to recipients' family members if authorized by the Committee/Board.

#### *Stock Awards*

Shares of Common Stock may be issued pursuant to the provisions of the Plan. Such issuances may be on an unrestricted or a restricted basis. Restricted stock shall be subject to such terms and conditions as the Committee/Board determines, including without limitation, restrictions on the sale or the disposition of the stock and the possible forfeiture of such stock upon failure to meet certain requirements.

#### *Shares Subject to the Plan*

Except as set forth below, shares of Common Stock issued in connection with the exercise of, or as other payment for, an Award will be charged against the total number of shares issuable under the Plan. If any Award granted terminates, expires or lapses for any reason other than as a result of being exercised, Common Stock subject to such Award will be available for further Awards to participants.

In order to reflect such events as stock dividends, stock splits, recapitalization, mergers, consolidations or reorganizations by the Company, the Committee/Board may, in its sole discretion, adjust the number of shares subject to each outstanding Award, the exercise price and the aggregate number of shares from which grants or awards may be made.

As of the date of this proxy statement, no shares of Common Stock remain issuable under the Plan.

#### *Change in Control*

In order to maintain all the participants' rights in the event of a change in control of the Company (that term being defined under the Plan), the Committee/Board, as constituted before such change in control, in its sole discretion, may, as to any outstanding Award either at the time an Award is made or any time thereafter, take any one or more of the following actions: (i) provide for the acceleration of any time periods relating to the exercise or realization of any such Award so that such Award may be exercised or realized in full on or before a date initially fixed by the Committee/Board; (ii) provide for the purchase or settlement of any Award by the Company, upon the participant's request, for an amount of cash equal to the amount which could have been obtained upon the exercise of such Award or realization of such participant's rights had such Award been currently exercisable or payable; (iii) make such adjustment to any such Award then outstanding as the Committee/Board deems appropriate to reflect such change in control; or (iv) cause any such Award then outstanding to be assumed, or new rights substituted therefor, by the acquiring or surviving corporation in such change in control.

#### *Certain Federal Income Tax Consequences*

*Incentive Stock Options.* An optionee generally will not recognize income on the grant of an ISO, and an optionee generally will not recognize income on the exercise of an ISO. Under these circumstances, no deduction will be allowable to the Company in connection with either the grant of such Options or the issuance of shares upon exercise thereof.

However, if the exercise of an ISO occurs more than three months after the optionee ceased to be an employee for reasons other than death or disability (or more than one year thereafter if the optionee ceased to be an employee by reason of permanent and total disability), the exercise will not be treated as the exercise of an ISO, and the optionee will be taxed in the same manner as on the exercise of a NQSO, as described below.

To the extent the aggregate fair market value (determined at the time the Options are granted) of shares subject to an ISO that become exercisable for the first time by any optionee in any calendar year exceeds \$100,000 the Options will be treated as Options which are not ISOs, and the optionee will be taxed upon exercise of those excess Options in the same manner as on the exercise of NQSO, as described below.

Gain or loss from the sale or exchange of shares acquired upon exercise of an ISO generally will be treated as capital gain or loss. If, however, shares acquired pursuant to the exercise of an ISO are disposed of within two years after the Option was granted or within one year after the shares were transferred pursuant to the exercise of the Option, the optionee generally will recognize ordinary income at the time of the disposition equal to the excess over

the exercise price of the lesser of the amount realized or the fair market value of the shares at the time of exercise (or, in certain circumstances, at the time such shares became either transferable or not subject to a substantial risk of forfeiture). If, however, such disposition is not a sale or exchange with respect to which a loss (if sustained) would be recognized, the ordinary income is the excess of the fair market value of the shares at the time of exercise (or, in certain circumstances, at the time they became either transferable or not subject to substantial risk of forfeiture) over the exercise price. Gain recognized on the disposition in excess of the ordinary income resulting therefrom will be capital gain and any loss recognized on the disposition will be capital loss. If an optionee recognizes ordinary income as a result of a disposition as described in this paragraph, the Company will be entitled to a deduction of the same amount.

The exercise of an ISO may result in a tax to the optionee under the alternative minimum tax because as a general rule the excess of the fair market value of stock received on the exercise of an ISO over the exercise price is defined as an item of "tax preference" for purposes of determining alternative minimum taxable income.

*Non-qualified Options.* A participant will not recognize income on the grant of a NQSO, but generally will recognize income upon the exercise of a NQSO. The amount of income recognized upon the exercise of a NQSO will be measured by the excess, if any, of the fair market value of the shares at the time of exercise over the exercise price, provided that the shares issued are either transferable or not subject to a substantial risk of forfeiture.

If shares received on the exercise of a NQSO are nontransferable and subject to a substantial risk of forfeiture then, unless the optionee elects to recognize income at the time of receipt of such shares, the optionee will not recognize ordinary income until the shares become either transferable or not subject to a substantial risk of forfeiture.

In the case of ordinary income recognized by an optionee as described above in connection with the exercise of a NQSO, the employer corporation will be entitled to a deduction in the amount of ordinary income so recognized by the optionee.

*Stock Awards.* Participants who receive unrestricted shares of Common Stock will generally recognize taxable income equal to the then fair market value for the Common Stock and the Company will generally be entitled to a corresponding deduction. Participants who receive shares of restricted stock will generally not recognize taxable income until expiration of the restricted period and the satisfaction of any other conditions applicable to the Restricted Stock. At that time, the participants will generally recognize taxable income equal to the then fair market value of Common Stock and the Company will generally then be entitled to a corresponding deduction. However, under Section 83(b) of the Code, the participant may elect to recognize ordinary income as of the date of grant and the Company would then be entitled to a corresponding deduction at that time.

*Section 162(m).* Compensation of persons who are named executive officers of the Company is subject to the tax deduction limits of Section 162(m) of the Code. Stock options and stock awards that qualify as "performance-based compensation" are exempt from Section 162(m), thus allowing the Company the full tax deduction otherwise permitted for such compensation. If approved by the Company's shareholders, the Plan will enable the Committee/Board to grant stock options and stock awards that will be exempt from the deduction limits of Section 162(m).



*Equity Compensation Plan Information*

The following table provides information as of May 15, 2012 with respect to the shares of our Common Stock that may be issued under our existing equity compensation plans.

Plan Category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	83,621 <sup>(1)</sup>	\$4.11	0
Equity compensation plans not approved by security holders	60,728 <sup>(2)</sup>	\$3.20	N/A
Total	144,349		N/A

- (1) Consists of options to acquire 71,021 shares of our Common Stock issued to our key employees and Directors; and warrants to purchase 12,600 shares of our Common Stock issued to our placement agent in connection with the October 2010 offering. On August 31, 2010, our stockholders provided the Board of Directors the authority to issue securities which led to the October 2010 offering.
- (2) Consists of warrants to purchase 60,728 shares of our Common Stock issued to our placement agent with respect to the January 2011, October 2011 and February 2012 offerings.

*General.* The rules governing the tax treatment of Awards that may be granted under the Plan are quite technical, so that the above description of tax consequences is necessarily general in nature and does not purport to be complete. Moreover, statutory provisions are, of course, subject to change, as are their interpretations, and their application may vary in individual circumstances. Finally, the tax consequences under applicable state laws may not be the same as under the federal income tax laws.

*Vote Required*

The affirmative vote of the holders of a majority of the Common Stock represented in person or by proxy at the Annual Meeting, assuming a quorum is present, is required to ratify and approve the amendment of the Plan.

**THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR AMENDMENT OF THE AMENDED AND RESTATED 1997 STOCK OPTION PLAN**

**APPROVAL OF AN AMENDMENT TO THE CERTIFICATE OF  
INCORPORATION, AS AMENDED, OF SPHERIX INCORPORATED  
TO AUTHORIZE A REVERSE STOCK SPLIT  
(Item 4 on the Proxy Card)**

The Company's Board of Directors has adopted a resolution approving and recommending to the Company's Stockholders for their approval an amendment to the Company's Certificate of Incorporation, as amended, accomplishing a reverse stock split of its Common Stock at a ratio within a range of 1:5 to 1:20 and a reduction in the number of authorized shares of Common Stock at a corresponding ratio. If the Company's Stockholders approve this proposal, the Board of Directors will have the authority to decide, within eighteen (18) months from the Annual Meeting, whether to implement the reverse stock split and the precise ratio of the reverse stock split within a range of 1:5 to 1:20. If the Board of Directors decides to implement the reverse stock split, it will become effective upon the filing of the amendment to the Company's Certificate of Incorporation, as amended, with the Secretary of State of the State of Delaware. If the reverse stock split is implemented, the number of issued and outstanding shares of Common Stock and the total number of authorized shares of Common Stock will be reduced in accordance with the ratio designated by the Board of Directors.

Except for adjustments that may result from the treatment of fractional shares as described below, each Stockholder will hold the same percentage of Common Stock outstanding immediately following the reverse stock split as that Stockholder held immediately before the reverse stock split.

The form of the Certificate of Amendment to accomplish the reverse stock split is attached to this proxy statement as *Appendix B*. The following discussion is qualified in its entirety by the full text of the Certificate of Amendment, which is hereby incorporated by reference.

### **Background**

The Company's Common Stock is currently listed on The NASDAQ Capital Market. In April 2012, NASDAQ initiated a process to delist the Company's stock because the Company's stock price dropped below the minimum \$1.00 per share requirement for continued inclusion on NASDAQ. NASDAQ has advised that the Company has until October 12, 2012, to regain compliance with the minimum price rule or its Common Stock could be delisted from the NASDAQ Capital Market.

The Board of Directors is seeking authority to implement a reverse stock split in the event the Company's stock price does not rebound in excess of \$1.00 per share. The authority sought by the Board of Directors is consistent with the authority granted by the Stockholders at the November 17, 2009 Annual Meeting, which resulted in a 1 for 10 reverse stock split in May 2011.

### **Purpose of the Reverse Stock Split**

The Board of Directors' primary objective in proposing the reverse stock split is to raise the per share trading price of the Company's Common Stock to regain compliance with the NASDAQ \$1.00 bid price listing standard. In this event, the Board believes that a higher price per share would better enable the Company to maintain the listing of its Common Stock on NASDAQ. In addition, the Board believes that the reverse stock split could (i) better facilitate higher levels of institutional stock ownership, where investment policies generally prohibit investments in lower-priced securities and (ii) better enable the Company to raise funds to finance its planned operations.

If a delisting from NASDAQ were to occur, the Common Stock would then trade on the OTC Bulletin Board or in the "pink sheets." The alternative markets are generally considered to be less efficient than, and not as broad as, the NASDAQ Capital Market. The Board has considered the potential harm to the Company of a delisting from NASDAQ and believes that a reverse stock split would help the Company regain compliance with NASDAQ's minimum bid price listing standard.

However, there can be no assurance that a reverse stock split, if implemented, will have the desired effect of proportionately raising our Common Stock price over the long term, or at all. The effect of a reverse stock split upon the market price of our Common Stock cannot be predicted with any certainty, and the history of similar stock splits for companies in similar circumstances is varied. While the Company's May 2011 reverse stock split resulted in an increase in the Company's stock price and allowed the Company to regain compliance with NASDAQ's \$1.00

minimum bid price listing standard, the stock price increase was temporary and the stock price has now fallen below the \$1.00 minimum price standard.

Under applicable NASDAQ rules, in order to regain compliance with the \$1.00 minimum bid price requirement and maintain our listing on NASDAQ, the \$1.00 bid price must be maintained for a minimum of ten (10) consecutive business days. However, under NASDAQ rules, NASDAQ may, in its discretion, require us to maintain a bid price of at least \$1.00 per share for a period in excess of ten (10) consecutive business days, but generally no more than twenty (20) consecutive business days, before determining that we have demonstrated an ability to maintain long-term compliance with the minimum bid price requirement. Accordingly, we cannot assure you that we will be able to maintain our NASDAQ listing after a reverse stock split is effected or that the market price per share after the reverse stock split will exceed or remain in excess of the \$1.00 minimum bid price for a sustained period of time. The market price of our Common Stock may vary based on other factors which are unrelated to the number of shares outstanding, including our future performance. We also cannot assure you that our Common Stock will not be delisted due to a failure to meet other continued listing requirements even if after the reverse stock split the market price per share of our Common Stock remains in excess of \$1.00.

The Board further believes that an increased stock price may encourage investor interest and improve the marketability of our Common Stock to a broader range of investors, thus enhancing its liquidity. Because of the trading volatility often associated with low-priced stocks, many brokerage firms and institutional investors have internal policies and practices that either prohibit them from investing in low-priced stocks or tend to discourage individual brokers from recommending low-priced stocks to their customers. Some of these policies and practices pertain to the payment of brokers' commissions and to time-consuming procedures that function to make the handling of lower-priced stocks unattractive to brokers from an economic standpoint. Additionally, because brokers' commissions on lower-priced stocks generally represent a higher percentage of the stock price than commissions on higher-priced stocks, the current share price of the Common Stock results in an individual Stockholder paying transaction costs that represent a higher percentage of total share value than would be the case if our share price were substantially higher. This factor may also limit the willingness of institutions to purchase our stock. The Board believes that the anticipated higher market price resulting from a reverse stock split would better enable institutional investors and brokerage firms with such policies and practices to invest in our Common Stock.

Furthermore, the Board believes that a reverse stock split, if implemented, could facilitate future efforts by the Company to raise capital. As previously disclosed in the Company's periodic reports filed with the SEC, the Company will need to raise additional capital and will likely elect to do so through the issuance of equity securities. If we are delisted from NASDAQ, we will be ineligible to use SEC Form S-3 to register additional shares of our Common Stock either for issuance by the Company or for resale by others. This will make it more difficult and more expensive for us to register any additional securities, which may adversely affect our ability to raise additional funds.

The purpose of seeking Stockholder approval in the range of exchange ratios from 1:5 to 1:20 (rather than a fixed exchange ratio) is to provide the Board of Directors with the flexibility to achieve the desired results of the reverse stock split. If the Stockholders approve this proposal, the Board would effect a reverse stock split only upon its determination that a reverse stock split would be in the best interests of the Company at that time. If the Board were to effect a reverse stock split, the Board would set the timing for such a split and select the specific ratio within the range of 1:5 to 1:20. No further action on the part of Stockholders would be required to either implement or abandon the reverse stock split. If the Stockholders approve the proposal, and the Board determines to effect the reverse stock split, we would communicate to the public, prior to the effective date, additional details regarding the reverse stock split, including the specific ratio selected by the Board of Directors. If the Board does not implement the reverse stock split within eighteen (18) months from the Annual Meeting, the authority granted in this proposal to implement the reverse stock split will terminate. The Board of Directors reserves its right to elect not to proceed with the reverse stock split if it determines, in its sole discretion, that this proposal is no longer in the best interests of the Company.

### **Determination of Reverse Stock Split Ratio**

In determining the range of reverse stock split ratios listed herein, the Board of Directors considered numerous factors, including:

- the historical and projected performance of our Common Stock and volume level before and after the reverse stock split;

- prevailing market conditions;
- general economic and other related conditions prevailing in our industry and in the marketplace generally;
- the projected impact of the reverse stock split ratio on trading liquidity in our Common Stock and our ability to continue our Common Stock's listing on NASDAQ;
- our capitalization (including the number of shares of our Common Stock issued and outstanding);
- the prevailing trading price for our Common Stock and the volume level thereof; and
- potential devaluation of our market capitalization as a result of a reverse stock split.

The Board of Directors will further consider these issues when it determines the precise reverse stock split ratio.

### **Effects of Reverse Stock Split**

A reverse stock split refers to a reduction in the number of outstanding shares of a class of a corporation's capital stock, which may be accomplished, as in this case, by reclassifying and combining all of our outstanding shares of Common Stock into a proportionately smaller number of shares. For example, if the reverse stock split is approved by our Stockholders and the Board of Directors elects a 1-for-10 reverse stock split, a Stockholder holding 10,000 shares of our Common Stock before the reverse stock split would hold 1,000 shares of our Common Stock immediately after the reverse stock split. Each Stockholder's proportionate ownership of our outstanding shares of Common Stock would remain the same, except that Stockholders who would otherwise receive fractional shares as a result of the reverse stock split will receive cash payments for such fractional share. All shares of our Common Stock will remain fully paid and non-assessable.

The primary purpose of the proposed reverse stock split of our Common Stock is to combine the issued and outstanding shares of our Common Stock into a smaller number of shares so that the shares of our Common Stock will trade at a higher price per share than recent trading prices. Although we expect that the reverse stock split will result in an increase in the market price of our Common Stock, the reverse stock split may not increase the market price of our Common Stock in proportion to the reduction in the number of shares of our Common Stock outstanding or result in the permanent increase in the market price, which is dependent upon many factors, including the Company's performance, prospects and other factors detailed from time to time in our reports filed with the SEC. The history of similar reverse stock splits for companies in like circumstances is varied. If the reverse stock split is accomplished and the market price of our Common Stock declines, the percentage decline as an absolute number and as a percentage of our overall market capitalization may be greater than would occur in the absence of a reverse stock split.

Our Common Stock is currently registered under Section 12(b) of the Exchange Act, and the Company is subject to the periodic reporting and other requirements of the Exchange Act. The proposed reverse stock split will not affect the registration of the Common Stock under the Exchange Act. If the proposed reverse stock split is implemented, the Common Stock will continue to be reported on the Nasdaq Capital Market under the symbol "SPEX" (although Nasdaq would likely add the letter "D" to the end of the trading symbol for a period of 20 trading days to indicate that the reverse stock split has occurred).

### **Effect on Outstanding Options and Rights Agreement**

The reverse stock split, when implemented, will affect the outstanding options to purchase our Common Stock. Our equity incentive plan includes provisions for appropriate adjustments to the number of shares of Common Stock covered by the plan and by stock options and other grants of stock-based awards under the plan, as well as the per share exercise prices. If our Stockholders approve the reverse stock split, an outstanding stock option to purchase one share of our Common Stock would thereafter evidence the right to purchase a fraction of a share of our Common Stock consistent with the reverse stock split ratio designated by the Board of Directors (rounding any fractional shares up to the nearest whole share), and the exercise price per share would be a corresponding multiple of the previous exercise price (rounded down to the nearest cent). For example, if we effect a 1-for-10 reverse stock

split, a pre-split option for 210 shares of Common Stock with an exercise price of \$3.00 per share would be converted post-split into an option to purchase 21 shares of Common Stock with an exercise price of \$30.00 per share. Further, the number of shares of our Common Stock reserved for issuance under the plan will be reduced by the same ratio.

In addition the purchase price per share under our Rights Agreement dated February 2001 shall be adjusted to equal the result obtained by multiplying the purchase price immediately prior to implementing the reverse split (currently \$160.00 per share) by the corresponding multiple.

### **Effect on Authorized and Outstanding Shares and Shares Subject to Options**

Currently, we are authorized to issue up to a total of 50,000,000 shares of Common Stock, of which 4,159,776 shares were outstanding as of May 10, 2012. Immediately following the effectiveness of the proposed amendment to our Certificate of Incorporation, as amended, the total authorized number of shares of Common Stock will be reduced consistent with the reverse stock split ratio designated by the Board of Directors.

The following table contains approximate information relating to the outstanding shares of Common Stock under various of the proposed reverse stock split ratios, without giving effect to any adjustments for fractional shares of our Common Stock (in thousands):

	Pre-Reverse Split	1-for-5	1-for-10	1-for-20
Authorized	50,000	10,000	5,000	2,500
Outstanding (May 10, 2012)	4,160	832	416	208
Reserved for future issuance pursuant to outstanding stock options (May 10, 2012)	—	—	—	—

Currently we are authorized to issue up to a total of 2,000,000 shares of preferred stock, only one of which is issued and outstanding, and 500,000 of which have been reserved for issuance in connection with our stockholders' rights agreement. The proposed amendment to our Certificate of Incorporation, as amended, will not impact the total authorized number of shares of preferred stock.

### **No Fractional Shares**

No fractional shares of Common Stock will be issued in connection with the reverse stock split. If, as a result of the reverse stock split, a Stockholder of record would otherwise hold a fractional share, the Stockholder will receive a cash payment equal to the fraction multiplied by the closing sales price of our Common Stock as reported on the NASDAQ Capital Market as of the effective date of the reverse stock split. No transaction costs will be assessed to Stockholders for the cash payment. Stockholders will not be entitled to receive interest for the period of time between the effective date of the reverse stock split and the date payment is made for fractional shares.

After the reverse stock split, then current Stockholders will have no further interest in the Company with respect to fractional shares. Such Stockholders will only be entitled to receive the cash payment described above. Such cash payments may reduce the number of post-split Stockholders; however, this is not the purpose of the reverse stock split.

Stockholders should be aware that under the escheat laws of the relevant jurisdictions, cash payments not timely claimed after the effective date of the reverse stock split may be required to be paid to designated agents for the relevant jurisdictions.

### **Effect on Par Value**

The proposed amendment to our Certificate of Incorporation, as amended, will not change the par value of our Common Stock, \$0.01 per share.

## Accounting Matters

Our stated capital, which consists of the par value per share of our Common Stock multiplied by the aggregate number of shares of our Common Stock issued and outstanding, will be reduced on the effective date of the reverse stock split. Correspondingly, our additional paid-in capital, which consists of the difference between our stated capital and the aggregate amount paid to us upon the issuance of all currently outstanding shares of our Common Stock, will be increased by a number equal to the decrease in stated capital. Further, net earnings/loss per share and book value per share will be increased as a result of the reverse stock split because there will be fewer shares of Common Stock outstanding.

## Implementation of Reverse Stock Split; Certificate of Amendment

If our Stockholders approve the reverse stock split, the Board will be authorized but will not be required to proceed with the reverse stock split. In determining whether to proceed with the reverse stock split, the Board will consider a number of factors, including market conditions, existing and expected trading prices of the Company's Common Stock, the NASDAQ requirements, the Company's additional funding requirements and the amount of the Company's authorized but unissued Common Stock. If the Board of Directors decides to effect the reverse stock split, it will designate the reverse stock split ratio within the designated range of 1:5 to 1:20. The Certificate of Amendment attached as *Appendix B* to this proxy statement will become effective when it is filed with the Secretary of State of the State of Delaware.

Notwithstanding approval of the reverse stock split by the Stockholders, our Board of Directors may, in its sole discretion, abandon the proposed amendment and determine prior to the effectiveness of any filing with the Secretary of State of the State of Delaware not to effect the reverse stock split. If the Board fails to implement the amendments prior to the eighteen month anniversary of this Annual Meeting, Stockholder approval again would be required prior to implementing any subsequent reverse stock split.

## Possible Disadvantages of Reverse Stock Split

Even though the Board of Directors believes that the potential advantages of a reverse stock split outweigh any disadvantages that might result, the following are some of the possible disadvantages of a reverse stock split:

- The reduced number of outstanding shares of our Common Stock resulting from a reverse stock split could adversely affect the liquidity of our Common Stock.
- A reverse stock split could result in a significant devaluation of the Company's market capitalization and the trading price of our Common Stock, on an actual or an as-adjusted basis, based on the experience of other companies that have accomplished reverse stock splits.
- A reverse stock split may leave certain Stockholders with one or more "odd lots," which are stock holdings in amounts of fewer than 100 shares of our Common Stock. These odd lots may be more difficult to sell than shares of Common Stock in even multiples of 100. Additionally, any reduction in brokerage commissions resulting from the reverse stock split, as discussed above, may be offset, in whole or in part, by increased brokerage commissions required to be paid by Stockholders selling odd lots created by the reverse stock split.
- There can be no assurance that the market price per new share of our Common Stock after the reverse stock split will remain unchanged or increase in proportion to the reduction in the number of old shares of our Common Stock outstanding before the reverse stock split. For example, if the Board of Directors designates a 1-for-10 reverse stock split ratio when the market price of our stock is \$0.70 per share, there can be no assurance that the post-split market price of our Common Stock would be \$7.00 per share or greater.
- The total market capitalization of our Common Stock after the proposed reverse stock split may be lower than the total market capitalization before the proposed reverse stock split and, in the future, the market price of our Common Stock following the reverse stock split may not exceed or remain higher than the market price prior to the proposed reverse stock split.

- The amendment to our Certificate of Incorporation, as amended, will reduce the number of authorized shares of Common Stock, and thereby reduce the number of shares we may issue in the future to fund operations.

Although the Company's Board of Directors believes that a higher stock price may help generate investor interest, there can be no assurance that the reverse stock split will result in a per share price that will attract institutional investors or investment funds or that such share price will satisfy the investing guidelines of institutional investors or investment funds. As a result, the trading liquidity of our Common Stock may not necessarily improve.

### **Effect on Beneficial Holders of Common Stock**

If the reverse stock split is effected, Stockholders holding certificated shares will be required to exchange their stock certificates for new book entry shares ("New Book-Entry Shares") representing the appropriate number of shares of our Common Stock resulting from the reverse stock split. Stockholders of record on the effective date will be furnished the necessary materials and instructions for the surrender and exchange of share certificates at the appropriate time by our transfer agent. Stockholders will not have to pay any transfer fee or other fee in connection with such exchange. As soon as practicable after the effective date, the transfer agent will send a letter of transmittal to each Stockholder advising such holder of the procedure for surrendering certificates representing the number of shares of our Common Stock prior to the reverse stock split ("Old Stock Certificates") in exchange for New Book-Entry shares representing the number of shares of our Common Stock resulting from the reverse stock split. As soon as practicable after the surrender to the transfer agent of any Old Stock Certificate, together with a duly executed letter of transmittal and any other documents the transfer agent may specify, the transfer agent will deliver to the person in whose name such Old Stock Certificate has been issued New Book-Entry Shares registered in the name of such person.

Until surrender as contemplated herein, each Old Stock Certificate shall be deemed at and after the effective date to represent the number of full shares of our Common Stock resulting from the reverse stock split. Until they have surrendered their Old Stock Certificates for exchange, Stockholders will not be entitled to receive any dividends or other distributions, if any, that may be declared and payable to holders of record.

Any Stockholder whose Old Stock Certificate has been lost, destroyed or stolen will be entitled to New Book-Entry Shares only after complying with the requirements that we and the transfer agent customarily apply in connection with lost, stolen or destroyed certificates.

No service charges, brokerage commissions or transfer taxes shall be payable by any holder of any Old Stock Certificate, except that if any New Book-Entry Shares are to be issued in a name other than that in which the Old Stock Certificates are registered, it will be a condition of such issuance that (1) the person requesting such issuance must pay to us any applicable transfer taxes or establish to our satisfaction that such taxes have been paid or are not payable, (2) the transfer complies with all applicable federal and state securities laws, and (3) the surrendered certificate is properly endorsed and otherwise in proper form for transfer.

Stockholders who hold uncertificated shares, either as direct or beneficial owners, will have their holdings electronically adjusted by our transfer agent (and, for beneficial owners, by their brokers or banks that hold in "street name" for their benefit, as the case may be) to give effect to the reverse stock split.

Upon the reverse stock split, the Company intends to treat shares of Common Stock held by Stockholders in "street name," that is, through a bank, broker or other nominee, in the same manner as Stockholders whose shares of Common Stock are registered in their names. Banks, brokers or other nominees will be instructed to effect the reverse stock split for their beneficial holders holding the Common Stock in "street name." However, these banks, brokers or other nominees may have different procedures than registered Stockholders for processing the reverse stock split. If a Stockholder holds shares of Common Stock with a bank, broker or other nominee and has any questions in this regard, the Stockholder is encouraged to contact the Stockholder's bank, broker or other nominee.

**Stockholders should not destroy any stock certificate(s) and should not submit any stock certificate(s) until requested to do so.**

## **NASDAQ Capital Market**

The Company's Common Stock is currently listed on the NASDAQ Capital Market. NASDAQ requires that listed issuers continuously comply with certain continued listing standards. Even if the reverse stock split causes our stock price to exceed the \$1.00 minimum price requirement, there is no assurance that we will continually comply with this or any of the other NASDAQ continued listing standards.

One of the requirements for continued listing on the NASDAQ Capital Market is maintaining stockholders' equity of not less than \$2.5 million. As of March 31, 2012, the Company's stockholders' equity was approximately \$4.6 million. Given the Company's ongoing costs of its commercialization plans for its products, unless the Company is successful in raising additional equity, it is expected that at some point the Company's stockholders' equity will decrease below \$2.5 million. Such action will likely result in a NASDAQ delisting action.

## **Federal Income Tax Consequences**

The following summary of the federal income tax consequences of a reverse stock split is based on current law, including the Internal Revenue Code of 1986, as amended, and is for general information only. The tax treatment of a Stockholder may vary depending upon the particular facts and circumstances of such Stockholder, and the discussion below may not address all the tax consequences for a particular Stockholder. For example, foreign, state and local tax consequences are not discussed below. Accordingly, notwithstanding anything to the contrary, each Stockholder should consult his, her or its tax advisor to determine the particular tax consequences to him, her or it of a reverse stock split, including the application and effect of federal, state, local and/or foreign income tax and other laws.

Generally, a reverse stock split will not result in the recognition of gain or loss for federal income tax purposes (except to the extent of cash received in lieu of a fractional share). The adjusted basis of the new shares of Common Stock will be the same as the adjusted basis of old shares of Common Stock exchanged for such new shares of Common Stock, reduced by the amount of adjusted basis allocated to the fractional share for which cash is received. The holding period of the new, post-split shares of Common Stock resulting from implementation of the reverse stock split will include the Stockholder's respective holding period for the pre-split shares of Common Stock exchanged for the new shares of Common Stock. A Stockholder who receives cash in lieu of a fractional share generally will recognize taxable gain or loss equal to the difference, if any, between the amount of cash received and the portion of the adjusted basis in the shares of old Common Stock allocated to the fractional share. If the shares of old Common Stock allocated to the fractional share were held as a capital asset, the gain or loss generally will be taxed as capital gain or loss. Such capital gain or loss will be short term if the pre-reverse stock split shares were held for one year or less and long term if held more than one year.

## **No Dissenters' Rights**

The holders of shares of Common Stock will have no dissenters' rights of appraisal under Delaware law, our Certificate of Incorporation, as amended, or our Bylaws with respect to the Certificate of Amendment effectuating a reverse stock split.

## **Approval Required**

The affirmative vote of a majority of the shares of Common Stock of the Company outstanding on the record date is required to approve an amendment to the Company's Certificate of Incorporation, as amended, to accomplish a reverse stock split of the Company's Common Stock. Abstentions and "broker non-votes" will not be counted as having been voted on the proposal, and therefore will have the same effect as negative votes.

**THE BOARD OF DIRECTORS RECOMMENDS THAT THE STOCKHOLDERS VOTE *FOR* PROPOSAL 4.**



**RATIFICATION OF THE APPOINTMENT OF INDEPENDENT ACCOUNTANTS**  
**(Item 5 on the Proxy Card)**

The Board of Directors has reappointed the firm of Grant Thornton LLP to be the Company's independent accountants for the year 2012 and recommends that Stockholders vote "FOR" ratification of that appointment. A representative from Grant Thornton LLP will attend the Annual Meeting, will have the opportunity to make a statement if he or she desires to do so, and will be available to answer questions. If the Stockholders, by the affirmative vote of a majority of the shares of Common Stock represented at the Meeting, do not ratify the selection of Grant Thornton LLP, the selection of independent accountants will be reconsidered by the Board of Directors.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS VOTING "FOR" RATIFICATION OF  
THE APPOINTMENT OF GRANT THORNTON LLP AS INDEPENDENT ACCOUNTANTS.**

**ADJOURNMENT**  
**(Item 6 On The Proxy Card)**

At the Annual Meeting, we may ask our stockholders to vote on a proposal to adjourn the Annual Meeting if necessary or appropriate in the sole discretion of our Board of Directors, including to solicit additional proxies in the event that there are not sufficient votes at the time of the Annual Meeting or any adjournment or postponement of the Annual Meeting to approve any of the other proposals.

If at the Annual Meeting the number of shares of our Common Stock present or represented by proxy and voting in favor of a proposal is insufficient to approve such proposal, then our Board of Directors may hold a vote on each proposal that has garnered sufficient votes, if any, and then move to adjourn the Annual Meeting as to the remaining proposals in order to solicit additional proxies in favor of those remaining proposals.

Alternatively, even if there are sufficient shares of our Common Stock present or represented by proxy voting in favor of all of the proposals, our Board of Directors may hold a vote on the adjournment proposal if, in its sole discretion, it determines that it is necessary or appropriate for any reason to adjourn the Annual Meeting to a later date and time. In that event, the Company will ask its stockholders to vote only upon the adjournment proposal and not any other proposal.

Any adjournment may be made without notice (if the adjournment is not for more than thirty days and a new record date is not fixed for the adjourned meeting), other than by an announcement made at the Annual Meeting of the time, date and place of the adjourned meeting.

Any adjournment of the Annual Meeting will allow our stockholders who have already sent in their proxies to revoke them at any time prior to their use at the Annual Meeting as adjourned.

If we adjourn the Annual Meeting to a later date, we will transact the same business and, unless we must fix a new record date, only the stockholders who were eligible to vote at the original meeting will be permitted to vote at the adjourned meeting.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS VOTING “FOR” AUTHORIZATION  
TO ADJOURN THE ANNUAL MEETING IF NECESSARY OR APPROPRIATE.**

**OTHER BUSINESS**  
**(Item 7 on the Proxy Card)**

As of the date of this statement, the management of Spherix Incorporated has no knowledge of any business that may be presented for consideration at the Annual Meeting, other than that described above. As to other business, if any, that may properly come before the Annual Meeting, or any adjournment thereof, it is intended that the Proxy hereby solicited will be voted in respect of such business in accordance with the judgment of the Proxy holders.

**STOCKHOLDER PROPOSALS**

Stockholders intending to present a proposal at the 2013 Annual Meeting of Stockholders must submit such proposals to the Company at Spherix Incorporated, ATTN: K. Brailer, Corporate Secretary, 6430 Rockledge Drive, Suite 503, Bethesda, MD 20817, no later than December 31, 2012. The Company's by-laws provide that any Stockholder wishing to nominate a Director must do so in writing delivered to the Corporate Secretary of the Company at least ten (10) days and not more than thirty (30) days prior to the Annual Meeting. For further details, please see the discussion under Item One hereof.

**BY ORDER OF THE BOARD OF DIRECTORS,**  
**Katherine M. Brailer, Corporate Secretary**

AMENDED AND RESTATED  
1997 STOCK PLAN  
(AS AMENDED 2012)

ARTICLE 1  
Establishment, Purpose and Duration

1.1 Establishment of the Plan. Spherix Incorporated hereby establishes a stock plan to be known as the "Amended and Restated 1997 Stock Plan", as set forth in this document. Unless otherwise defined herein, all capitalized terms shall have the meanings set forth in Section 2.1 herein. The Plan was initially adopted by the Board of Directors on November 17, 1997, and was subsequently approved by the Stockholders of the Company in accordance with applicable law. In 2001, the Plan was amended by action of the Board of Directors and the Stockholders to increase the maximum number of shares issuable under the Plan. On February 17, 2005, the Board of Directors amended and restated the Plan, and the Stockholders subsequently provided approval. In 2012, the Board of Directors further amended the Plan, subject to Stockholder approval. Awards may be granted prior to Stockholder approval of the Plan, subject to the approval of the Plan by the Stockholders.

1.2 Purpose of the Plan. The purpose of the Plan is to promote the success of the Company and its Subsidiaries by providing incentives to Select Employees and Directors that will promote the identification of their personal interest with the long-term financial success of the Company and with growth in Stockholder value. The Plan is designed to provide flexibility to the Company in its ability to motivate, attract and retain the services of Select Employees and Directors upon whose judgment, interest and special effort the successful conduct of its operation is largely dependent.

1.3 Duration of the Plan. The Plan shall remain in effect, subject to the right of the Board of Directors to terminate the Plan at any time pursuant to Article 10 hereof, until December 31, 2015 (the "Term"), at which time it shall terminate, except with respect to Awards made prior to, and outstanding on, that date which shall remain valid in accordance with their terms.

ARTICLE 2  
Definitions

2.1 Definitions. Except as otherwise defined in the Plan, the following terms shall have the meanings set forth below:

(a) "Affiliate" and "Associate" shall have the respective meanings ascribed to such terms in Rule 12b-2 under the Securities Exchange Act of 1934, as amended (the "Exchange Act").

(b) "Agreement" means a written agreement implementing the grant of each Award signed by an authorized officer of the Company and by the Participant.

(c) "Award" means, individually or collectively, a grant under this Plan of Incentive Stock Options, Non-Qualified Stock Options or Stock (including but not limited to Restricted Stock).

(d) "Award Date" or "Grant Date" means the date on which an Award is made by the Committee under this Plan.

(e) "Beneficial Owner" shall have the meaning ascribed to such term in Rule 13d-3 under the Exchange Act.

(f) "Board" or "Board of Directors" means the Board of Directors of the Company.

(g) "Change in Control" shall be deemed to have occurred if the conditions set forth in any one of the following paragraphs shall have been satisfied:

(1) the acquisition by any Person of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 20% or more of either (A) the then outstanding Shares or (B) the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (the "Outstanding Voting Securities"). Notwithstanding the foregoing, the following acquisitions shall not constitute a Change in Control: (A) any acquisition directly from the Company, (B) any acquisition by the Company, (C) any acquisition by, or benefit distribution from, any employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company, (D) any acquisition pursuant to any compensatory stock option or stock purchase plan for employees or Directors, (E) any acquisition or ownership by Gilbert V. Levin or Karen M. Levin, or (F) any acquisition pursuant to a reorganization, merger or consolidation, if, following such reorganization, merger or consolidation, the conditions described in clauses (A), (B), and (C) of Subsection (3) of this Section 2.1(g) are satisfied; or

(2) Individuals who, as of the date hereof, constitute the Board (the "Incumbent Board") cease for any reason to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election or nomination for election was approved by a vote of at least a majority of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board (with his predecessor thereafter ceasing to be a member); or

(3) Approval by the Stockholders of the Company of the reorganization, merger, or consolidation of the Company unless, following such reorganization, merger, or consolidation, (A) more than 60% of the then outstanding Shares and the then outstanding voting securities of the resulting corporation is then beneficially owned by all or substantially all of the beneficial owners, respectively, of the Stock and Outstanding Voting Securities immediately prior to such reorganization, merger, or consolidation, (B) no Person (excluding (I) the Company, (II) any employee benefit plan (or related trust) of the Company or such corporation resulting from such reorganization, merger, or consolidation, and (III) any Person beneficially owning, immediately prior to such reorganization, merger, or consolidation, 20% or more of the Stock or Outstanding Voting Securities, as the case may be) beneficially owns 20% or more of the then outstanding shares of common stock or the combined voting power of the then outstanding voting securities of the resulting corporation, and (C) at least a majority of the members of the Board of Directors of the resulting corporation were members of the Incumbent Board at the time of the execution of the initial agreement providing for such reorganization, merger, or consolidation; or

(4) Approval by the Stockholders of the Company of (A) a complete liquidation or dissolution of the Company, or (B) the sale or other disposition of all or substantially all of the assets of the Company other than to a corporation with respect to which, following such sale or other disposition, (I) more than 60% of the outstanding shares of common stock and the then outstanding voting securities of such corporation is beneficially owned by all or substantially all of the beneficial owners, respectively, of the Stock and Outstanding Voting Securities immediately prior to such sale or disposition; (II) no Person (excluding (x) the Company, (y) any employee benefit plan (or related trust) of the Company or such corporation, and (z) any Person beneficially owning, immediately prior to such sale or other disposition, 20% or more of the Stock or Outstanding Voting Securities, as the case may be) beneficially owns 20% or more of the then outstanding shares of common stock or the combined voting power of the then outstanding voting securities of such corporation, and (III) at least a majority of the members of the Board of Directors of such corporation were members of the Incumbent Board at the time of the execution of the initial agreement providing for such sale or other disposition of the assets of the corporation.

(h) "Code" means the Internal Revenue Code of 1986, as amended from time to time.

(i) "Committee" means the Compensation Committee of the Board as long as such Compensation Committee is composed solely of at least two (2) non-employee Directors; in the event the Compensation Committee does not have the above-described composition, Board of Directors shall select a separate stock option committee which shall be composed solely of at least two (2) non-employee Directors and such stock option committee shall constitute the "Committee" hereunder.

(j) "Company" means Spherix Incorporated, or any successor thereto as provided in Article 12 herein.

(k) "Director" means a non-employee member of the Board of Directors.

(l) "Fair Market Value" of a Share means the closing sales price of the Stock on the relevant date if it is a trading date, or if not, on the most recent date on which the Stock was traded prior to such date, as reported by NASDAQ, or if, in the opinion of the Committee, this method is inapplicable or inappropriate for any reason, the fair market value as determined pursuant to a reasonable method adopted by the Committee in good faith for such purpose.

(m) "Incentive Stock Option" or "ISO" means an option to purchase Stock, granted under Article 6 herein, which is designated as an incentive stock option and is intended to meet the requirements of Section 422 of the Code.

(n) "Non-Qualified Stock Option" or "NQSO" means an option to purchase Stock, granted under Article 6 herein, which is not an Incentive Stock Option.

(o) "Option" means an Incentive Stock Option or a Non-Qualified Stock Option.

(p) "Participant" means a Select Employee or Director who receives an Award under the Plan.

(q) "Person" shall have the meaning ascribed to such term in Section 3(a)(9) of the Exchange Act and used in Sections 13(d) and 14(d) thereof, including a "group" as defined in Section 13(d).

(r) "Plan" means the 1997 Amended and Restated Stock Plan, as described herein and as hereafter from time to time amended.

(s) "Restricted Stock" means shares of Stock, or rights to receive such Stock upon certain conditions, issued subject to such restrictions as established by the Committee as authorized by the provisions of Article 7 hereof.

(t) "Select Employee" means an Officer or other employee of the Company or its Subsidiaries, who, in the opinion of the Committee, can contribute significantly to the growth and profitability of, or perform services of major importance to, the Company and its Subsidiaries.

(u) "Stock" or "Shares" means the Common Stock of the Company.

(v) "Subsidiary" shall mean a corporation at least 50% of the total combined voting power of all classes of capital stock of which is owned by the Company, either directly or through one or more of its Subsidiaries.

### ARTICLE 3 Administration

3.1 The Committee. Subject to the Board's right to retain administration of the Plan, the Plan shall be administered by the Committee which shall have all powers necessary or desirable for such administration. The express grant in this Plan of any specific power to the Committee shall not be construed as limiting any power or authority of the Committee. In addition to any other powers and, subject to the provisions of the Plan, the Committee shall have the following specific powers: (i) to determine the terms and conditions upon which the Awards may be made and exercised; (ii) to determine all terms and provisions of each Agreement, which need not be identical; (iii) to construe and interpret the Agreements and the Plan; (iv) to establish, amend or waive rules or regulations for the Plan's administration; (v) to accelerate the exercisability of any Award; and (vi) to make all other determinations and take all other actions necessary or advisable for the administration of the Plan. Notwithstanding the foregoing and any other provision of the Plan, all Awards to Directors shall be made and administered by the Board of Directors.

3.2 Delegation of Certain Duties. The Committee may in its sole discretion delegate all or part of its duties and obligations to designated Officer(s) to administer the Plan with respect to Awards.

3.3 Selection of Select Employees. The Committee shall have the authority to grant Awards under the Plan, from time to time, to such Select Employees as may be selected by it. Each Award shall be evidenced by an Agreement. Awards will generally be granted following the achievement by Select Employees of pre-established performance objectives although some Awards may be granted for exemplary performance outside of any pre-established objectives.

3.4 Decisions Binding. All determinations and decisions made by the Board or the Committee pursuant to the provisions of the Plan shall be final, conclusive and binding.

3.5 Indemnification. In addition to such other rights of indemnification as they may have as Directors or as members of the Committee, the members of the Committee shall be indemnified by the Company against reasonable expenses, including attorneys' fees, actually and reasonably incurred in connection with the defense of any action, suit or proceeding, or in connection with any appeal therein, to which they or any of them may be a party by reason of any action taken or failure to act under or in connection with the Plan or any Award granted or made hereunder, and against all amounts reasonably paid by them in settlement thereof or paid by them in satisfaction of a judgment in any such action, suit or proceeding, if such members acted in good faith and in a manner which they believed to be in, and not opposed to, the best interests of the Company and its Subsidiaries.

#### ARTICLE 4 Stock Subject to the Plan

4.1 Number of Shares. Subject to adjustment as provided in Section 4.4 herein, the maximum aggregate number of Shares that may be issued pursuant to Awards made under the Plan shall not exceed 500,000. Except as provided in Sections 4.2 and 4.3 herein, the issuance of Shares in connection with the exercise of, or as other payment for Awards, under the Plan shall reduce the number of Shares available for future Awards under the Plan.

4.2 Lapsed Awards or Forfeited Shares. If any Award granted under this Plan terminates, expires, or lapses for any reason other than by virtue of exercise of the Award, any Stock subject to such Award again shall be available for the grant of an Award under the Plan.

4.3 Delivery of Shares as Payment. In the event a Participant pays the Option price for Shares pursuant to the exercise of an Option with previously acquired Shares, the number of Shares available for future Awards under the Plan shall be reduced only by the net number of new Shares issued upon the exercise of the Option.

4.4 Capital Adjustments. The number and class of Shares subject to each outstanding Award, the Option price and the aggregate number and class of Shares for which Awards thereafter may be made shall be subject to such adjustment, if any, as the Committee in its sole discretion deems appropriate to reflect such events as stock dividends, stock splits, recapitalizations, mergers, consolidations or reorganizations of or by the Company.

#### ARTICLE 5 Eligibility

Persons eligible to participate in the Plan include all employees of the Company and its Subsidiaries who, in the opinion of the Committee, are Select Employees, as well as all Directors.

#### ARTICLE 6 Stock Options

6.1 Grant of Options. Subject to the terms and provisions of the Plan, Options may be granted to Select Employees or Directors at any time and from time to time as shall be determined by the Committee/Board. The Committee/Board shall have complete discretion in determining the number of Shares subject to Options

granted to each Select Employee or Directors; provided, however, that the aggregate Fair Market Value (determined at the time the Award is made) of Shares with respect to which any Select Employee may first exercise ISOs granted under the Plan during any calendar year may not exceed \$100,000 or such amount as shall be specified in Section 422 of the Code and rules and regulations thereunder.

6.2 Option Agreement. Each Option grant shall be evidenced by an Agreement that shall specify the type of Option granted, the Option price, the duration of the Option, the number of Shares to which the Option pertains, any conditions imposed upon the exercisability of Options in the event of retirement, death, disability or other termination of employment, and such other provisions as the Committee/Board shall determine. The Agreement shall specify whether the Option is intended to be an ISO within the meaning of Section 422 of the Code, or a Non-Qualified Stock Option not intended to be within the provisions of Section 422 of the Code.

6.3 Option Price. The exercise price per share of Stock covered by an Option shall be determined by the Committee/Board subject to the following limitations. The Option price shall not be less than 50% of the Fair Market Value of such Stock on the Grant Date; provided, however, that the Option price shall not be less than 100% of the Fair Market Value of such Stock on the Grant Date for all Incentive Stock Options. In addition, an ISO granted to an employee who, at the time of grant, owns (within the meaning of Section 425(d) of the Code) Stock possessing more than 10% of the total combined voting power of all classes of Stock of the Company, shall have an Option price which is at least equal to 110% of the Fair Market Value of the Stock.

6.4 Duration of Options. Each Option shall expire at such time as the Committee/Board shall determine at the time of grant; provided, however, that (i) no ISO shall be exercisable later than the tenth (10th) anniversary date of its Award Date and (ii) no ISO granted to an employee who, at the time of grant, owns (within the meaning of Section 425(d) of the Code) Stock possessing more than 10% of the total combined voting power of all classes of Stock of the Company, shall be exercisable later than the fifth (5th) anniversary date of its Award Date.

6.5 Exercisability. Options granted under the Plan shall be exercisable at such times and be subject to such restrictions and conditions as the Committee/Board shall determine, which need not be the same for all Select Employees or Directors.

6.6 Method of Exercise. An Option shall be exercised by the delivery of a written notice to the Company in the form prescribed by the Committee/Board setting forth the number of Shares with respect to which the Option is to be exercised, accompanied by full payment for the Shares which shall be deemed to include arrangements approved by the Committee/Board for the delivery to the Company of the proceeds of a sale or margin loan in the case of a "cashless" exercise. The Option price shall be payable to the Company in full either in cash (including the proceeds of a cashless exercise in the Committee's/Board's discretion), by delivery of Shares of Stock valued at Fair Market Value at the time of exercise, delivery of a promissory note (in the Committee's/Board's discretion) or by a combination of the foregoing. As soon as practicable after receipt of written notice and payment, the Company shall deliver to the Participant, stock certificates in an appropriate amount based upon the number of Options exercised, issued in the Participant's name. No Participant who is awarded Options shall have rights as a stockholder until the date of exercise of the Options.

6.7 Restrictions on Stock Transferability. The Committee/Board shall impose such restrictions on any Shares acquired pursuant to the exercise of an Option under the Plan as it may deem advisable.

6.8 Transferability of Options. The Committee/Board may, in its discretion, authorize all or a portion of the Options to be granted to a Participant to be on terms which permit transfer by such Participant to (i) the spouse, children or grandchildren of the Participant ("Immediate Family Members"), (ii) a trust or trusts for the exclusive benefit of such Immediate Family Members, (iii) a partnership in which such Immediate Family Members are the only partners, or (iv) other persons or entities permitted by the Committee/Board; provided that (x) the agreement pursuant to which such Options are transferred must be approved by the Committee/Board, and must expressly provide for transferability in a manner consistent with this Section, and (y) subsequent transfers of transferred Options shall be prohibited except those occasioned by will or the laws of descent and distribution. Following transfer, any such Options shall continue to be subject to the same terms and conditions as were applicable immediately prior to transfer. The events of termination of employment shall continue to be applied with respect to the original Participant, following which the Options shall be exercisable by the transferee only to the extent, and for the periods specified herein.



ARTICLE 7  
Stock/Restricted Stock

7.1 Awards. The Committee/Board may issue Stock (including but not limited to Restricted Stock) to Participants at any time, with or without payment therefor, as additional compensation, or in lieu of other compensation, for their services to the Company and/or any Affiliate. Restricted Stock shall be subject to such terms and conditions as the Committee/Board determines appropriate, including, without limitation, restrictions on the sale or other disposition of the Stock and rights of the Company to reacquire such Restricted Stock upon termination of the Participant's employment or service within specified periods, all as prescribed by the Committee/Board.

7.2 Other Restrictions. Without limitation, the Committee/Board may provide that Restricted Stock shall be subject to forfeiture if the Company or the Participant fails to achieve certain performance goals established by the Committee/Board over a designated period of time. In the event the minimum goal established by the Committee/Board is not achieved at the conclusion of a period, all shares of Restricted Stock shall be forfeited. In the event the maximum goal is achieved, no shares of Restricted Stock shall be forfeited. Partial achievement of the maximum goal may result in forfeiture corresponding to the degree of non-achievement to the extent specified in writing by the Committee/Board when the Award is made. The Committee/Board shall certify in writing as to the degree of achievement after completion of the performance period.

7.3 Registration. Any Restricted Stock granted under the Plan to a Participant may be evidenced in such manner as the Committee/Board may deem appropriate, including, without limitation, book-entry registration or issuance of a stock certificate or certificates. In the event any stock certificate is issued in respect of shares of Restricted Stock granted under the Plan to a Participant, such certificate shall be registered in the name of the Participant and shall bear an appropriate legend (as determined by the Committee/Board) referring to the terms, conditions and restrictions applicable to such Restricted Stock.

7.4 Other Rights. Unless otherwise determined by the Committee/Board, during the period of restriction, Participants holding shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those shares and shall be entitled to receive all dividends and other distributions paid or made with respect to those shares while they are so held; provided, however, that the Committee/Board may provide in any grant of Restricted Stock that payment of dividends thereon may be deferred until termination of the period of restriction and may be made subject to the same restrictions regarding forfeiture as apply to such shares of Restricted Stock. If any such dividends or distributions are paid in shares of Stock, the shares shall be subject to the same restrictions on transferability as the shares of Restricted Stock with respect to which they were paid.

7.5 Forfeiture. Except as otherwise determined by the Committee/Board, upon termination of employment or service of a Participant with the Company (as determined under criteria established by the Committee/Board) for any reason during the applicable period of restriction, all shares of Restricted Stock still subject to restriction shall be forfeited by the Participant to the Company.

ARTICLE 8  
Change in Control

The Committee/Board, as constituted before a Change in Control, in its sole discretion may, as to any outstanding Award, either at the time the Award is made or any time thereafter, take any one or more of the following actions with respect to a Change in Control: (i) provide for the acceleration of any time periods relating to the exercise or realization of any such Award so that such Award may be exercised or realized in full on or before a date initially fixed by the Committee/Board; (ii) provide for the purchase or settlement of any such Award by the Company, upon a Participant's request, for an amount of cash equal to the amount which could have been obtained upon the exercise of such Award or realization of such Participant's rights had such Award been currently exercisable or payable; (iii) make such adjustment to any such Award then outstanding as the Committee/Board deems appropriate to reflect such Change in Control; or (iv) cause any such Award then outstanding to be assumed, or new rights substituted therefor, by the acquiring or surviving corporation in such Change in Control.

## ARTICLE 9

### Modification, Extension and Renewals of Awards

Subject to the terms and conditions and within the limitations of the Plan, the Committee may modify, extend or renew outstanding Awards, or, if authorized by the Board, accept the surrender of outstanding Awards (to the extent not yet exercised) granted under the Plan and authorize the granting of new Awards pursuant to the Plan in substitution therefor, and the substituted Awards may specify a longer term than the surrendered Awards or may contain any other provisions that are authorized by the Plan; provided, however, that the substituted Awards may not specify a lower exercise price than the surrendered Awards. The Committee may also modify the terms of any outstanding Agreement. Notwithstanding the foregoing, however, no modification of an Award shall, without the consent of the Participant, adversely affect the rights or obligations of the Participant.

## ARTICLE 10

### Amendment, Modification and Termination of the Plan

10.1 Amendment, Modification and Termination. At any time and from time to time, the Board may terminate, amend, or modify the Plan. Such amendment or modification may be without stockholder approval except to the extent that such approval is required by the Code, by NASDAQ or any other exchange or system on which the Stock is then listed or reported, by any regulatory body having jurisdiction with respect thereto or under any other applicable laws, rules or regulations.

10.2 Awards Previously Granted. No termination, amendment or modification of the Plan other than pursuant to Section 4.4 herein shall in any manner adversely affect any Award theretofore granted under the Plan, without the written consent of the Participant.

## ARTICLE 11

### Withholding

11.1 Tax Withholding. The Company shall have the power and the right to deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy Federal, State and local taxes (including the Participant's FICA obligation) required by law to be withheld with respect to any grant, exercise, or payment made under or as a result of this Plan.

11.2 Stock Withholding. With respect to withholding required upon the exercise of Non-Qualified Stock Options or the Award of Stock, or upon the occurrence of any other similar taxable event, participants may elect, subject to the approval of the Committee/Board, to satisfy the withholding requirement, in whole or in part, by having the Company withhold Shares of Stock having a Fair Market Value equal to the amount required to be withheld. The value of the Shares to be withheld shall be based on Fair Market Value of the Shares on the date that the amount of tax to be withheld is to be determined. All elections shall be irrevocable and be made in writing, signed by the Participant on forms approved by the Committee/Board in advance of the day that the transaction becomes taxable.

## ARTICLE 12

### Successors

All obligations of the Company under the Plan, with respect to Awards granted hereunder, shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation or otherwise, of all or substantially all of the business and/or assets of the Company.

## ARTICLE 13

### General

13.1 Requirements of Law. The granting of Awards and the issuance of Shares of Stock under this Plan shall be subject to all applicable laws, rules and regulations, and to such approvals by any governmental agencies as may be required.

13.2 Effect of Plan. The establishment of the Plan shall not confer upon any Select Employee or Director any legal or equitable right against the Company, a Subsidiary, or the Committee, except as expressly provided in the Plan. The Plan does not constitute an inducement or consideration for the employment of any Select Employee or the engagement of any Director, nor is it a contract between the Company or any of its Subsidiaries and any Select Employee or any Director. Participation in the Plan shall not give any Select Employee or Director any right to be retained/engaged in the service of the Company or any of its Subsidiaries.

13.3 Creditors. The interests of any Participant under the Plan or any Agreement are not subject to the claims of creditors and may not, in any way, be assigned, alienated or encumbered.

13.4 Governing Law. The Plan, and all Agreements hereunder, shall be governed, construed and administered in accordance with and governed by the laws of the State of Delaware and the intention of the Company is that ISOs granted under the Plan qualify as such under Section 422 of the Code.

13.5 Severability. In the event any provision of the Plan shall be held illegal or invalid for any reason, the illegality or invalidity shall not affect the remaining parts of the Plan, and the Plan shall be construed and enforced as if the illegal or invalid provision had not been included.

CERTIFICATE OF AMENDMENT

SPHERIX INCORPORATED

Spherix Incorporated, a corporation organized and existing under the Delaware General Corporation Law (the "Corporation"), does hereby certify that:

FIRST: The name of the corporation is Spherix Incorporated.

SECOND: This Certificate of Amendment was duly adopted in accordance with the Secretary of State of the State of Delaware by the Board of Directors and Stockholders of the Corporation. Following action by the Board of Directors, a meeting of the stockholders of said corporation was duly called and held, upon notice in accordance with Section 222 of the General Corporation Law of the State of Delaware, at which meeting the necessary number of shares as required by statute were voted in favor of the amendment. This Certificate of Amendment was duly adopted at said meeting of the Stockholders in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

THIRD: That upon the effectiveness of this Certificate of Amendment, the first paragraph of Article FOURTH of the Certificate of Incorporation, as amended, is hereby amended and restated in its entirety such that, as amended, said paragraph shall read in its entirety as follows:

"The total number of shares of stock of all classes which the Corporation shall have authority to issue is \_\_\_\_\_ Million (\_\_\_\_,000,000.00) shares, consisting of \_\_\_\_\_ (\_\_\_\_,000,000.00) shares of common stock, \$0.01 per share par value, and Two Million (2,000,000) shares of preferred stock, \$0.01 per share par value.

Upon this Certificate of Amendment becoming effective pursuant to the General Corporation Law of the State of Delaware (the "Effective Date"), each share of common stock, par value \$0.01 per share (the "Old Common Stock"), issued and outstanding immediately before the Effective Date, shall be and hereby is, reclassified as and changed into one-\_\_\_\_\_ (1/\_\_\_\_) of a share of common stock, par value \$0.01 per share (the "New Common Stock"). Each outstanding stock certificate which immediately before the Effective Date represented one or more shares of Old Common Stock shall thereafter, automatically and without the necessity of surrendering the same for exchange, represent the number of whole shares of New Common Stock determined by multiplying the number of shares of Old Common Stock represented by such certificate immediately prior to the Effective Date by one-\_\_\_\_\_ (1/\_\_\_\_), and shares of Old Common Stock held in uncertificated form shall be treated in the same manner. Stockholders who would otherwise be entitled to receive fractional share interests of Common Stock shall instead receive a cash payment equal to the fraction multiplied by the closing sales price of our Common Stock on the Effective Date."

IN WITNESS WHEREOF, Spherix Incorporated has caused this certificate to be signed by its Chief Executive Officer as of the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

By: \_\_\_\_\_  
Claire L. Kruger, CEO