

**UNITED STATES SECURITIES
AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

Preliminary Proxy Statement

Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

Definitive Proxy Statement

Definitive Additional Materials

Soliciting Material Pursuant to §240.14a-12

SPHERIX INCORPORATED

(Name of Registrant as Specified in Its Charter)

(Name of Person(s) Filing Proxy Statement if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

No fee required.

Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

1. Title of each class of securities to which transaction applies:

2. Aggregate number of securities to which transaction applies:

3. Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

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1. Amount previously paid:

2. Form, Schedule or Registration Statement No.:

3. Filing Party:

4. Date Filed:

**Notice of Annual Meeting of Stockholders
to be held on November 17, 2009
and Proxy Statement**

The Annual Meeting of Stockholders of Spherix Incorporated (the “Company”) will be held on November 17, 2009, 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 seven (7) Directors.
- (2) Ratification of the appointment of the independent accountants.
- (3) 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”).
- (4) 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, Annual Report on Form 10-K, and Quarterly Report on Form 10-Q for the period ended June 30, 2009 accompany this Notice.

Pursuant to the By-Laws of the Company, the Board of Directors has fixed the close of business on September 18, 2009 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 November 17, 2009. 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, 2008, including financial statements. Under new 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>.

**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 November 17, 2009

This Proxy Statement is being mailed on or about September 30, 2009, 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 November 17, 2009, 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 ratification of the appointment of independent accountants, and for the reverse stock split. 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, \$.005 par value per share ("Common Stock"), held by the Stockholder at the close of business on September 18, 2009. At that time, there were 14,389,778 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 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* ratification of the appointment of independent accountants listed herein, and *for* the reverse stock split

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 seven (7). Unless otherwise instructed, the persons named in the accompanying Proxy intend to vote the Shares represented by the Proxy for the election of the seven (7) 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. Gilbert V. Levin, 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 2009-2010 Spherix Board of Directors. It also provides certain information about the Nominees as of September 18, 2009.

Nominees for Election to Board of Directors

Name	Age	Position	Director Since
Douglas T. Brown	56	Director	2004
Claire L. Kruger	51	Director, and Chief Executive Officer	2007
Gilbert V. Levin	85	Director, and Chairman Emeritus	1967
Aris Melissaratos	65	Director	2008
Thomas B. Peter	56	Director	2009
Robert A. Lodder, Jr.	50	Director, and President	2005
Robert J. Vander Zanden	63	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. Gilbert V. Levin founded Spherix Incorporated in 1967 and served the Company in a variety of capacities from incorporation until his retirement in August 2008. He is currently Adjunct Professor in the Beyond Center of the College of Liberal Sciences, Arizona State University, and is an Honorary Professor at Cardiff University, Wales, UK. Dr. Levin previously served in the public health departments of Maryland, California, and the District of Columbia and, subsequently, as a research scientist and corporate official. Among his inventions are low-caloric sweeteners; biological nutrient removal (BNR) for municipal wastewater, rapid detection and identification of microorganisms; and the Labeled Release life detection experiment that landed on Mars in 1976 aboard NASA's Viking Mission. He holds a Bachelor's, Master's, and a Ph.D., all from The Johns Hopkins University, where he also served on its Board of Trustees and presently serves on its National Advisory Council for the Whiting School of Engineering. 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 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, having served as a Vice President of R&D with Kraft Foods International, 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 Science and Human Nutrition 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.

Board of Directors and Committee Meetings in Board Year 2008-2009

The Company's Board of Directors held five (5) regular meetings from April 12, 2008 to September 18, 2009; and six (6) special meetings. The Board of Directors has five (5) Committees: Audit, Compensation & Benefits, Executive, Nominating, 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. 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 were two (2) meetings during this time period. The Compensation Committee Charter is available on the Company's website at 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. Five (5) 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 Melissaratos, who held two (2) meetings during this time period. The Nominating Committee Charter is available on the Company's website at 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 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. Four (4) meetings of this Committee were held and were 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. 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 2008 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.

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. 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 and are listed in the following table.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Robert L. Clayton	46	Interim CFO and Treasurer
Claire L. Kruger	51	Chief Executive Officer and Chief Operating Officer
Robert A. Lodder	50	President

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

Mr. Robert L. Clayton was elected to the Office of Interim 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 2008 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 2008 and 2009 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.

EXECUTIVE COMPENSATION

We strive to pay our named executive officers at or near the median paid by comparable companies. In 2007, the Compensation Committee hired an outside company, Equilar, Inc., to compare the total compensation of the Spherix Executives to the total compensation of fourteen (14) companies identified by Equilar, Inc. to be peer companies to Spherix. The Equilar Report on Executive Compensation showed that Spherix Executives are not compensated at the same level as colleagues in peer companies. Based upon the fiscal health of Spherix, however, it was 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 requested that the Chief Executive Officer of Spherix propose all Executive salary increases, but the overall Spherix company-wide increase should not be above inflation. With minor adjustments, these recommendations were accepted by the full Board. The Compensation Committee recommended to the Board the salary adjustment for the President and Chief Executive Officer of Spherix.

The following Summary of Compensation table sets forth the compensation paid by the Company during the two years ended December 31, 2008, to all Executive Officers earning in excess of \$100,000 during any year.

Summary of Compensation

Name and Principal Position	Year	Salary (\$)	Bonus (\$)(1)	Stock Award (\$)(2)	Option Award (\$)(3)	Non-Equity Incentive Plan Compensation (\$)(4)	Change in Pension Value and Non- Qualified Deferred Compensation Earnings (\$)	All Other Compen- sation (\$)	Total (\$)
C. Kruger CEO and COO	2008	186,667	-	18,600	-	76,000	-	-	281,267
	2007	72,333	-	26,350	-	33,751	-	-	132,434
R. Lodder President	2008	166,667	-	22,500	-	68,000	-	-	257,167
	2007	60,000	-	10,000	-	18,667	-	-	88,667
R. Clayton CFO and Treasurer	2008	224,625	-	-	940	-	-	-	225,565
	2007	150,314	100,000	-	940	-	-	-	251,254

(1) R. Clayton received a stay bonus of \$100,000 in 2007.

(2) On August 1, 2007, C. Kruger was granted 30,000 shares in restricted stock with a market price on the date of grant of \$1.86. The restricted stock vested in equal amounts of 10,000 shares on August 1, 2007 and August 1, 2008, and the remaining 10,000 will vest on August 1, 2009. On August 16, 2007, R. Lodder was granted 15,000 shares in restricted stock with a market price of the date of grant of \$2.00. The restricted stock vested in equal amounts of 7,500 shares on March 1, 2008 and September 1, 2008.

(3) 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 8.

(4) 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)	4,600
R. Lodder	-	-	-	-	-	-
R. Clayton	1,000	1,000 (1)	\$ 2.20	2/15/2011	-	-

(1) Will vest in equal installments on 2/16/2009 and 2/16/2010.

(2) Vested on 8/1/2009.

Potential Payment Upon Termination or Change in Control

The Company has agreed to pay Dr. Kruger six months salary and health and welfare (COBRA) benefits upon termination by the Company or following a change of control.

The only other commitments the Company has regarding payment upon termination of employment are the commitments to Dr. and Mrs. Levin, each of whom has retired as an employee of the Company. On July 2, 2008, the Company entered into a Letter Agreement confirming and clarifying certain matters regarding the retirements of Dr. and Mrs. Levin. This agreement provides the following continuing post-employment benefits:

- Lifetime quarterly payments of \$12,500 to each of Dr. Levin and his wife;
- Up to \$2,000 per day for any consulting services requested by the Company;
- Office space and secretarial support at the Company's headquarters for a period of three (3) years;
- Free use of cell phones and computers for a period of three (3) years;
- Lifetime long-term care and health insurance for Dr. Levin and his wife.

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

Completed Service Years	Severance Pay
> 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, 2008.

Name	Fees Earned Paid in Cash (\$)	Stock Awards (\$)	All Other Compensation (\$)	Total (\$)
Douglas T. Brown	25,000	10,000	-	35,000
A. Paul Cox, Jr.	26,000	10,000	-	36,000
George C. Creel	6,000	-	-	6,000
Aris Melissaratos	17,000	10,000	-	27,000
Robert J. Vander Zanden	26,000	10,000	-	36,000
Gilbert V. Levin	-	-	*	*

* Under employment agreements with Dr. Gilbert V. Levin and Mrs. M. Karen Levin, the Company's founders, the Company has agreed to provide Dr. and Mrs. Levin each with lifetime payments of \$12,500 each quarter and to fund long-term lifetime healthcare and health insurance policies following their retirements from the Company on August 14, 2008 and January 4, 2006, respectively. At December 31, 2008, the Company's liability for both Dr. and Mrs. Levin was estimated to be \$500,000 for the lifetime payments and \$250,000 for funding the long-term lifetime healthcare and health insurance policies based on actuarially determined amounts. The non-current portion of these amounts is reported on the accompanying balance sheet as deferred compensation. During 2008 and 2007, the Company paid Dr. and Mrs. Levin a combined total of \$123,000 and \$50,000 in post-retirement benefits. In addition, Dr. Levin also received \$87,000 and \$125,000 in salaries during 2008 and 2007, respectively. Dr. Levin continues to serve as a member of the Board of Directors.

Non-employee directors of Spherix Incorporated ("Spherix") receive the following annual compensation for service as a member of Spherix:

Annual Retainer	\$5,000	To be paid in cash at May Board Meeting annually.
Stock Awards	\$10,000	To be calculated by dividing \$10,000 by the closing stock price the day of the May Board Meeting. The shares will be granted upon approval of the Board; however, the shares will be restricted and instructions will be given to the stock transfer agent that the shares may not be transferred until the one year anniversary of the Board Member's departure from the Board.
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	\$1,000	To be paid to the Chairman of the Audit Committee.

Security Ownership Of Certain Beneficial Owners And Management

The following table sets forth the shares of Common Stock beneficially owned by all Executive Officers and Directors as a group as of September 18, 2009. Except for Dr. Levin, Director and Chairman Emeritus, and his wife, no person is known by the Company to own beneficially more than 5% of the outstanding Common Stock. The ownership of Dr. Levin is detailed below.

Beneficial Ownership of Common Stock by Executive Officers and Directors

Title of Class	Name of Beneficial Owner	Amount and Nature of Ownership		Percent Of Class
Common	Gilbert V. Levin	2,419,307	(1) (2)	16.8%
Common	Douglas T. Brown	46,318	(2)	*
Common	Robert J. Vander Zanden	37,318	(2)	*
Common	Claire L. Kruger	30,000	(2)	*
Common	Robert A. Lodder, Jr.	27,852	(2)	*
Common	Aris Melissaratos	16,281	(2)	*
Common	Thomas B. Peter	6,666	(2)	*
Common	Robert L. Clayton	1,000	(2)	*
Common	All Executive Officers and Directors as a Group	2,584,742	(2)	18.0%

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

(1) Includes shares owned by M. Karen Levin.

(2) Included in the number of shares beneficially owned by G.V. Levin, D.T. Brown, R.J. Vander Zanden, R.A. Lodder, C.L. Kruger, A. Melissaratos, T.B. Peter, R.L. Clayton, and All Executive Officers and Directors as a Group are 0, 7,500, 7,500, 5,000, 0, 0, 0, 1,000 and 21,000 shares, respectively, which such persons have a right to acquire within 60 days pursuant to stock options.

As of September 18, 2009, Dr. Levin, Chairman Emeritus, 3170 S. Ocean Boulevard, #602S, Palm Beach, FL 33480, beneficially owned in the aggregate 2,419,307 shares of Common Stock (16.8% of the 14,389,778 outstanding shares). As principal Stockholders of the Company, Dr. Levin and his wife are considered control persons with respect to the Company.

All Directors and Executive Officers as a group, beneficial owners of 2,584,742 shares of Common Stock, owned 17.9% of the 14,389,778 outstanding shares. With the exception of Cede & Co., the holder of record for certain brokerage firms and banks, no other person is known by the Company to own beneficially more than 5% of the outstanding Common Stock of the Company.

In February 2001, the Board of Directors adopted the Rights Agreement (the "Agreement"). The 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, 2010. 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. Gilbert V. Levin, 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 2008, 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. 61 (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, 2008, 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 2008 and 2007:

	<u>2008</u>	<u>2007</u>
Audit fees	\$131,000	\$202,000
Tax fees	-	3,000
Total	<u>\$131,000</u>	<u>\$205,000</u>

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.

RATIFICATION OF THE APPOINTMENT OF INDEPENDENT ACCOUNTANTS
(Item 2 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 2009 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.

**APPROVAL OF AN AMENDMENT TO THE CERTIFICATE OF
INCORPORATION, AS AMENDED, OF SPHERIX INCORPORATED
TO AUTHORIZE A REVERSE STOCK SPLIT
(Item 3 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 A*. 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 2008, 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. In response to this action, the Board of Directors requested authorization from the Company's Stockholders to implement a reverse stock split. At a special meeting of the Stockholders held on November 17, 2008, the Stockholders approved the reverse stock split and authorized the Board of Directors to implement a reverse stock split at its discretion at any time through mid-November 2009. Thereafter, due to instability in the financial markets, the SEC suspended enforcement of its minimum bid price and market value requirements. During the suspension period, the price of the Company's stock increased and the Company regained compliance with the \$1.00 per share minimum bid price requirement for continued listing on NASDAQ. Accordingly, the Board of Directors has not effected a reverse stock split as authorized by the Stockholders. The authority to effect such a reverse stock split expires in mid-November 2009.

While the Company's stock has traded in excess of the \$1.00 minimum price since late April 2009, there can be no guarantee that it will continue to trade in excess of the minimum price requirement. Inasmuch as the authority of the Board of Directors to effect a reverse stock split expires in mid-November 2009, the Board of Directors believes it is prudent to seek an extension of this authority. Without such an extension, if the Company's stock price were to decrease below the minimum bid price requirement before the next Annual Meeting, the Company would be required to hold a Special Meeting, at considerable cost, to obtain Stockholder approval of a reverse stock split. Accordingly, the Board of Directors believes that it is preferable to seek authorization of a reverse stock split from the Stockholders at this Annual Meeting.

Thus, the Board of Directors is seeking authority to implement a reverse stock split solely in the event the Company's stock price decreases below \$1.00 per share and NASDAQ threatens to delist the Company's common stock. The authority sought by the Board of Directors is consistent with the authority granted by the Stockholders at the November 17, 2008 Special Meeting except that the Board of Directors is now requesting that this authority extend for a period of eighteen (18) months from the Annual Meeting. The balance of the provisions of the Proxy Statement describing this action is nearly identical to the disclosure set forth in the Proxy Statement issued in connection with the November 17, 2008 Special Meeting.

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 in the event it becomes necessary to maintain and/or regain compliance with the NASDAQ \$1.00 bid price listing standards. 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 Global Market or 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. 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 any future efforts by the Company to raise capital. As previously disclosed in the Company's periodic reports filed with the SEC, the Company may need to raise additional capital and may 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 \$16.00 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 14,357,162 shares were outstanding as of August 25, 2009. 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 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 (August 25, 2009)	14,357	2,871	1,436	718
Reserved for future issuance pursuant to outstanding stock options (August 25, 2009)	41	8	4	2

Currently we are authorized to issue up to a total of 2,000,000 shares of preferred stock, none of which are issued and outstanding, but 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 change the par value of our common stock to \$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 A* 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 one year anniversary of this special 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 June 30, 2009, the Company’s stockholders’ equity was approximately \$6.8 million. Given the Company’s ongoing costs of the Phase 3 clinical trial and its commercialization plans for Naturlose as a treatment for Type 2 Diabetes, 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 3.

OTHER BUSINESS
(Item 4 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 2010 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, 2009. 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

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APPENDIX A

CERTIFICATE OF AMENDMENT

SPHERIX INCORPORATED

Spherix Incorporated, a corporation organized and existing under the Delaware General Corporation Law (the “Corporation”), by virtue of a Certificate of Incorporation filed with the Secretary of State of Delaware on May 1, 1992, as amended by a Certificate of Amendment filed with the Secretary of State of Delaware on May 21, 1996, a Certificate of Amendment filed with the Secretary of State of Delaware on May 30, 2000, and a Certificate of Amendment filed with the Secretary of State of Delaware on May 25, 2001, 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 special 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 (_____) shares, consisting of _____ Million (_____) 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 \$0.005

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 _____, 20__.

By: _____
Claire L. Kruger, CEO