

**Notice of Annual Meeting of Stockholders
to be held on August 31, 2010
and Proxy Statement**

The Annual Meeting of Stockholders of Spherix Incorporated (the “Company”) will be held on August 31, 2010, 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) For purposes of complying with NASDAQ Marketplace Rule 563(d) in connection with one or more capital-raising transactions, to authorize the Company to issue up to 15,000,000 shares of common stock (including preferred stock, options, warrants, convertible debt or other securities exercisable for or convertible into common stock) for aggregate consideration of not more than \$12,000,000 million in cash and at a price not less than 80% of the market price of the Company’s common stock at the time of issuance, with such issuances to occur, if at all, within the three-month period commencing on the date of the approval of this proposal by the stockholders, and upon such terms as the Board of Directors shall deem to be in the best interests of the Corporation.
- (3) Ratification of the appointment of the independent accountants.
- (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 March 31, 2010 accompany this Notice.

Pursuant to the By-Laws of the Company, the Board of Directors has fixed the close of business on July 2, 2010 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 31, 2010. 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, 2009, 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 AUGUST 31, 2010

This Proxy Statement is being mailed on or about July 16, 2010, 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 August 31, 2010, 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 authorization for the issuance of additional shares of common stock (or securities convertible into shares of common stock) as set forth herein and for ratification of the appointment of independent accountants. 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 July 2, 2010. At that time, there were 17,150,648 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* authority to issue additional shares of common stock (or securities convertible into shares of common stock) as set forth herein, and *for* ratification of the appointment of independent accountants listed herein.

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 2010-2011 Spherix Board of Directors. It also provides certain information about the Nominees as of July 2, 2010.

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	86	Director, and Chairman Emeritus	1967
Robert A. Lodder, Jr.	51	Director, and President	2005
Aris Melissaratos	66	Director	2008
Thomas B. Peter	57	Director	2009
Robert J. Vander Zanden	64	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 Armel 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 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 2009-2010

The Company's Board of Directors held three (3) regular meetings from November 3, 2009 to May 25, 2010; and four (4) 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 six (6) 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 three (3) 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. Three (3) 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. 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 2009 Annual Meeting was attended by all Directors except for Dr. Levin who was unable to attend because of a minor illness.

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	47	CFO and Treasurer
Claire L. Kruger	51	Chief Executive Officer and Chief Operating Officer
Robert A. Lodder	51	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 2009 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 2009 and 2010 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 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 was determined by the Compensation Committee that in 2008 and 2009 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 2010, the Board approved annual salaries for Dr. Kruger, Dr. Lodder and Mr. Clayton of \$270,000, \$220,000 and \$200,000, respectively.

The following Summary of Compensation table sets forth the compensation paid by the Company during the two years ended December 31, 2009, 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 (\$)(1)	Option Award (\$)(2)	Non-Equity Incentive Plan Compensation (\$)(3)	Change in Pension Value and Non- Qualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
C. Kruger CEO and COO	2009	190,000	-	10,850	-	95,000	-	-	295,850
	2008	186,667	-	18,600	-	76,000	-	-	281,267
R. Lodder President	2009	170,000	-	-	-	59,500	-	-	229,500
	2008	166,667	-	22,500	-	68,000	-	-	257,167
R. Clayton CFO and Treasurer	2009	228,031	-	-	940	-	-	-	228,971
	2008	224,625	-	-	940	-	-	-	225,565

- (1) 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, August 1, 2008 and 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.
- (2) On February 17, 2006, R. Clayton was granted stock options for 2,000 shares, respectively. Information regarding forfeiture and assumptions made in the valuation are disclosed in Note 7.
- (3) 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	-	-	-	-	-	-
R. Lodder	-	-	-	-	-	-
R. Clayton	1,000	500 (1)	\$ 2.20	2/15/2011	-	-

(1) Vested on 2/16/2010.

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 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, 2009.

Name	Fees Earned Paid in Cash (\$)	Stock Awards (\$)	All Other Compensation (\$)	Total (\$)
Douglas T. Brown	22,900	10,000	-	32,900
A. Paul Cox	4,900	-	-	4,900
Gilbert V. Levin	-	-	*	*
Aris Melissaratos	21,300	10,000	-	31,300
Thomas B. Peter	10,300	-	-	10,300
Robert J. Vander Zanden	23,500	10,000	-	33,500

* Under employment agreements with Dr. Gilbert V. Levin and Mrs. M. Karen Levin, our founders, we have 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 on August 14, 2008 and January 4, 2006, respectively. At December 31, 2009, our liability for both Dr. and Mrs. Levin was estimated to be \$480,000 for the lifetime payments and \$240,000 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 2009 and 2008, we paid Dr. and Mrs. Levin a combined total of \$135,000 and \$123,000 in post-retirement benefits. In addition, Dr. Levin also received \$87,000 in salaries during 2008. Dr. Levin continues to serve as a member of the Board of Directors.

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	Number of shares to be calculated by dividing \$10,000 by the closing stock price the day of the May Board Meeting. Option will vest immediately and 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	\$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 July 2, 2010. 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	Douglas T. Brown	52,590 (2)	*
Common	Robert L. Clayton	2,000 (2)	*
Common	Claire L. Kruger	30,000 (2)	*
Common	Gilbert V. Levin	2,419,307 (1) (2)	14.1%
Common	Robert A. Lodder, Jr.	27,852 (2)	*
Common	Aris Melissaratos	25,053 (2)	*
Common	Thomas B. Peter	15,438 (2)	*
Common	Robert J. Vander Zanden	43,590 (2)	*
Common	All Executive Officers and Directors as a Group	2,615,830 (2)	15.3%

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

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

(2) Included in the number of shares beneficially owned by D.T. Brown, R.L. Clayton, C.L. Kruger, G.V. Levin, R.A. Lodder, A. Melissaratos, T.B. Peter, R.J. Vander Zanden and All Executive Officers and Directors as a Group are 13,772, 2,000, 0, 0, 5,000, 8,772, 8,772, 13,772 and 52,088 shares, respectively, which such persons have a right to acquire within 60 days pursuant to stock options.

As of December 31, 2009, Dr. Levin, 3170 S. Ocean Boulevard, #602S, Palm Beach, FL 33480, beneficially owned in the aggregate 2,419,307 shares of Common Stock (14.1% of the 17,150,648 outstanding shares). As principal stockholders, Dr. Levin and his wife are considered control persons with respect to us.

All directors and executive officers as a group, beneficial owners of 2,615,830 shares of Common Stock, owned 15.3% of the 17,150,648 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 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 2009, 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, 2009, 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 2009 and 2008:

	<u>2009</u>	<u>2008</u>
Audit fees	\$140,000	\$131,000
Tax fees	-	-
Total	<u>\$140,000</u>	<u>\$131,000</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.

**AUTHORIZATION TO ISSUE SECURITIES IN CONNECTION WITH CAPITAL-RAISING
TRANSACTIONS IN ACCORDANCE WITH NASDAQ MARKETPLACE RULE 5635(d)
(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 stockholder approval prior to the issuance of our common stock in connection with a transaction other than a public offering involving the sale, issuance or potential issuance by the Company of common stock (or securities convertible into or exercisable for common stock) (i) at a price less than the greater of book or market value, which together with sales by our officers, directors or substantial shareholders equals 20% or more of common stock or 20% or more of the voting power outstanding before the issuance; or (ii) equal to 20% or more of the common stock or 20% or more of the voting power outstanding before the issuance for less than the greater of book or market value of the stock. 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 a capital-raising transaction 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 six months and have an exercise price that exceeds the market value.

We are seeking stockholder 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 15,000,000 shares of our common stock (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 \$12 million in cash;
- The maximum discount at which securities will be offered 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, within the three-month period commencing on the date of the approval by the shareholders; and
- Such other terms as the board of directors shall deem to be in the best interests of the Corporation and its shareholders.

We intend to seek additional capital to implement our business strategy and enhance our overall capitalization. We are continuing in an attempt to commercialize D-tagatose as a drug candidate. We have been attempting to develop D-tagatose as a drug for treatment of Type 2 diabetes. We have recently announced that we are also seeking to develop D-tagatose as a treatment for triglycerides. We need to raise additional funds to continue these development efforts.

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 in the near future to take full advantage of any opportunities that may develop in the equity markets.

We have recently filed with the Securities and Exchange Commission (“SEC”) a registration statement on Form S-1 for a registered offering of our securities. The registration statement contemplates an offering of units consisting of shares of a newly-issued Series B Convertible Preferred Stock, which would be convertible into shares of our common stock, and warrants to purchase additional shares of our common stock. The registration statement provides for a maximum offering price of \$10,000,000 but does not describe any specific offering and will be amended to describe a specific offering as well as to address comments provided by the SEC prior to the registration statement being declared effective by the SEC. If the shareholders authorize the issuance of additional securities as set forth in this proxy statement, we could sell securities in a registered offering pursuant to the Form S-1 registration statement after it is amended and declared effective by the SEC.

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 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 15,000,000 shares of common stock in the aggregate pursuant to the authority requested from shareholders under this proposal. 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 \$12 million. If all or part of the Offerings is completed, the net proceeds will be used for general corporate purposes, including our continuing D-tagatose development efforts. 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.

Assuming a quorum is present, approval of these prospective securities offerings requires the affirmative vote of a majority of the total votes cast (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 OFFERINGS.

RATIFICATION OF THE APPOINTMENT OF INDEPENDENT ACCOUNTANTS
(Item 3 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 2010 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.

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 2011 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, 2010. 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

THIS PAGE INTENTIONALLY LEFT BLANK