

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 (Amendment No.)**

Filed by the Registrant x

Filed by a Party other than the Registrant o

Check the appropriate box:

- o Preliminary Proxy Statement
- o Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- x Definitive Proxy Statement
- o Definitive Additional Materials
- o Soliciting Material Pursuant to §240.14a-12

SAFESTITCH MEDICAL, INC.

(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):

- x No fee required.
 - o 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):
 - (4) Proposed maximum aggregate value of transaction:
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 - o Fee paid previously with preliminary materials:
 - o Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
 - (1) Amount Previously Paid:
 - (2) Form, Schedule or Registration Statement No.:
 - (3) Filing Party:
 - (4) Date Filed:
-



April 29, 2009

Dear Stockholders:

On behalf of the Board of Directors, we cordially invite you to attend the 2009 Annual Meeting of Stockholders of SafeStitch Medical, Inc. to be held at its executive offices, 4400 Biscayne Blvd., Suite A-100, Miami, Florida 33137 on Wednesday, June 10, 2009, beginning at 9:30 a.m. local time.

The attached Notice of Annual Meeting and Proxy Statement describe the matters expected to be acted upon at the Annual Meeting. At the Annual Meeting, you will have an opportunity to meet management and ask questions.

Whether or not you plan to attend the Annual Meeting, it is important that you vote your shares of SafeStitch Medical, Inc. common stock. Regardless of the number of shares you own, please sign and date the enclosed proxy card and promptly return it to us in the enclosed postage paid envelope. If you sign and return your proxy card without voting, your shares will be voted in accordance with the recommendations of the Board of Directors contained in the attached Proxy Statement.

We look forward to seeing you on June 10, 2009 and urge you to return your proxy card as soon as possible.

Sincerely,

A handwritten signature in black ink, appearing to read "Jane H. Hsiao".

Jane H. Hsiao, Ph.D., MBA
Chairman of the Board

A handwritten signature in black ink, appearing to read "Jeffrey G. Spragens".

Jeffrey G. Spragens
Chief Executive Officer



SAFESTITCH MEDICAL, INC.
4400 Biscayne Blvd.
Miami, FL 33137

**NOTICE OF 2009 ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD JUNE 10, 2009**

Notice is hereby given that the Annual Meeting of Stockholders (the "Annual Meeting") of SafeStitch Medical, Inc., a Delaware corporation (the "Company"), will be held at the Company's headquarters at 4400 Biscayne Blvd., Suite A-100, Miami, Florida, 33137, on Wednesday, June 10, 2009, beginning at 9:30 a.m., local time, for the following purposes:

1. To elect seven directors for a term of office expiring at the 2010 Annual Meeting of Stockholders or until their respective successors are duly elected and qualified; and
2. To transact such other business as may properly come before the Annual Meeting or any adjournments thereof.

Only holders of record of our common stock at the close of business on April 24, 2009, will be entitled to notice of and to vote at the Annual Meeting or any adjournments thereof. The approximate date on which this proxy statement and the enclosed form of proxy are first sent to stockholders is May 12, 2009.

Whether or not you expect to attend the Annual Meeting, please sign and date the enclosed proxy and return it in the postage paid, self-addressed envelope provided for your convenience. Should you attend, you may, if you wish, withdraw your proxy and vote your shares in person.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting to Be Held on June 10, 2009. Our proxy statement and annual report on Form 10-K are available at www.SafeStitch.com.

By Order of the Board of Directors,

A handwritten signature in black ink, appearing to read "Stewart B. Davis", with a long horizontal line extending to the right.

Stewart B. Davis, M.D.
Secretary

Miami, Florida
April 29, 2009

SAFESTITCH MEDICAL, INC.
PROXY STATEMENT FOR THE 2009 ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD
WEDNESDAY, JUNE 10, 2009

This proxy statement is furnished by the Board of Directors ("Board") of SafeStitch Medical, Inc. (the "Company" or "we," "us" or "our") in connection with the solicitation of proxies to be voted at the 2009 Annual Meeting of Stockholders of the Company that will be held at the Company's headquarters at 4400 Biscayne Blvd., Suite A-100, Miami, Florida 33137, on Wednesday, June 10, 2009, beginning at 9:30 a.m., local time, and all adjournments thereof (the "Annual Meeting"), for the purposes set forth in the accompanying Notice of Annual Meeting.

Our Board has fixed the close of business on April 24, 2009, as the record date for the determination of stockholders entitled to notice of and to vote at the Annual Meeting or any adjournments thereof. As of that date, there were 17,962,718 shares of our common stock issued and outstanding. The holders of our common stock are each entitled to one vote for each outstanding share on all matters submitted to our stockholders. The presence, in person or by proxy, of holders of a majority of our outstanding common and preferred stock constitutes a quorum at the Annual Meeting. Shares of our stock represented by proxies that reflect abstentions and "broker non-votes" (i.e., stock represented at the Annual Meeting by proxies held by brokers or nominees as to which (i) the brokers or nominees have not received instructions from the beneficial owners or persons entitled to vote and (ii) the broker or nominee does not have the discretionary voting power on a particular matter) will be counted for the purpose of determining the existence of a quorum at the Annual Meeting, but will not be counted as a vote cast "for" or "against" any given matter.

Any stockholder giving a proxy may revoke it at any time prior to the time it is voted. A proxy may be revoked by: (i) written notice to us at or prior to the Annual Meeting, attention: Secretary; (ii) execution of a subsequent proxy; or (iii) requesting revocation at the Annual Meeting and voting in person. Please note that attendance at the Annual Meeting will not automatically revoke the proxy. All shares of our stock represented by effective proxies will be voted at the Annual Meeting or at any adjournment thereof. **Unless otherwise specified in the proxy, shares of our stock represented by proxies will be voted: (i) FOR the election of the Board's nominees for directors and (ii) in the discretion of the proxy holders with respect to such other matters as may properly come before the Annual Meeting.**

Our executive offices are located at 4400 Biscayne Blvd., Suite A-100, Miami, Florida 33137. Mailing to stockholders of record on April 24, 2008 of the Notice of Annual Meeting, this proxy statement, the accompanying form of proxy and our Annual Report to Stockholders for our fiscal year ended December 31, 2008 ("fiscal 2008") will commence on or before May 12, 2009.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information as of April 15, 2009 concerning the beneficial ownership of our common stock by (i) each person known by us to be the beneficial owner of more than 5% of our outstanding common stock, (ii) each of our directors (all of whom are nominees for director), (iii) each Named Executive Officer (as defined in the Compensation Discussion and Analysis Section below), and (iv) all of our current executive officers and directors as a group. All holders listed below have sole voting power and investment power over the shares beneficially owned by them, except to the extent such power may be shared with such person's spouse. Unless noted otherwise, the address of each person listed below is 4400 Biscayne Boulevard, Suite A-100, Miami, Florida 33137.

Name and Address of Beneficial Owner	Number of Shares	Percentage of Outstanding Common Shares (1)
Phillip Frost, M.D.	4,900,648 (2)(3)	26.1%
Frost Gamma Investments Trust	4,900,648(3)	26.1%
Jane H. Hsiao, Ph.D., MBA, Chairman of the Board of Directors	3,664,348 (4)	19.5%
Jeffrey G. Spragens, Chief Executive Officer, President and Director	2,890,188 (5)	16.1%
Dr. Charles J. Filipi, Medical Director and Director 12370 Rose Lane Omaha, Nebraska 68154	2,814,092 (6)	15.7%
Dr. Stewart B. Davis, Chief Operating Officer and Secretary	46,834 (7)	*
Adam S. Jackson, Chief Financial Officer	12,500 (8)	*
Dr. Kenneth Heithoff, Director 5775 Wayzata Boulevard Suite 190 Minneapolis, Minnesota 55416	110,000 (9)	*
Richard C. Pfenniger, Jr., Director 7200 Corporate Center Drive Suite 600 Miami, Florida 33426	126,000 (10)	*
Steven D. Rubin, Director	1,036,511 (11)	5.5%
Kevin Wayne, Director 24 Pine Tree Lane Lowell, Massachusetts 01854	15,000 (12)	*
All Executive Officers and Directors as a group (9 persons)	9,930,090	52.6%

* Less than 1%.

(1) Based on 17,962,718 shares outstanding as of April 15, 2009.

(2) Does not include options to purchase 10,000 shares of the Company's common stock which are not currently exercisable and will not become exercisable within the next 60 days.

(3) Frost Gamma Investments Trust holds 4,115,265 shares of the Company's common stock. Dr. Phillip Frost is the trustee and Frost Gamma, Limited Partnership is the sole and exclusive beneficiary of Frost Gamma Investments Trust. Dr. Frost is one of two limited partners of Frost Gamma, Limited Partnership. The general partner of Frost Gamma Limited Partnership is Frost Gamma Inc. and the sole shareholder of Frost Gamma, Inc. is Frost-Nevada Corporation. Dr. Frost is also the sole shareholder of Frost-Nevada Corporation. The number of shares included above also includes warrants to purchase 785,383 shares of the Company's common stock owned directly by The Frost Group, LLC. Frost Gamma Investments Trust is a principal member of The Frost Group, LLC. Dr. Frost and Frost Gamma Investments Trust disclaim beneficial ownership of these warrants to purchase common stock, except to the extent of any pecuniary interest therein.

(4) Includes options to purchase 15,000 shares of the Company's common stock which are currently exercisable. Does not include options to purchase an additional 60,000 shares of the Company's common stock which are not currently exercisable and will not become exercisable within the next 60 days. Includes warrants to purchase 785,383 shares of the Company's common stock held by The Frost Group, LLC. Dr. Hsiao is a member of The Frost Group, LLC. Dr. Hsiao disclaims beneficial ownership of the securities held by The Frost Group, LLC, except to the extent of her pecuniary interest therein.

(5) Includes options to purchase 1,250 shares of the Company's common stock which are currently exercisable. Does not include options to purchase an additional 63,750 shares of the Company's common stock which are not currently exercisable and will not become exercisable within the next 60 days. Includes 562,818 shares owned by each of the Joy Fowler Spragens Family Trust, and RSLs Investments LLC. The Trust is an irrevocable trust established by Joy Fowler Spragens, the spouse of Mr. Spragens, for the benefit of her descendants and relatives who are unrelated to Mr. Spragens. Although Mr. Spragens is the manager of RSLs Investments LLC, the LLC is 100% owned by his adult children. Accordingly, Mr. Spragens disclaims any beneficial ownership of the shares held by the Joy Fowler Spragens Family Trust and RSLs Investment LLC. Includes warrants to purchase 20,138 shares of the Company's common stock held by Mr. Spragens.

(6) Does not include options to purchase 10,000 shares of the Company's common stock which are not currently exercisable and will not become exercisable within the next 60 days.

(7) Includes options to purchase 46,834 shares of the Company's common stock which are currently exercisable. Does not include options to purchase an additional 136,833 shares of the Company's common stock which are not currently exercisable and will not become exercisable within the next 60 days.

- (8) Includes options to purchase 12,500 shares of the Company’s common stock which are currently exercisable. Does not include options to purchase an additional 77,500 shares of the Company’s common stock which are not currently exercisable and will not become exercisable within the next 60 days.
- (9) Includes options to purchase 10,000 shares of the Company’s common stock which are currently exercisable. Does not include options to purchase an additional 5,000 shares of the Company’s common stock which are not currently exercisable and will not become exercisable within the next 60 days.
- (10) Includes options to purchase 11,000 shares of the Company’s common stock which are currently exercisable. Does not include options to purchase an additional 6,000 shares of the Company’s common stock which are not currently exercisable and will not become exercisable within the next 60 days.
- (11) Includes options to purchase 11,000 shares of the Company’s common stock which are currently exercisable. Does not include options to purchase an additional 6,000 shares of the Company’s common stock which are not currently exercisable and will not become exercisable within the next 60 days. Includes warrants to purchase 785,383 shares of the Company’s common stock held by The Frost Group, LLC. Mr. Rubin is a member of The Frost Group, LLC. Mr. Rubin disclaims beneficial ownership of the securities held by The Frost Group, LLC, except to the extent of his pecuniary interest therein.
- (12) Includes options to purchase 10,000 shares of the Company’s common stock which are currently exercisable. Does not include options to purchase an additional 5,000 shares of the Company’s common stock which are not currently exercisable and will not become exercisable within the next 60 days.

ELECTION OF DIRECTORS
(Proposal No. 1)

Nominees for Election as Director

The Board of Directors has nominated each of its seven incumbent directors for re-election as directors to serve until our next Annual Meeting of Stockholders and until each director’s successor is duly elected and qualified. Although we anticipate that all of the nominees will be able to serve, if any nominee is unable or unwilling to serve at the time of the Annual Meeting, proxies solicited hereunder will be voted in favor of the remaining nominees, if any, and for such other persons as may be designated by the Board of Directors, unless directed by a proxy to do otherwise.

The following table sets forth the names and ages of the director nominees.

Name	Age
Jane H. Hsiao, Ph.D., MBA	62
Jeffrey G. Spragens	67
Charles J. Filipi, M.D.	68
Kenneth Heithoff, M.D.	65
Richard C. Pfenniger, Jr.	53
Steven D. Rubin	48
Kevin Wayne, Ph.D.	46

The following is biographical information for the director nominees.

Jane H. Hsiao, Ph.D., MBA. Dr. Hsiao has served as a director of the Company since April 2005 and became Chairman of the Board in September 2007. Dr. Hsiao has served since May 2007 as Vice-Chairman and Chief Technical Officer of OPKO Health, Inc. (“OPKO”), a specialty healthcare company. Dr. Hsiao also serves as Chairman of the Board of medical device developer Non-Invasive Monitoring Systems, Inc. (“NIMS”), a position she has held since October 2008, and as a director of Modigene, Inc., a developmental stage biopharmaceutical company, and Neovasc, Inc. a developer of vascular devices. Dr. Hsiao is a member of The Frost Group, LLC (the “Frost Group”), a private investment firm. Dr. Hsiao previously served as the Vice Chairman-Technical Affairs and Chief Technical Officer of IVAX Corporation (“IVAX”) from 1995 until IVAX was acquired in January 2006 by Teva Pharmaceutical Industries Ltd. Dr. Hsiao also served as Chairman, CEO and President of IVX Animal Health, IVAX’s veterinary products subsidiary, from 1998 until 2006, and as IVAX’s Chief Regulatory Officer from 1992 to 1995.

Jeffrey G. Spragens. Mr. Spragens has served as our President and Chief Executive Officer and as a member of our Board of Directors since September 2007, and he has served as Business Manager of SafeStitch LLC, of which he was a founding member, since August 2005. From January 2002 to December 2006 he was a member of Board of Directors of ETOC, Inc., a privately owned hotel and lodging company based in Minneapolis, Minnesota. Since April 2002 he has been a Founding Board of Directors Member and Treasurer of the Foundation for Peace, Washington, D.C. From 1990 to 1995, he was Managing Partner, Gateway Associates, Inc., a company that secured full subdivision and planning approval for properties under its control. Prior to that and from 1987 to 1993, he was one of three founding board of directors members of North American Vaccine which was a public company acquired by Baxter International in 1999. Mr. Spragens also has previous experience as a developer and attorney.

Charles J. Filipi M.D. Dr. Filipi has served as our Medical Director and a member of our Board of Directors since September 2007. Dr. Filipi was a founding member of SafeStitch LLC in August 2005 and has served as its Medical Director since 2006. He is also Professor of Surgery in the Department of Surgery at Creighton University School of Medicine in Omaha, Nebraska and has served in this position since 1999. During the last five years, Dr. Filipi served as president of the American Hernia Society, editor of the journal *Hernia* and has published approximately thirty peer-reviewed articles and ten book chapters. He has been the inventor of over twenty provisional or utility patents. His primary areas of interest are intraluminal surgery for the correction of gastroesophageal reflux disease, obesity, Barrett's Esophagus, gastrointestinal bleeding and natural orifice transluminal intraperitoneal surgery.

Kenneth Heithoff, M.D. Dr. Heithoff has been a director of the Company since September 2007. Dr. Heithoff is a director of the Center for Diagnostic Imaging ("CDI") headquartered in Minneapolis, Minnesota, which he founded in December 1981. CDI now includes 40 clinics throughout six states, representing one of the largest teleradiology networks in the United States. Prior to that and from July 1, 1973 to June 1, 1975, Dr. Heithoff served as a Clinical Associate for the U.S. Public Health Service National Institutes of Health. Dr. Heithoff has authored or co-authored more than 40 articles and book chapters, and he lectures internationally on topics related to spine imaging. He serves, and has served, on the editorial boards of several journals, including *Spine* and *Radiology*. His professional affiliations include the American College of Radiology, the North American Spine Society, the International Society for the Study of the Lumbar Spine, and the International Society of Magnetic Resonance in Medicine.

Richard C. Pfenniger, Jr. Richard C. Pfenniger, Jr., has been a director of the Company since April 2005. Mr. Pfenniger has been Chief Executive Officer and President of Continucare Corporation, a medical service provider, since October 2003, and the Chairman of Continucare's Board of Directors since 2002. He served as CEO and Vice Chairman of Whitman Education Group, Inc., a post-secondary education provider, from 1997 until 2003. Mr. Pfenniger is a director of GP Strategies, Inc., a corporate training provider, and of OPKO.

Steven D. Rubin. Mr. Rubin has served as a director of the Company since September 2007. Mr. Rubin has been the Executive Vice President and a director of OPKO since 2007 and is a member of the Frost Group. Mr. Rubin currently serves on the Boards of Directors of OPKO, NIMS, Modigene, Inc., Neovasc, Inc., Kidville, Inc., which operates upscale learning and play facilities for children, Cardo Medical, Inc., a producer and distributor of orthopedic and spinal medical devices, Castle Brands, Inc., a marketer of premium spirits, and Dreams, Inc., a vertically integrated sports licensing and products company. Mr. Rubin previously served as the Senior Vice President, General Counsel and Secretary of IVAX from August 2001 until September 2006.

Kevin Wayne, Ph.D. Dr. Wayne is an Associate Professor of Business Administration at Rivier College in Nashua, New Hampshire and has been with the College since 2003. Dr. Wayne has been a director of the Company since September 2007. Prior to this and from 1999 until 2002, he was co-founder and Vice President of Onux Medical, Inc., a medical device company acquired by C.R. Bard in 2004. At Onux, Dr. Wayne was responsible for marketing and business development. He was also an Adjunct Professor of Marketing at Daniel Webster College from 2002-2003 and a Faculty Associate at Worcester Polytechnic Institute in 2002. Additionally, he has served in product development and marketing functions at Smith & Nephew Endoscopy, Visualization Technology (now part of GE), and Bard's Endoscopy Division. His medical and surgical device experience includes work in general surgery, GI endoscopy, arthroscopy/sports medicine and computer-assisted spine and neurosurgery applications. He is a member of the Medical Device Group of Boston, the Association of University Technology Managers and the Academy of Management.

Vote Required and Recommendation

Directors will be elected by a plurality of the votes cast by the shares of our common stock entitled to vote at the Annual Meeting.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE “FOR” EACH OF THE NOMINEES IDENTIFIED ABOVE.

Identification of Executive Officers

The following individuals are our executive officers:

Name	Age	Position
Jeffrey G. Spragens	67	Chief Executive Officer, President and Director
Dr. Stewart B. Davis	29	Chief Operating Officer and Secretary
Dr. Charles J. Filipi	68	Medical Director and Director
Adam S. Jackson	46	Chief Financial Officer

All officers serve until they resign or are replaced or removed at the discretion of the Board of Directors.

Biographical information for Mr. Spragens and Dr. Filipi is set forth in the section entitled “Proposal No. 1 - Election of Directors”, beginning on page 3.

Stewart B. Davis M.D. Dr. Davis has served as our Chief Operating Officer and Secretary since September 2007 and had joined SafeStitch LLC as Chief Operating Officer in June 2007. Prior to that and from July 2003, Dr. Davis was Assistant Medical Director for Innovia LLC, a privately-held bio medical device company in Miami, Florida, and its affiliates, including InnFocus LLC, InnoGraft LLC and InnCardia LLC. Innovia and its affiliates design implantable medical devices focusing on ophthalmology implants, vascular grafts and percutaneous heart valves. From 2006 he has also been managing partner and medical director of Parasol International, LLC, a privately-owned global healthcare advisory firm. Dr. Davis has authored ten peer-reviewed articles and three NIH grants and has published a book. Dr. Davis graduated from the University of Miami School of Medicine in 2003.

Adam S. Jackson. Mr. Jackson joined the Company as Vice President, Finance in March 2008 and was appointed Chief Financial Officer in April 2008. Mr. Jackson also serves as Chief Financial Officer of NIMS, and as Vice President, Finance of Aero Pharmaceuticals, Inc. a privately-held pharmaceutical distributor. Prior to joining the Company, Mr. Jackson served as Senior Vice President, Finance for Levitt Corporation (“Levitt”), a real estate development company, from 2006 to 2008, where he was responsible for the Levitt’s financial planning and analysis activities. From 2003 to 2006, Mr. Jackson served as Levitt’s Senior Vice President, Controller, during which period he supervised Levitt’s accounting and financial reporting activities. From 2001 to 2003, Mr. Jackson served as Chief Financial Officer of Romika-USA, Inc., a privately-held consumer goods manufacturing and distribution concern. From 2000 to 2001, Mr. Jackson served as Chief Operating Officer of V-Commex.com Corp., a privately-held internet company developing an international business-to-business web portal. From 1998 to 2000, Mr. Jackson served as Director of Financial Planning and Analysis at Eclipsys Corporation, a healthcare information technology provider.

CORPORATE GOVERNANCE

Code of Ethics

We have adopted a Code of Business Conduct and Ethics that applies to our principal executive officer, principal financial officer and other persons performing similar functions. A copy of our Code of Business Conduct and Ethics is available on our website at www.safestitch.com. We intend to post amendments to, or waivers from a provision of, our Code of Business Conduct and Ethics that apply to our principal executive officer, principal financial officer or persons performing similar functions on our website. Our website is not part of this proxy statement.

Section 16(a) Beneficial Ownership Reporting Compliance

Under section 16(a) of the Exchange Act, the Company's directors, executive officers and persons who own more than ten percent (10%) of our common stock are required to file with the SEC initial reports of ownership and reports of changes in ownership of the common stock and other equity securities of the Company. To the Company's knowledge, based solely on a review of copies of such reports furnished to the Company during and/or with respect to fiscal 2008, the Company is not aware of any late or delinquent filings required under Section 16(a) of the Exchange Act in respect of the Company's common stock or other equity securities.

Board of Directors and Committees Thereof

Independence

The Board of Directors, in the exercise of its reasonable business judgment, has determined that each of our directors qualify as independent directors pursuant to Nasdaq Marketplace Rule 4200(a)(15) and applicable SEC rules and regulations, except Mr. Spragens, who is employed as our President and CEO, and Dr. Filipi, who is employed as our Medical Director. Additionally, each of Dr. Heithoff, Dr. Wayne, Mr. Pfenniger, Jr. and Mr. Rubin is independent for audit committee purposes under Nasdaq Marketplace Rule 4350(d).

Board Committees and Meeting Attendance

The Board of Directors conducts its business through meetings of the full Board of Directors and through committees of the Board, including the Audit Committee and the Compensation Committee. We do not have any other standing committee of the Board of Directors. The Board and its committees also act by written consent. During 2008, the full Board of Directors met on three occasions. During 2008, each of the current directors attended at least 75% of the aggregate of the Board meetings and the meetings of each committee on which such director served, with the exception of Dr. Heithoff, who attended 55% of such meetings.

We do not have a policy requiring our directors to attend the Annual Meeting.

Compensation Committee

The Compensation Committee is composed of the following non-employee directors, all of whom the Board of Directors, in the exercise of its reasonable business judgment, has determined to be independent under Nasdaq and applicable SEC rules and regulations: Steven D. Rubin, Chairman, Dr. Kenneth Heithoff, Richard C. Pfenniger, Jr. and Kevin Wayne. The Compensation Committee is charged with discharging the Board of Director's responsibilities relating to compensation and evaluation of our executive officers, including establishing compensation policies and philosophies for the Company and its executive officers and reviewing and approving corporate goals and objectives relevant to our Chief Executive Officer's compensation, as well as overseeing our incentive compensation plans and equity-based plans that are subject to Board approval. The Compensation Committee has the power to create subcommittees with such powers as the Compensation Committee may from time to time confer to such subcommittees. The Board of Directors has adopted a charter that sets forth the responsibilities of the Compensation Committee, which is available on our website located at www.safestitch.com. During 2008, the Compensation Committee met on three occasions.

Audit Committee

We have a separately-designated standing audit committee, established in accordance with section 3(a)(58)(A) of the Exchange Act. The Board of Directors has adopted a charter that sets forth the responsibilities of the Audit Committee, which is available on our website located at www.safestitch.com. During 2008, the Audit Committee met on five occasions.

The Audit Committee is composed of the following non-employee directors: Richard C. Pfenniger, Jr., Chairman, Dr. Kenneth Heithoff, Steven D. Rubin and Kevin Wayne. The Company's Board of Directors has determined that Richard C. Pfenniger, Jr. is an independent audit committee financial expert as defined in Item 407 (d)(5)(ii) of Regulation S-K.

Audit Committee Report

The Audit Committee has reviewed and discussed with management the Company's audited financial statements contained in its Annual Report on Form 10-K for fiscal 2008 and has discussed with the Company's independent auditors the matters required to be discussed by the statement on Auditing Standards No. 61, as amended, as adopted by the Public Company Accounting Oversight Board in Rule 3200T. Additionally, the Audit Committee has received the written disclosures and the letter from the Company's independent accountant required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the Audit Committee concerning independence, and has discussed with the Company's independent accountant its independence.

In performing its functions, the Audit Committee acts in an oversight capacity. The Audit Committee relies on the work and assurances of the Company's management, which has the primary responsibility for the financial statements and reports, and of the independent registered public accounting firm, which, in its report, expresses an opinion on the conformity of the Company's annual financial statements to generally accepted accounting principles. In reliance on these reviews and discussions, and the report of the independent auditors, the Audit Committee has recommended to the Board of Directors and the Board of Directors has approved, the audited financial statements included in the Company's Annual Report on Form 10-K for fiscal 2008 as filed with the Securities and Exchange Commission on March 27, 2009.

Richard C. Pfenniger, Jr., Chairman
Dr. Kenneth Heithoff
Steven D. Rubin
Kevin Wayne

Nominating Committee

We do not have a standing nominating committee or a committee performing similar functions. We believe that, as a result of the role of the independent directors in the nominations process, it is not necessary at this time for us to have a separate nominating committee. In connection with this, our Board of Directors is responsible for evaluating candidates for nomination to the Board of Directors both for election at an annual meeting and as necessary from time to time to fill vacancies on the Board between annual meetings.

The Board of Directors has no specific minimum qualifications for director candidates. In general, however, persons considered for membership on the Board must have demonstrated leadership capabilities, be of sound mind and high moral character and be willing and able to commit the necessary time for Board and committee service. In evaluating potential candidates for service on the Board of Directors, the existing members of the Board will consider the candidate's ability to satisfy the Nasdaq's and SEC's independence requirements and the candidate's ability to contribute to the effective oversight and management of SafeStitch, taking into account our needs and such factors as the individual's experience, perspective, skills and knowledge of the industry in which we operate. Additionally, the Board will consider such other factors as it deems appropriate.

Board Nominations by Security Holders

The Board will consider candidates recommended by our stockholders pursuant to written applications submitted to our Corporate Secretary, SafeStitch Medical, Inc., 4400 Biscayne Boulevard, Suite A-100, Miami, Florida 33137.

There have been no changes to the procedures by which security holders may recommend nominees to our Board of Directors.

Our current Audit Committee and Compensation Committee charters are available on our website located at www.safestitch.com and are available in print to any stockholder upon request sent to SafeStitch Medical, Inc., 4400 Biscayne Blvd., Suite A-100, Miami, Florida 33137. Our Internet website and the information contained therein, other than material expressly referred to in this proxy statement, or connected thereto is not incorporated into this proxy statement.

Communication with the Board

Interested parties who want to communicate with the presiding director or with the independent or non-management directors as a group, with the Board as a whole, any Board committee or any individual Board members should address their communications to the Board, the Board members or the Board committee, as the case may be, and send them to c/o Corporate Secretary, SafeStitch Medical, Inc., 4400 Biscayne Blvd., Suite A-100, Miami, Florida 33137 or call the Corporate Secretary at (305) 575-4145. The Corporate Secretary will forward all such communications directly to such Board members. Any such communications may be made on an anonymous and confidential basis.

Director Compensation

For the year ended December 31, 2008, no cash, stock awards, option awards, non-equity incentive plan compensation, non-qualified deferred compensation earnings or any other compensation was paid to any Director in respect of such person's service on our Board of Directors or any committee thereof. The table below contains those option award granted during periods preceding our last completed fiscal year and which were outstanding at December 31, 2008.

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards (\$)	Non-Equity Incentive Plan Compensation (\$)	Nonqualified Deferred Compen- sation Earnings (\$)	All Other Compensation (\$)	Total (\$)
Jane H. Hsiao, Chairman	-	-	28,146 (1)	-	-	-	28,146
Kenneth Heithoff, MD	-	-	18,764 (2)	-	-	-	18,764
Richard C. Pfenniger, Jr.	-	-	20,640 (3)	-	-	-	20,640
Steven D. Rubin	-	-	20,640 (4)	-	-	-	20,640
Kevin Wayne	-	-	18,764 (5)	-	-	-	18,764

(1) Includes 15,000 options, all of which were exercisable at December 31, 2008.

(2) Includes 10,000 options, all of which were exercisable at December 31, 2008.

(3) Includes 11,000 options, all of which were exercisable at December 31, 2008.

(4) Includes 11,000 options, all of which were exercisable at December 31, 2008.

(5) Includes 10,000 options, all of which were exercisable at December 31, 2008.

EXECUTIVE COMPENSATION

Summary Compensation Table

The following table summarizes the compensation information for the years ended December 31 2007 and 2008 for our principal executive officer and each of the other two most highly compensated executive officers. We refer to these persons as our named executive officers elsewhere in this proxy statement.

SUMMARY COMPENSATION TABLE

Name	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$)	Non-Equity Incentive Plan Compensation (\$)	Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation (\$) (1)	Total (\$)
Jeffrey G. Spragens, Chief Executive Officer and President (2)	2008	-	-	-	4,296	-	-	-	4,296
	2007	-	-	-	-	-	-	-	-
Dr. Stewart B. Davis, Chief Operating Officer and Secretary	2008	158,750	-	-	57,043	-	-	6,350	222,143
	2007	70,000	-	-	65,318	-	-	-	135,318
Adam S. Jackson, Chief Financial Officer (3)	2008	131,042	-	-	42,659	-	-	5,242	178,943
	2007	-	-	-	-	-	-	-	-
Steven Katz, Former Chief Executive Officer and Chairman of the Board (4)	2007	-	-	-	-	-	-	-	-

(1) Includes Company match of employee 401(k) contributions under Safe Harbor Match guidelines.

(2) Jeffrey G. Spragens, our President and Chief Executive Officer, currently serves without compensation.

(3) Mr. Jackson joined the Company in March 2008. Pursuant to a cost sharing arrangement with certain related companies, the Company received approximately \$73,000 in cash and services from the related companies for Mr. Jackson's service to such other companies during 2008.

(4) Mr. Katz resigned from all positions held with the Company on September 4, 2007.

Outstanding Equity Awards as of December 31, 2008

The following table sets forth information with respect to outstanding option awards as of December 31, 2008 for our named executive officers. We have not granted any stock awards.

Name	Option Awards		Equity Incentive Plan Awards: Number of Securities		
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Underlying Unexercised Options (#)	Option Exercise Price (\$/Share)	Option Expiration Date
Dr. Stewart B. Davis	44,334	44,333 (1)	-	\$ 2.60	9/11/2017
	-	10,000 (2)	-	\$ 3.10	3/18/2015
Jeffrey G. Spragens	-	5,000 (3)	-	\$ 3.10	3/18/2015
Adam S. Jackson	-	50,000 (4)	-	\$ 3.00	3/24/2015

(1) Of the 44,333 unvested options, 22,167 become exercisable on September 11, 2009 and 22,166 become exercisable on September 11, 2010.

(2) Of the 10,000 unvested options, 2,500 become exercisable on March 18th of each of 2009, 2010, 2011 and 2012.

(3) Of the 5,000 unvested options, 1,250 become exercisable on March 18th of each of 2009, 2010, 2011 and 2012.

(4) Of the 50,000 unvested options, 12,500 become exercisable on March 24th of each of 2009, 2010, 2011 and 2012.

Potential Payments upon Termination or Change-in-Control

The named executive officers do not have employment agreements with us and are all employed on an “at will” basis. We do not have arrangements with any of our named executive officers providing for additional benefits or payments in connection with a termination of employment, change in job responsibility or change-in-control. Grants of stock options to all employees eligible to receive such grants under the SafeStitch Medical, Inc. 2007 Incentive Compensation Plan vest immediately in the event of a change in control; therefore, no separate disclosure is presented herein with respect to the acceleration of stock options held by the named executive officers upon a change of control under the terms of this stock option plan.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

We are parties to a credit agreement with The Frost Group, LLC and our CEO, Jeffrey G. Spragens, under which we have access to a line of credit with available borrowings of \$4 million. Members of the Frost Group, LLC include our Chairman, Jane Hsiao, Ph.D., Steven D. Rubin, a director, and Frost Gamma Investments Trust, a trust controlled by Dr. Phillip Frost, our largest beneficial stockholder. We are obligated to pay interest at a 10% annual rate on the borrowings on the line of credit, and we have granted a security interest in all present and subsequently acquired collateral in order to secure prompt, full and complete payment of the amounts due under the credit agreement. In March 2009, we entered into an amendment to the credit agreement solely to change the maturity date from December 31, 2009 to June 30, 2010.

In connection with entering into the line of credit, we granted warrants to purchase a total of 805,521 shares of common stock to The Frost Group, LLC and Jeffrey G. Spragens. The warrants held by the Frost Group, LLC and Mr. Spragens represent approximately 4% of our outstanding voting securities. Furthermore, Frost Gamma Investments Trust beneficially owns approximately 26% of our outstanding common stock.

Our principal corporate office is located at 4400 Biscayne Blvd., Suite A-100, Miami, Florida. We rent this space from Frost Real Estate Holdings, LLC, which is a company controlled by Dr. Frost. We currently lease approximately 3,200 square feet under the lease agreement, as amended, which has a five-year term that began on January 1, 2008. The lease currently requires annual rent of approximately \$68,000, which amount increases by approximately 4.5% per year.

Dr. Hsiao is a director of Great Eastern Bank of Florida, a bank where we maintain a bank account in the normal course of business. As of December 31, 2008, we had approximately \$260,000 on deposit with Great Eastern Bank of Florida.

Dr. Hsiao, Dr. Frost and Mr. Rubin are each significant shareholders, directors and/or officers of Non-Invasive Monitoring Systems, Inc. (“NIMS”), a publicly-traded medical device company, and of Aero Pharmaceuticals, Inc. (“Aero”), a privately-held pharmaceutical distribution company. Commencing in March 2008, our Chief Financial Officer also serves as the Chief Financial Officer and supervises the accounting staffs of NIMS and Aero under a Board-approved cost sharing arrangement whereby the total salaries of the accounting staffs of the three companies are shared. We recorded approximately \$33,000 of net reductions to operating costs and expenses for the year ended December 31, 2008 to account for the sharing of costs under this arrangement.

On December 30, 2008, we issued 8,197 shares of our common stock to RSLs Investments, LLC, an entity controlled by Mr. Spragens as repayment in full of a \$10,000 non-interest bearing loan originally made in 2005 by RSLs Investments, LLC to SafeStitch LLC. The exchange ratio was based upon the average closing price of our common stock on the OTCBB for the five trading days immediately preceding the transaction. The issuance of shares in this transaction was exempt from registration under the Securities Act pursuant to Section 4(2) thereof.

The Audit Committee of our Board of Directors reviews and approves all transactions that are required to be reported under Item 404(a) of Regulation S-K.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

Eisner LLP (“Eisner”) has served as our independent registered public accounting firm since 2006. We do not expect representatives of Eisner LLP to be present at the Annual Meeting. If they do attend, they will be available to respond to appropriate questions and will be given an opportunity to make a statement if they so desire. The following table sets forth the fees billed to the Company by Eisner for its audits of the Company’s consolidated annual financial statements and other services for the years ended December 31, 2008 and 2007.

	<u>2008</u>	<u>2007</u>
Audit Fees	\$ 74,750	\$ 145,442 (1)
Audit-Related Fees	-	-
Tax Fees	17,000 (2)	1,500
All Other Fees	-	-
Total Fees	<u>\$ 91,750</u>	<u>\$ 146,942</u>

(1) Includes \$20,750 related to the audit of the SafeStitch LLC’s 2005 and 2006 financial statements. Includes \$62,000 related to review of financial statements and schedules related to the Share Exchange.

(2) Includes fees related to the filing of the Company’s 2007 State and Federal tax returns.

Pre-Approval Policies and Procedures

Our Audit Committee has a policy in place that requires its review and pre-approval of all audit and permissible non-audit services provided by our independent auditors. The services requiring pre-approval by the audit committee may include audit services, audit related services, tax services and other services. The pre-approval requirement is waived with respect to the provision of non-audit services if (i) the aggregate amount of all such non-audit services provided to us constitutes not more than 5% of the total amount of revenues paid by us to our independent auditors during the fiscal year in which such non-audit services were provided, (ii) such services were not recognized at the time of the engagement to be non-audit services, and (iii) such services are promptly brought to the attention of the Audit Committee or by one or more of its members to whom authority to grant such approvals has been delegated by the Audit Committee. During 2007 and 2008, audit related services, tax services and all other services provided by Eisner were pre-approved by the Audit Committee.

The Audit Committee has considered and determined that the provision of all non-audit services set forth in the table above is compatible with maintaining Eisner’s independence.

OTHER BUSINESS

As of the date of this proxy statement, the Board of Directors knows of no other business to be presented at the Annual Meeting. If any other business should properly come before the Annual Meeting, the persons named in the accompanying proxy will vote thereon as in their discretion they may deem appropriate, unless they are directed by a proxy to do otherwise.

STOCKHOLDER PROPOSALS

Under our bylaws, only such business shall be conducted as shall have been brought before the meeting as specified in the meeting notice, by or at the direction of the Board of Directors or by any stockholder who is a stockholder of record at the time of giving of the meeting notice, who is entitled to vote at such meeting and who complies with the notice procedures set forth in Section 2.05 of our bylaws. Stockholder proposals intended to be included in our proxy statement and proxy for our 2010 Annual Meeting of Stockholders pursuant to the provisions of Rule 14a-8 promulgated under the Securities Exchange Act of 1934, as amended, must be received by us at our executive offices by January 12, 2010. Proposals received after such date, while not included in our proxy statement or proxy, may still be brought before the 2010 Annual Meeting of Stockholders, provided that any such proposal is delivered to or mailed and received at our principal executive office no later than February 11, 2010.

PROXY

**SAFESTITCH MEDICAL, INC.
4400 Biscayne Blvd., Suite A-100
Miami, Florida 33137**

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

ANNUAL MEETING OF STOCKHOLDERS — JUNE 10, 2009

The undersigned hereby appoints Jeffrey G. Spragens and Adam S. Jackson, and each of them severally, as proxies of the undersigned, each with full power to appoint his substitute, to represent the undersigned at the Annual Meeting (the "Annual Meeting") of Stockholders of SafeStitch Medical, Inc. (the "Company") to be held on June 10, 2009, and at any adjournments thereof, and to vote thereat all shares of common stock of the Company held of record by the undersigned at the close of business on April 24, 2009 in accordance with the instructions set forth on this proxy card and, in their discretion, to vote such shares on any other business as may properly come before the Annual Meeting and on matters incident to the conduct of the Annual Meeting. Any proxy heretofore given by the undersigned with respect to such stock is hereby revoked.

PLEASE MARK, DATE AND SIGN THIS PROXY ON THE REVERSE SIDE AND RETURN IT IN THE ENCLOSED ENVELOPE

PLEASE MARK, SIGN, DATE AND RETURN THE PROXY CARD PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE x

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" EACH OF THE FOLLOWING PROPOSALS

1. Election of seven directors.

NOMINEES:

- (1) Jane H. Hsiao, Ph.D.
- (2) Jeffrey G. Spragens
- (3) Charles J. Filipi, M.D.
- (4) Kenneth Heithoff, M.D.
- (5) Richard C. Pfenniger, Jr.
- (6) Steven D. Rubin
- (7) Kevin Wayne, Ph.D.

FOR ALL NOMINEES

WITHHOLD AUTHORITY FOR ALL NOMINEES

FOR ALL EXCEPT

INSTRUCTION: To withhold authority to vote for any individual nominee(s), mark "FOR ALL EXCEPT" and, in the list to the left, strike a line through the name of the nominee for whom you wish to withhold your vote.

2. In their discretion, the proxy holders are authorized to vote upon such other matters as may properly come before the Annual Meeting or any postponement or adjournment thereof.

THIS PROXY WHEN PROPERLY EXECUTED WILL BE VOTED AS INDICATED. IF NO CONTRARY INDICATION IS MADE, THIS PROXY WILL BE VOTED IN FAVOR OF ELECTING THE SEVEN NOMINEES TO THE BOARD OF DIRECTORS AND IN ACCORDANCE WITH THE JUDGMENT OF THE PERSONS NAMED AS THE PROXIES HEREIN ON ANY OTHER MATTERS THAT MAY PROPERLY COME BEFORE THE ANNUAL MEETING.

The undersigned acknowledges receipt of the accompanying Notice of Annual Meeting of Stockholders and Proxy Statement for the June 10, 2009 meeting.

Signature of Shareholder _____ Date: _____

Signature of Shareholder _____ Date: _____

NOTE: Please sign exactly as your name or names appears hereon. When shares are held by joint owners, both must sign. When signing as attorney, executor, administrator, trustee or guardian, please give title as such. If a corporation, please sign in full corporate name by president or other authorized officer. If a partnership, please sign in partnership name by authorized person.

