

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 14A

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

Preliminary Proxy Statement

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

Definitive Proxy Statement

Definitive Additional Materials

Soliciting Material Pursuant to §240.14a-12

XTANT MEDICAL HOLDINGS, 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):

No fee required.

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

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

2) Aggregate number of securities to which transaction applies:

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

4) Proposed maximum aggregate value of transaction:

5) Total fee paid:

Fee paid previously with preliminary materials.

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:



MEDICAL

664 Cruiser Lane
Belgrade, Montana 59714
(406) 388-0480

Notice of Annual Meeting of Stockholders To Be Held June 15, 2016

To Our Stockholders:

You are invited to attend the Annual Meeting of Stockholders (the “Annual Meeting”) of Xtant Medical Holdings, Inc. (the “Company”) on June 15, 2016 at 8:00 a.m. Eastern Time, at the Hilton Garden Inn, Dayton South/Austin Landing, 12000 Innovation Drive, Dayton, Ohio 45342, for the following purposes:

1. To elect the three Class II directors named in the accompanying Proxy Statement to serve on the Company’s Board of Directors for three year terms until the 2019 Annual Meeting of Stockholders and until their respective successors have been duly elected and qualified;
2. To ratify the appointment of EKS&H LLLP as the Company’s independent registered public accounting firm for the year ending December 31, 2016;
3. To approve the First Amendment to the Amended and Restated Xtant Medical Equity Incentive Plan (the “Plan”) to increase the number of shares of common stock authorized for issuance under the Plan from 1,400,000 shares to 1,900,000 shares;
4. To conduct an advisory vote to approve the compensation of the named executive officers; and
5. To transact such other business as may properly be brought before the Annual Meeting and any adjournment or postponement thereof.

Stockholders of record at the close of business on May 23, 2016 shall be entitled to notice of and to vote at the Annual Meeting and any adjournments or postponements thereof.

Your vote is important. Please submit a proxy as soon as possible so that your shares can be voted at the Annual Meeting. You may submit your proxy by mail or Internet, and you may revoke your proxy and vote in person if you decide to attend the Annual Meeting.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting to Be Held on June 15, 2016: The Proxy Statement, along with our 2015 Annual Report on Form 10-K, are available at www.xtantmedical.com (click “Investor Info” and “SEC Filings”).

By order of the Board of Directors

/s/ Daniel Goldberger

Daniel Goldberger

Chief Executive Officer

Belgrade, Montana
May 26, 2016

Information about Attending the Annual Meeting

Only stockholders of record on the record date of May 23, 2016, are entitled to notice of, and to attend or vote at, our Annual Meeting. If you plan to attend the meeting in person, please bring the following:

1. Photo identification.
2. Acceptable Proof of Ownership if your shares are held in “street name.”

Street Name means your shares are held of record by brokers, banks or other institutions.

Acceptable Proof of Ownership is either (a) a letter from your broker confirming that you beneficially owned shares of the Company’s common stock on the record date or (b) an account statement showing that you beneficially owned shares of the Company’s common stock on the record date. If your shares are held in street name, you may attend the meeting with proof of ownership, but you may not vote your shares in person at the Annual Meeting unless you have obtained a “legal proxy” or other evidence from your Broker giving you the right to vote your shares at the Annual Meeting.

XTANT MEDICAL HOLDINGS, INC.

664 Cruiser Lane
Belgrade, Montana 59714
(406) 388-0480

**PROXY STATEMENT FOR THE ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON JUNE 15, 2016**

QUESTIONS AND ANSWERS ABOUT THE PROXY MATERIALS

AND THE ANNUAL MEETING

Q: WHY AM I RECEIVING THESE MATERIALS?

A: We are providing these proxy materials to you in connection with the Board's solicitation of proxies for our 2016 Annual Meeting of Stockholders (the "Annual Meeting"), which will take place on June 15, 2016. As a stockholder of record, you are invited to attend the Annual Meeting and are entitled and requested to vote on the items of business described in this Proxy Statement. This Proxy Statement and accompanying proxy card (or voting instruction card) are being mailed on or about May 26, 2016 to all stockholders entitled to vote at the Annual Meeting.

Q: WHEN AND WHERE WILL THE ANNUAL MEETING BE HELD?

A: The Annual Meeting will be held on June 15, 2016 at 8:00 a.m. Eastern Time at the Hilton Garden Inn, Dayton South/Austin Landing, 12000 Innovation Drive, Dayton, Ohio 45342.

Q: WHAT INFORMATION IS CONTAINED IN THIS PROXY STATEMENT?

A: This Proxy Statement contains information regarding our corporate governance practices, our board of directors, our named executive officers, the compensation of our board of directors and named executive officers, the proposals to be voted on at the Annual Meeting and certain other required information.

Q: HOW MAY I OBTAIN THE COMPANY'S ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2015?

A: We have enclosed with this Proxy Statement a copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2015. Our Annual Report on Form 10-K can also be accessed through our website at www.xtantmedical.com (click "Investor Info" and "SEC Filings"). We filed our Annual Report on Form 10-K with the Securities and Exchange Commission (the "SEC") on March 24, 2016.

Q: WHAT ITEMS OF BUSINESS WILL BE VOTED ON AT THE ANNUAL MEETING?

A: The items of business scheduled to be voted on at the Annual Meeting are:

1. To elect three Class II directors to serve on the Board until the 2019 Annual Meeting of Stockholders and until their respective successors have been duly elected and qualified;
2. To ratify the appointment of EKS&H LLLP ("EKS&H") as the Company's independent registered public accounting firm for the year ending December 31, 2016;
3. To approve the First Amendment to the Amended and Restated Xtant Medical Equity Incentive Plan (the "Plan") to increase the number of shares of our common stock authorized for issuance under the Plan from 1,400,000 shares to 1,900,000 shares;

4. To conduct an advisory vote to approve the compensation of our named executive officers; and
5. To transact such other business as may properly be brought before the Annual Meeting and any adjournment or postponement thereof.

Q: HOW MANY VOTES MUST THE NOMINEES FOR DIRECTOR HAVE TO BE ELECTED?

A: In order for a director to be elected at a meeting at which a quorum is present, he must receive the affirmative vote of a plurality of the shares voted. There is no cumulative voting for our directors or otherwise.

Q: WHAT ARE THE VOTING REQUIREMENTS TO APPROVE THE OTHER PROPOSALS?

A: The affirmative vote of a majority of the shares cast in person or represented by proxy at the Annual Meeting and entitled to vote on the matter is required to ratify the appointment of EKS&H as our registered public accounting firm, to approve the First Amendment to the Amended and Restated Xtant Medical Equity Incentive Plan, and to approve, on an advisory basis, the compensation of our named executive officers.

Q: HOW DOES THE BOARD RECOMMEND THAT I VOTE?

A: Our Board recommends that you vote your shares “FOR” the nominees to the Board; “FOR” the ratification of the appointment of EKS&H as our registered public accounting firm; “FOR” the approval of the First Amendment to the Amended and Restated Xtant Medical Equity Incentive Plan; and “FOR” the approval, on an advisory basis, of the compensation of our named executive officers.

Q: WHAT SHARES MAY I VOTE?

A: Each share of our common stock issued and outstanding as of the close of business on May 23, 2016 (the “Record Date”) is entitled to one vote on each of the matters to be voted upon at the Annual Meeting.

You may vote all shares owned by you as of the Record Date, including (a) shares held directly in your name as the stockholder of record and (b) shares held for you as the beneficial owner through a broker, trustee or other nominee (collectively, a “Broker”). We had 12,135,150 shares of common stock issued and outstanding on the Record Date.

Q: WHAT IS THE DIFFERENCE BETWEEN BEING A STOCKHOLDER OF RECORD AND BEING THE BENEFICIAL OWNER OF SHARES HELD IN STREET NAME?

A: A stockholder of record owns shares which are registered in his or her own name. A beneficial owner owns shares which are held in street name through a third party, such as a Broker. As summarized below, there are some distinctions between stockholders of record and beneficial owners.

Stockholder of Record

You are the stockholder of record of any of your shares registered directly in your name with our transfer agent, Corporate Stock Transfer. With respect to such shares, these proxy materials are being sent to you by the Company. As the stockholder of record, you have the right to grant your voting proxy directly to our designees, Daniel Goldberger, Chief Executive Officer, and John P. Gandolfo, Chief Financial Officer, or to any other person you wish to designate, or to vote in person at the Annual Meeting. We have enclosed a proxy card for you to grant your voting proxy to Messrs. Goldberger and Gandolfo.

Shares Beneficially Held in Street Name

You are the beneficial owner of any of your shares held in street name. With respect to such shares registered through a Broker, these proxy materials, together with a voting instruction card, are being forwarded to you by your Broker. As the beneficial owner, you have the right to direct your Broker how to vote. You may use the voting instruction card provided by your Broker for this purpose. Even if you have directed your Broker how to vote, you may also attend the Annual Meeting. However, you may not vote your shares in person at the Annual Meeting unless you obtain a “legal proxy” or other evidence from your Broker giving you the right to vote the shares at the Annual Meeting.

Q: WHO IS ENTITLED TO ATTEND THE ANNUAL MEETING AND WHAT ARE THE ADMISSION PROCEDURES?

A: You are entitled to attend the Annual Meeting only if you were a stockholder as of the close of business on the Record Date or if you hold a valid proxy for the Annual Meeting. A list of stockholders eligible to vote at the Annual Meeting will be available for inspection at the Annual Meeting. If you are a beneficial holder, you will need to provide proof of beneficial ownership as of the Record Date, such as a brokerage account statement showing that you owned shares of the Company’s common stock as of the Record Date or the voting instruction card provided by your Broker. The Annual Meeting will begin promptly at 8:00 a.m., Eastern Time. You should be prepared to present photo identification for admittance. Check-in will begin one-half hour prior to the meeting. Please allow ample time for the admission procedures.

Q: MAY I VOTE MY SHARES IN PERSON AT THE ANNUAL MEETING?

A: If you were a stockholder of record on the Record Date, you may vote your shares in person at the Annual Meeting or through a proxy. If you decide to vote your shares in person, you do not need to present your share certificate(s) at the Annual Meeting; your name will be on the list of stockholders eligible to vote. If you hold your shares beneficially in street name, you may vote your shares in person at the Annual Meeting only if you obtain a legal proxy or other evidence from your Broker giving you the right to vote the shares. *Even if you plan to attend the Annual Meeting, we recommend that you also submit your proxy or voting instructions as described below so that your vote will be counted if you later decide not to attend the Annual Meeting.*

Q: HOW CAN I VOTE MY SHARES WITHOUT ATTENDING THE ANNUAL MEETING?

A: Whether you hold shares directly as the stockholder of record or beneficially in street name, you may direct how your shares are voted without attending the Annual Meeting. If you are a stockholder of record, you may vote by submitting a proxy. If you hold shares beneficially in street name, you may vote by submitting voting instructions to your Broker. For directions on how to vote, please refer to the instructions on your proxy card or, for shares held beneficially in street name, the voting instruction card provided by your Broker.

Stockholders of record may submit proxies by completing, signing, dating and mailing their proxy cards to the address provided on the proxy card. Stockholders who hold shares beneficially in street name may vote by completing, signing and dating the voting instruction cards provided and mailing them to the address provided on the voting instruction card. The proxy card and voting instruction card also include directions as to how you may submit your vote through the Internet. The voting instruction card may also include directions for alternative methods of submitting your vote. We encourage you to vote early. If you choose to vote by mail, please allow sufficient time for your proxy or voting instruction card to reach our vote tabulator prior to the Annual Meeting.

Q: WHO WILL COUNT THE VOTES?

A: Votes at the Annual Meeting will be counted by an inspector of election, who will be appointed by the Board of Directors.

Q: WHAT IS THE EFFECT OF NOT VOTING?

A: If you are a stockholder of record and you do not cast your vote, no votes will be cast on your behalf on any of the items of business at the Annual Meeting. If you are a stockholder of record and you properly sign and return your proxy card, your shares will be voted as you direct. If no instructions are indicated on such proxy card and you are a stockholder of record, shares represented by the proxy will be voted in the manner recommended by the Board of Directors on all matters presented in this Proxy Statement, namely "FOR" both of the director nominees, "FOR" the ratification of the appointment of EKS&H as the Company's independent registered public accounting firm for the year ending December 31, 2016, "FOR" the approval of the First Amendment to the Amended and Restated Xtant Medical Equity Incentive Plan, and "FOR" the approval, on an advisory basis, of the compensation of our named executive officers as described in this proxy statement.

If you are a beneficial owner of shares in street name and do not provide the Broker that holds your shares with specific voting instructions then, under applicable rules, the Broker may generally vote on "routine" matters but cannot vote on "non-routine" matters. In the case of a non-routine item, your shares will be considered "broker non-votes" on that proposal. Proposal 2 (ratification of the appointment of EKS&H) is a matter the Company believes will be considered "routine." Proposal 1 (election of directors), Proposal 3 (approval of the First Amendment to the Amended and Restated Xtant Medical Equity Incentive Plan) and Proposal 4 (approval, on an advisory basis, of the compensation of our named executive officers) are matters the Company believes will be considered "non-routine."

Q: HOW ARE BROKER NON-VOTES AND ABSTENTIONS TREATED?

A: Broker non-votes and abstentions with respect to a proposal are counted as present or represented by proxy for purposes of establishing a quorum.

Q: CAN I REVOKE MY PROXY OR CHANGE MY VOTE AFTER I HAVE VOTED?

A: You may revoke your proxy and change your vote by voting again or by attending the Annual Meeting and voting in person. Only your latest dated proxy card received at or prior to the Annual Meeting will be counted. However, your attendance at the Annual Meeting will not have the effect of revoking your proxy unless you forward written notice to the Corporate Secretary at Xtant Medical Holdings, Inc., 664 Cruiser Lane, Belgrade, Montana 59714, or you vote by ballot at the Annual Meeting. If you are a beneficial owner, you will need to request a legal proxy from your Broker and bring it with you to vote at the Annual Meeting.

Q: HOW MANY VOTES DO YOU NEED TO HOLD THE ANNUAL MEETING?

A: The presence, in person or by proxy, of the holders of one-third of the shares of common stock outstanding and entitled to vote on the Record Date is necessary to hold the Annual Meeting and conduct business. This is called a quorum. Abstentions and broker non-votes will be considered as present at the Annual Meeting for purposes of establishing a quorum.

Q: MAY THE COMPANY POSTPONE OR ADJOURN THE ANNUAL MEETING?

A: If sufficient votes for approval of the matters to be considered at the Annual Meeting have not been received prior to the meeting date, the Company may postpone or adjourn the Annual Meeting in order to solicit additional votes. The enclosed proxy card requests authority for the proxy holders, in their discretion, to vote the stockholders' common shares with respect to a postponement or adjournment of the Annual Meeting. At any postponed or adjourned meeting, proxies received pursuant to this Proxy Statement will be voted in the same manner described in this Proxy Statement with respect to the original meeting.

Q: WHO WILL BEAR THE COST OF SOLICITING VOTES FOR THE ANNUAL MEETING?

A: The Company is making this solicitation and will pay the entire cost of preparing, printing, assembling, mailing and distributing these proxy materials. In addition to the use of the mails, proxies may be solicited by personal interview, telephone, electronic mail and facsimile by directors, officers and regular employees of the Company. None of the Company's directors, officers or employees will receive any additional compensation for soliciting proxies on behalf of the Board. The Company may also make arrangements with brokerage firms and other custodians, nominees and fiduciaries for the forwarding of soliciting material to the beneficial owners of common stock held of record by those owners. The Company will reimburse those brokers, custodians, nominees and fiduciaries for their reasonable out-of-pocket expenses incurred in connection with that service.

Q: WHERE CAN I FIND THE VOTING RESULTS OF THE ANNUAL MEETING?

A: We intend to announce preliminary voting results at the Annual Meeting and will disclose results in a Current Report on Form 8-K that will be filed not more than four business days following the Annual Meeting.

PROPOSAL 1: ELECTION OF DIRECTORS

Nominees for Director

The Company's Board of Directors consists of three classes of directors with staggered terms of three years each. Our Class I directors are Daniel Goldberger and David Goodman, our Class II directors are Kent Swanson, John Deedrick and David L. Kirschman, and our Class III directors are Michael Lopach and Jon Wickwire. Each director holds office until his or her successor has been elected and qualified or until the director's earlier resignation or removal. The term of our Class II directors expires at the Annual Meeting, and all of our current Class II directors are standing for re-election. The board of directors has determined that all nominees except David L. Kirschman, Executive Vice President and Chief Scientific Officer, satisfy the NYSE MKT LLC's ("NYSE MKT") definition of independent director. Biographical information about our directors is provided below.

The Board of Directors recommends that you vote "FOR" the election of Mr. Swanson, Mr. Deedrick and Dr. Kirschman.

The names, ages and positions of our directors are as follows:

Name	Age	Position
Kent Swanson	71	Chairman of the Board
Daniel Goldberger	57	Chief Executive Officer and Director
David Goodman, M.D.	61	Director
Michael Lopach	67	Director
Jon Wickwire	73	Director
John Deedrick	53	Director
David L. Kirschman, M.D.	45	Director, Executive Vice President and Chief Scientific Officer

The business experience of our directors for the past five years (and, in some instances, for prior years) is summarized below.

Nominees standing for re-election as Class II Directors:

Kent Swanson, Chairman of the Board, was with Accenture for over 32 years, retiring from the firm in 2001 as a Senior Partner. He held global leadership and management positions in a wide range of industries and geographies. From 2001 to 2008, he was the board chair of ALN Medical Management; providing outsourced services for clinic-based physician practices. Also from 2001 to 2008, he was board chair for Boys Hope Girls Hope of Colorado, a charitable organization providing a home and scholarship education for disadvantaged children with significant capabilities and promise. From 2002 to 2009, he was a board member, audit committee member and compensation committee chair for MPC Computers. Mr. Swanson graduated with distinction from the University of Minnesota earning an M.S. in Business and received an M.B.A. from the University of Chicago in 1969. Mr. Swanson contributes significant management experience to the board of directors.

John Deedrick, Director, is an experienced senior executive with 30 years of experience in healthcare, defense, and business consulting. He was a co-founder and managing director for Accuitive Medical Ventures (2003-2012) and a corporate venture capitalist for Mayo Clinic (1997-2003). Mr. Deedrick currently serves as President and Chief Executive Officer of CHIP Solutions (2012-present) and is founder and chairman of GreatDeeds (2001-present), a Minnesota non-profit organization. Mr. Deedrick has served on the board of numerous early, mid and growth stage healthcare companies over the last 17 years, including LAFORGE Optical (2016-present) GreatDeeds (2001-present) and Ironwood Springs Ranch (2014-present). Mr. Deedrick received his undergraduate degree from the University of Northwestern St. Paul (Roseville, MN) and his MBA from St. Thomas University (St. Paul, MN). Mr. Deedrick contributes significant financial, management and industry experience to the board of directors.

David L. Kirschman, M.D., Director, Executive Vice President and Chief Scientific Officer, is an inventor and entrepreneur with a background in the medical device industry. He completed training in neurosurgery with a specialization in instrumented spinal surgery. Dr. Kirschman retired from the practice of medicine in 2006. Dr. Kirschman has issued and pending patents for a wide range of spinal devices and has been the President of X-spine since 2004. In connection with the acquisition of X-spine by the Company on July 31, 2015, Dr. Kirschman became a member of our board of directors and our Executive Vice President and Chief Scientific Officer. Dr. Kirschman also serves on the board of directors of Aerobiotix, Inc. He received his B.S. in Biological Science cum laude from Colorado State University and M.D. from the University of Colorado School of Medicine. Dr. Kirschman contributes medical, management and industry experience to the board of directors, as well as an in-depth understanding of the X-spine business.

Continuing Directors:

Daniel Goldberger, Director, Chief Executive Officer, has more than 25 years of experience as a leader of both publicly traded and privately held medical technology companies, with a proven track record of building revenue and profits through the introduction of market changing product innovations. He was most recently Chief Executive Officer and a director of Sound Surgical Technologies from April 2007 through its merger with Solta Medical (Nasdaq: SLTM) in February 2013. Previously, he was President/Chief Executive Officer and a director of Xcorporeal (Amex XCR) an innovator in portable dialysis and Glucon (private) a developer of glucose measurement technology and several other successful enterprises. Mr. Goldberger is a named inventor on more than 60 US patents. He holds a B.S. in Mechanical Engineering from the Massachusetts Institute of Technology and an MS in Mechanical Engineering from Stanford University. Mr. Goldberger contributes medical industry and management experience to the board of directors.

Michael Lopach, Director, is a certified public accountant with over 40 years of accounting experience. Mr. Lopach spent 10 years of his career with Galusha, Higgins, Galusha & Co. (1981-1991), the largest privately held accounting firm in Montana and northern Idaho, where he served as president and Chief Executive Officer. In 1999, Mr. Lopach founded Lopach & Carparelli PC, an accounting firm that focuses on medical practitioners. Mr. Lopach received his MBA from the University of Notre Dame. Mr. Lopach serves as chairman of the audit committee. Mr. Lopach contributes significant accounting experience to the board of directors.

Jon Wickwire, Director, is an attorney and founding shareholder of Wickwire Gavin, P.C., a national construction law firm which merged with Akerman Senterfitt, one of the top 100 law firms in the United States. Mr. Wickwire served as lead counsel on major infrastructure litigation and alternative dispute resolutions, both domestically and internationally, throughout his 35 year career, and was the founding fellow of the American College of Construction Lawyers. Mr. Wickwire also served as the founding chairman of the College of Scheduling, an organization dedicated to advancing the techniques, practice and profession of project scheduling, and has authored several books and articles on construction and public contract law, including Construction Management: Law and Practice and The Construction Subcontracting Manual: Practice Guide with Forms. Mr. Wickwire currently serves on the advisory board for Crunchies Food Company. Mr. Wickwire is a graduate of the University of Maryland and Georgetown University Law Center. Mr. Wickwire serves as chairman of the nominations and corporate governance committee. Mr. Wickwire contributes legal experience to the board of directors.

David Goodman, M.D., Director, has devoted his career to improving health through the development and integration of innovative technologies into clinical practice. Dr. Goodman currently serves as co-founder and Chief Medical Officer of FirstVitals Health & Wellness, a technology-enabled service company focused on preventing complications such as foot ulcers and lower extremity amputations in people with diabetes. Dr. Goodman also serves on the board of directors of NEUROMetrix (Nasdaq: NURO), a neurotechnology company focused on the early detection of diabetic peripheral neuropathy (DPN) and treatment of painful diabetic neuropathy (PDN). In addition, Dr. Goodman served as a director of Sound Surgical Technologies LLC, a private manufacturer of aesthetic surgical tools until its successful acquisition by Solta Medical (Nasdaq: SLTM) in 2013. Dr. Goodman has a long track record of accomplishment in executive management as well as through his own entrepreneurial efforts. As an executive, Dr. Goodman served as Chief Executive Officer of SEDLine, an EEG-based brain monitoring company as well as the EVP of Business Development for Masimo (Nasdaq: MASI), a leading company in non-invasive patient monitoring. As an entrepreneur, Dr. Goodman was the founding Chief Executive Officer of LifeMasters Supported SelfCare, a pioneering disease management company, and Aradigm, a developer of electronic aerosol drug delivery systems. Dr. Goodman began his career as the first engineer at Nellcor, the company that developed modern pulse oximetry. He holds a B.A.S. in applied science and bioengineering and a M.S.E. in bioengineering from the University of Pennsylvania. Dr. Goodman also received an M.D. cum laude from Harvard Medical School and the Harvard-M.I.T. Division of Health Sciences and Technology. Dr. Goodman completed his internship at the University of California, San Francisco (UCSF) in the Department of Medicine. He holds 18 issued and 4 pending US patents and maintains clinical practices in California and Hawaii. Dr. Goodman contributes medical and industry experience to the board of directors.

GENERAL INFORMATION ABOUT THE BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

Director Independence

The NYSE MKT listing standards require that the boards of listed companies have a majority of independent directors and, with limited exceptions, that audit and compensation committee members must all be independent as affirmatively determined by the Board. After reviewing the NYSE MKT standards of independence, our Board affirmatively determined, by written consent in lieu of a special meeting of the Board, effective May 12, 2016, that the following directors were independent: Kent Swanson, Michael Lopach, Jon Wickwire, John Deedrick and David Goodman. The basis for these determinations was that each of these directors had no relationships with the Company other than being a director and/or stockholder of the Company. All of the members of the Company's Audit, Compensation, Nominations and Corporate Governance and Business Development committees are independent.

Board Meetings; Attendance at Annual Stockholders Meeting

The Board of Directors met eight times during fiscal 2015. All directors attended at least 75% of the meetings of the Board and Board Committees on which the director served during the last fiscal year. The Company does not have a formal policy on Board member attendance at annual meetings of stockholders, but encourages Directors to attend. All Board members serving at the time of the Company's 2015 annual meeting of stockholders attended the annual meeting.

Board Leadership Structure and Risk Oversight

The Board is led by Kent Swanson in his role as Chairman. Mr. Swanson is an independent director. The Company believes this structure is appropriate because it enables the Board to provide independent oversight and guidance.

The Board of Directors has overall responsibility for risk oversight with a focus on the most significant risks facing the Company. The Board of Directors relies upon the Chief Executive Officer to supervise day-to-day risk management, and the Chief Executive Officer reports directly to the Board and certain committees on such matters as appropriate.

Stockholder Communications

The Board does not have a formal process for stockholders to send communications to the Board of Directors and does not feel that such a process is necessary at this time. If the Company receives stockholder communications that cannot be properly addressed by officers of the Company, the officers bring the matter to the attention of the Board of Directors.

Corporate Governance

The Company has adopted a Code of Ethics for the CEO and Senior Financial Officers, as well as a Code of Conduct that applies to all directors, officers and employees. Our corporate governance materials, including our Code of Conduct and our Code of Ethics for the CEO and Senior Financial Officers, are available on our website at www.xtantmedical.com (click “Investor Info” and “Corporate Governance”).

Committees

Our Board has the following committees and committee members (all of whom are independent directors):

Audit	Compensation	Nominations and Corporate Governance	Business Development
Mr. Lopach, Chair	Mr. Deedrick, Chair	Mr. Wickwire, Chair	Mr. Deedrick, Chair
Mr. Swanson	Mr. Lopach	Dr. Goodman	Mr. Swanson
Mr. Wickwire	Dr. Goodman	Mr. Deedrick	Dr. Goodman

Our Audit Committee, Compensation Committee, and Nominations and Corporate Governance Committee charters are posted on our website at www.xtantmedical.com (click “Investor Info” and “Corporate Governance”). A description of each committee's function and number of meetings during fiscal 2015 follows.

Audit Committee

The purpose of the Audit Committee is to assist the oversight of our Board of Directors of the integrity of the Company’s financial statements, the Company’s compliance with legal and regulatory matters, the independent auditor’s qualifications and independence, and the performance of the Company’s independent auditor and internal audit function. The primary responsibilities of the Audit Committee are set forth in its charter, and include various matters with respect to the oversight of the Company’s accounting and financial reporting process and audits of the financial statements of the Company. The Audit Committee also selects the independent auditor to conduct the annual audit of the financial statements of the Company; reviews the proposed scope of such audit; reviews accounting and financial controls of the Company with the independent auditor and our financial accounting staff; and reviews and approves transactions between the Company and directors, officers, and affiliates.

The Audit Committee currently consists of Messrs. Lopach, Swanson and Wickwire, each an “independent director” in accordance with NYSE MKT listing standards. Mr. Lopach serves as the Chairman of the Audit Committee.

Under the NYSE MKT listing standards, all audit committee members must be “financially literate,” as that term is determined by the Board in its business judgment. Further, under SEC rules, the Board must determine whether at least one member of the audit committee is an “audit committee financial expert,” as defined by the SEC’s rules. The Board has determined that all members of the Audit and Finance Committee are “financially literate” and that Messrs. Lopach and Swanson (whose backgrounds are detailed above) each qualify as an “audit committee financial expert” in accordance with applicable rules and regulations of the SEC. The Audit Committee met eight times during 2015.

Report of the Audit Committee

The Audit Committee reviews the Company’s financial reporting process on behalf of the Board of Directors. Management has the primary responsibility for establishing and maintaining adequate internal financial control, for preparing the financial statements and for the public reporting process. EKS&H, our independent auditor, is responsible for expressing opinions on the conformity of the Company’s audited financial statements with generally accepted accounting principles. In this context, the Audit Committee has (i) reviewed and discussed the audited financial statements with management and our independent auditor, (ii) discussed with our independent auditor the matters that are required to be discussed by the applicable Public Company Accounting Oversight Board standards, and (iii) received written disclosures and the letter from the independent auditor required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent auditor’s communications with the Audit Committee concerning independence, and has discussed with the independent auditor the independent auditor’s independence. Based on the review and discussions referred to above, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the Company’s 2015 Annual Report on Form 10-K.

Respectfully submitted,

Michael Lopach
Kent Swanson
Jon Wickwire

The foregoing Audit Committee Report does not constitute soliciting material and shall not be deemed filed or incorporated by reference into any other filing of our company under the Securities Act of 1933, as amended, or the Exchange Act of 1934, except to the extent we specifically incorporate this Audit Committee Report by reference therein.

Compensation Committee

The primary purposes of the Compensation Committee are to determine or recommend the compensation of our CEO and other executive officers and to oversee the administration of the Amended and Restated Xtant Medical Equity Incentive Plan. Our Compensation Committee currently consists of John Deedrick, Michael Lopach and David Goodman, each of whom is an “independent director” in accordance with NYSE MKT listing standards. The Compensation Committee met two times during 2015.

Our Chief Executive Officer makes recommendations to the Compensation Committee regarding the Company’s business goals and the performance of executives in achieving those goals, and recommends other executives’ compensation levels to the Compensation Committee based on such performance. The Compensation Committee considers these recommendations and then makes an independent decision regarding officer compensation levels and awards. While the Compensation Committee did purchase executive compensation data from Equilar, neither the Compensation Committee nor management engaged the services of a compensation consultant during the year ended December 31, 2015.

Nominations and Corporate Governance Committee

The purposes of the Nominations and Corporate Governance Committee include the selection or recommendation to our Board of Directors of nominees to stand for election as directors at each election of directors, the oversight of the selection and composition of committees of our Board of Directors, the oversight of the evaluations of our Board of Directors and management, and the development and recommendation to our Board of Directors of a set of corporate governance principles applicable to our company.

In identifying and evaluating candidates for membership on the Board of Directors, the Nominations and Corporate Governance Committee may take into account all factors it considers appropriate, which may include strength of character, mature judgment, career specialization, relevant technical skills, diversity (including, but not limited to, gender, race, ethnicity, age, experience and skills), and the extent to which the candidate would fill a present need on the Board of Directors. The Company does not have a formal diversity policy for directors. The Nominations and Corporate Governance Committee identifies director candidates based on input provided by a number of sources, including members of the Committee, other directors, our stockholders, members of management and third parties. The Nominations and Corporate Governance Committee does not distinguish between nominees recommended by our stockholders and those recommended by other parties. Any stockholder recommendation must be sent to our Corporate Secretary at Xtant Medical Holdings, Inc., 664 Cruiser Lane, Belgrade, Montana 59714, and must include certain information concerning the nominee as specified in the Company's Amended and Restated Bylaws.

The Nominations and Corporate Governance Committee currently consists of Messrs. Wickwire, Goodman and Deedrick, each of whom is an "independent director" in accordance with NYSE MKT listing standards. Mr. Wickwire serves as the Chairman of the Nominations and Corporate Governance Committee. The Nominations and Corporate Governance Committee met two times during 2015.

Business Development Committee

The purpose of the Business Development Committee is to assist the Board in carrying out oversight responsibilities related to potential strategic transactions. The Business Development Committee consists of Messrs. Deedrick, Swanson and Goodman, each of whom is an independent director. Mr. Deedrick serves as the Chairman of the Business Development Committee. The Business Development Committee met six times during 2015.

Director Compensation

Effective September 4, 2014, compensation for our independent Board members was revised as follows: independent directors receive an annual retainer of \$40,000 per year, the independent Chairman of our Board receives an additional \$20,000 per year, the Audit Committee Chair receives \$12,500 per year, other Committee Chairs receive \$10,000 per year, Audit Committee members receive \$5,000 per year, other Committee members receive \$4,000 per year and all independent directors receive an annual equity grant valued at \$40,000. In addition, the Chair of our Business Development Committee earned \$90,000 for the first six months of 2015, the other member of the Business Development Committee earned \$30,000 for the first six months of 2015, and thereafter, beginning July 1, 2015, the annual compensation for the Business Development Committee was set at \$12,500 per year for the Committee Chair and \$5,000 per year for the other members.

The following table describes the compensation earned by our independent Board members during fiscal 2015.

Director Compensation

Name	Fees Earned or Paid in Cash	Stock Awards (1)	Option Awards (1)	Non-Equity Incentive Plan Compensation	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation	Total
Kent Swanson	\$ 97,500	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ 137,500
Michael Lopach	\$ 56,500	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ 96,500
Jon Wickwire	\$ 55,000	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ 95,000
John Deedrick	\$ 150,250	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ 190,250
David Goodman, M.D.	\$ 51,750	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ 91,750

(1) Key assumptions used to estimate the grant date fair value of option awards are contained in Note 10 to the financial statements in our 2015 Annual Report on Form 10-K.

TRANSACTIONS WITH RELATED PERSONS, PROMOTERS AND CERTAIN CONTROL PERSONS

Certain former X-spine shareholders, who now own over 10% of our common stock, own a controlling interest in Norwood Tool Company d/b/a Norwood Medical, X-spine's largest supplier. In 2015, Xtant purchased from Norwood Medical approximately 12% of its operating products.

Dr. David Kirschman's sister, Deborah Kirschman Klopsch, serves as Xtant's Corporate Counsel and Director of Corporate Compliance. Compensation paid to Ms. Klopsch since the acquisition date was \$50,327 in 2015. Ms. Klopsch also received 1,005 of the restricted stock units at \$3.19 a share for a total cost of approximately \$3,000 to be expensed ratably over the vesting period as General and administrative expense. See Note 10 to the financial statements in our 2015 Annual Report on Form 10-K.

Unless delegated to the Compensation Committee by the Board of Directors, the Audit Committee or the disinterested members of the full Board of Directors reviews and approves all related party transactions.

Family Relationships

There are no family relationships between or among our directors, executive officers, or persons nominated or chosen by the Company to become directors or executive officers not disclosed above.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information regarding the beneficial ownership of our common stock as of April 30, 2016 by (a) each of our directors and named executive officers, (b) all of our current directors and executive officers as a group, and (c) each person who is known by us to beneficially own more than 5% of our common stock.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned ⁽²⁾	Percentage of Shares Beneficially Owned ⁽³⁾
Directors and Named Executive Officers⁽¹⁾:		
Daniel Goldberger	210,358 ⁽⁴⁾	1.7%
Kent Swanson	120,828 ⁽⁵⁾	1.0%
Michael Lopach	43,812 ⁽⁶⁾	*
Jon Wickwire	74,509 ⁽⁷⁾	*
John Deedrick	26,621 ⁽⁸⁾	*
David Goodman, M.D.	5,000 ⁽⁹⁾	*
David L. Kirschman, M.D.	1,701,063 ⁽¹⁰⁾	14.0%
John P. Gandolfo	24,890 ⁽¹¹⁾	*
All executive officers and directors as a group (8 persons)	2,207,081	18.2%
Five Percent Stockholders:		
OrbiMed Advisors LLC 601 Lexington Ave., 54 th Floor New York, NY 10022	1,212,301 ⁽¹²⁾	10.0%
Kenneth J. Hemmelgarn, Jr. Revocable Living Trust dated February 9, 1998 9485 Gulf Shore Drive, B-201 Naples, FL 34108	1,272,796 ⁽¹³⁾	10.5%
Brian J. Hemmelgarn Revocable Living Trust dated February 9, 1998 P.O. Box 421 15643 Captive Drive	1,272,796 ⁽¹⁴⁾	10.5%

* Less than 1% of outstanding shares of common stock.

- (1) The address for directors and named executive officers is c/o Xtant Medical Holdings, Inc., 664 Cruiser Lane, Belgrade, Montana 59714.
- (2) Unless otherwise indicated, includes shares owned by a spouse, minor children and relatives sharing the same home, as well as entities owned or controlled by the named person. Also includes shares that the named person has the right to acquire within 60 days after April 30, 2016, by the exercise or conversion of any warrant, stock option or convertible preferred stock. Unless otherwise noted, shares are owned of record and beneficially by the named person and the persons named in the table have sole voting and investment power with respect to the shares beneficially owned by them as set forth opposite their respective names.
- (3) The calculation in this column is based on 12,135,150 shares of common stock outstanding on April 30, 2016. The shares of common stock underlying warrants and stock options are deemed outstanding for purposes of computing the percentage of the person holding them, but are not deemed outstanding for the purpose of computing the percentage of any other person.
- (4) Consists of (a) 15,510 shares of our common stock held directly, (b) 81,522 shares of our common stock held by an IRA, and (c) options to purchase 113,326 shares of our common stock.
- (5) Consists of (a) 84,828 shares of our common stock held directly, (b) 20,000 shares held by a family limited partnership, (c) warrants to purchase 5,000 shares of our common stock, and (d) options to purchase 11,000 shares of our common stock.
- (6) Consists of (a) 11,522 shares of our common stock held directly, (b) 14,258 shares held by a 401(k) plan, (c) warrants to purchase 2,032 shares of our common stock, and (d) options to purchase 16,000 shares of our common stock.
- (7) Consists of (a) 31,247 shares of our common stock held directly, (b) 25,762 shares of common stock held by trusts, (c) warrants to purchase 1,500 shares of our common stock, and (d) options to purchase 16,000 shares of our common stock.
- (8) Consists of (a) 16,621 shares of our common stock, and (b) options to purchase 10,000 shares of our common stock.
- (9) Consists of an option to purchase 5,000 shares of our common stock not yet exercised.
- (10) Consists of (a) 4,000 shares of our common stock held directly, and (b) 1,697,063 shares of our common stock acquired in connection with our acquisition of X-spine, which are subject to a lock-up agreement and escrow agreement.
- (11) Consists of (a) 6,396 shares of our common stock held directly, (b) 994 shares of our common stock held by an IRA, and (c) options to purchase 17,500 shares of our common stock.
- (12) Based on Schedule 13G/A filed with the SEC on February 17, 2015, as well as our knowledge regarding recent purchases of the Notes by affiliates of OrbiMed. Includes 475,438 shares of our common stock and warrants to purchase 87,719 shares of our common stock held by Royalty Opportunities S.à.r.l., an entity managed by OrbiMed. Affiliates of OrbiMed also purchased \$52.0 million aggregate principal amount of the Notes, which are convertible into shares of our common stock. However, the indenture prevents note holders from converting their Notes to the extent that such conversion would result in beneficial ownership by the note holder or any of its affiliates in excess of 9.99% of the then-outstanding shares of our common stock. OrbiMed, an investment advisor, and Samuel D. Isaly, its managing member and a control person, each have shared voting and dispositive power with respect to shares of our common stock and notes held by Royalty Opportunities S.à.r.l. and Royalty Opportunities II, LP.

(13)Based on Schedule 13D filed with the SEC on August 10, 2015. Consists of 1,272,796 shares of our common stock acquired in connection with our acquisition of X-spine, which are subject to a lock-up agreement and escrow agreement. Kenneth J. Hemmelgarn, Jr. is a beneficiary of and the sole trustee of the Kenneth J. Hemmelgarn, Jr. Revocable Living Trust dated February 9, 1998, which may be revoked by Kenneth J. Hemmelgarn, Jr. Kenneth J. Hemmelgarn, Jr. and Brian J. Hemmelgarn are brothers and may be deemed to be members of a “group” for purposes of Section 13(d)(3) of the Exchange Act, though they have disclaimed any express agreement to act as a group, other than as described in their jointly filed Schedule 13D.

(14)Based on Schedule 13D filed with the SEC on August 10, 2015. Consists of 1,272,796 shares of our common stock acquired in connection with our acquisition of X-spine, which are subject to a lock-up agreement and escrow agreement. Brian J. Hemmelgarn is a beneficiary of and the sole trustee of the Brian J. Hemmelgarn Revocable Living Trust dated February 9, 1998, which may be revoked by Brian J. Hemmelgarn. Kenneth J. Hemmelgarn, Jr. and Brian J. Hemmelgarn are brothers and may be deemed to be members of a “group” for purposes of Section 13(d)(3) of the Exchange Act, though they have disclaimed any express agreement to act as a group, other than as described in their jointly filed Schedule 13D.

Economic Ownership; Stock Ownership Guidelines

Because the table above is limited to shares that are owned or which the person has the right to acquire within 60 days, it does not present a complete view of the economic exposure our directors and executive officers have to our common stock. Excluded from the table above are unvested stock options, unvested restricted stock units and unvested warrants which will become vested more than 60 days from April 30, 2016.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) requires directors, executive officers and holders of more than 10% of an equity security registered pursuant to Section 12 of the Exchange Act of 1934 to file various reports with the SEC.

To the Company’s knowledge, based solely on our review of the Section 16 reports furnished to us with respect to 2015, we believe all reports required pursuant to Section 16(a) were filed on a timely basis.

EXECUTIVE OFFICERS

The following table sets forth certain information concerning each of our executive officers:

Name	Age	Position
Daniel Goldberger	57	Chief Executive Officer and Director
John P. Gandolfo	55	Chief Financial Officer, Treasurer and Secretary
David L. Kirschman, M.D.	45	Director, Executive Vice President and Chief Scientific Officer

The business experience of our executive officers for the past five years (and, in some instances, for prior years) is summarized below.

Daniel Goldberger, Director, Chief Executive Officer, See page 10 of the proxy statement for a description of Mr. Goldberger’s business experience.

John Gandolfo, Chief Financial Officer, joined us as our interim Chief Financial Officer on a part-time basis, effective June 4, 2010, and filled this position full time commencing on July 6, 2010. Mr. Gandolfo also served as Interim Co-Chief Executive Officer from April 5, 2013 to August 14, 2013, and as a Director from July 9, 2013 to August 14, 2013. Mr. Gandolfo has 25 years of experience as chief financial officer of rapidly growing private and publicly held companies with a primary focus in the life sciences, healthcare and medical device areas. Mr. Gandolfo has had direct responsibility over capital raising, including four public offerings, financial management, mergers and acquisition transactions and SEC reporting throughout his professional career. Prior to joining us, Mr. Gandolfo served as the Chief Financial Officer for Progenitor Cell Therapy LLC, a leading manufacturer of stem cell therapies. Prior to joining Progenitor, Mr. Gandolfo served as the Chief Financial Officer for Power Medical Interventions, Inc., a publicly held developer and manufacturer of computerized surgical stapling and cutter systems, from January 2007 to January 2009. Prior to joining PMI, Mr. Gandolfo was the Chief Financial Officer of Bioject Medical Technologies, Inc., a publicly held supplier of needle-free drug delivery systems to the pharmaceutical and biotechnology industries, from September 2001 to May 2006, and served on the Bioject’s board of directors from September 2006 through May 2007. Prior to joining Bioject, Mr. Gandolfo was the Chief Financial Officer of Capital Access Network, Inc., a privately held specialty finance company, from 2000 through September 2001, and Xceed, Inc., a publicly held Internet consulting firm, from 1999 to 2000. From 1994 to 1999, Mr. Gandolfo was Chief Financial Officer and Chief Operating Officer of Impath, Inc., a publicly held, cancer-focused healthcare information company. From 1987 through 1994, he was Chief Financial Officer of Medical Resources, Inc., a publicly held manager of diagnostic imaging centers throughout the United States. A graduate of Rutgers University, Mr. Gandolfo is a certified public accountant (inactive status) who began his professional career at Price Waterhouse.

David L. Kirschman, M.D., Director, Executive Vice President and Chief Scientific Officer, See page 10 of the proxy statement for a description of Dr. Kirschman's business experience.

EXECUTIVE COMPENSATION

The table below summarizes the compensation earned for services rendered to the Company for the fiscal years indicated, by our Chief Executive Officer and two most highly-compensated executive officers other than the Chief Executive Officer for fiscal year 2015 (the "Named Executive Officers").

Summary Compensation Table

Name and Principal Position	Year	Salary	Bonus	Stock Awards ⁽¹⁾	Option Awards ⁽¹⁾	Non-Equity Incentive Plan Compensation	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation	Total
Daniel Goldberger	2015	404,000	245,000	-	-	-	-	-	649,000
Chief Executive Officer	2014	400,000	100,154	-	-	-	-	143,422 ⁽²⁾	643,576
David Kirschman									
Executive Vice President and Chief Scientific Officer									
From July 31, 2015 to present	2015	209,615	62,500	-	76,868	-	-	-	348,983
John Gandolfo	2015	330,000	153,000	-	-	-	-	-	483,000
Chief Financial Officer	2014	330,000	20,000	-	90,841	-	-	-	440,841
Robert Di Silvio	2015	325,000	-	-	-	-	-	-	325,000
President	2014	153,750	-	-	150,990	-	-	129,300 ⁽³⁾	433,140

From July 1, 2014 to January 8, 2016.

(1) Key assumptions used to estimate the grant date fair value of restricted stock and option awards are contained in Note 10 to the financial statements in our 2015 Annual Report on Form 10-K.

(2) Relocation reimbursement.

(3) Consulting fees paid to Mr. Di Silvio for services provided prior to his employment.

The following table shows information about Outstanding Equity Awards to our Named Executive Officers as of December 31, 2015.

Name	Option Awards				Stock Awards	
	Number of Securities Underlying Unexercised Options Exercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options	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
Daniel Goldberger	93,328	106,653	\$ 6.00	8/14/23	-	-
John Gandolfo	7,500	22,500	5.01	9/4/24	-	-
	7,000	-	6.80	5/24/23	-	-
Robert Di Silvio	15,585	39,415	6.80	7/1/24	-	-

Retirement Plans

The Company currently has two 401(k) retirement plans for its employees. Under both plans, the employee becomes qualified after six months of employment. The Company is in the process of integrating the two plans. Terms for the two plans are as follows:

	<u>Bacterin</u>	X-Spine
Matching:	2%	None
Contribution Limit:	\$18,000 or the statutorily prescribed limit	\$18,000 or \$24,000 if over the age of 50
Enrollment Period:	Twice a year	Four times a year

Potential Payments Upon Termination or Change-in-Control

All of our named executive officers have employment agreements that provide for severance payments for termination in connection with a change in control.

Under Mr. Goldberger's employment agreement, Mr. Goldberger currently receives an annual base salary of \$520,000, which is subject to annual increases based on periodic reviews, along with other incentive compensation as determined by the Board of Directors, with a bonus target of 50% of Mr. Goldberger's annual base salary. Mr. Goldberger's employment agreement contains customary intellectual property provisions and restrictive covenants and provides for six (6) months of severance for termination without cause or resignation with good reason and twelve (12) months of severance for termination in connection with a change in control.

Dr. David L. Kirschman's employment agreement provides for an annual base salary of \$500,000, along with other incentive compensation as determined by the Board of Directors, with a bonus target of 50% of his annual base salary. Dr. Kirschman also received a restricted stock grant of 40,000 shares of our common stock in 2015, vesting over four years. Dr. Kirschman's employment agreement contains customary proprietary information provisions and restrictive covenants, including non-solicitation and non-competition covenants, and his agreement provides for 12 months' severance for termination in connection with a change of control.

Mr. Gandolfo's employment agreement provides for an annual base salary of \$360,000, along with other incentive compensation as determined by the Compensation Committee of the Board of Directors, with a bonus target of 50% of Mr. Gandolfo's annual base salary. Mr. Gandolfo's employment agreement contains customary intellectual property provisions and restrictive covenants and provides for twelve (12) months of severance for termination without cause, resignation with good reason, or termination in connection with a change in control.

Mr. Di Silvio's employment agreement provided for an annual base salary of \$325,000, along with other incentive compensation as determined by the Compensation Committee of the Board of Directors, with a bonus target of 50% of Mr. Di Silvio's annual base salary. Mr. Di Silvio's employment agreement contained customary intellectual property provisions and restrictive covenants and provides for six (6) months of severance for termination without cause or resignation with good reason and twelve (12) months of severance for termination in connection with a change in control. We are currently paying severance to Mr. Di Silvio pursuant to the term of his agreement. Per the terms of his stock option agreement, Mr. Di Silvio had ninety days from January 8, 2016 to exercise his vested stock options, and did not exercise his options within such time period.

PROPOSAL 2: RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We are seeking stockholder ratification of the appointment of EKS&H LLLP (“EKS&H”) as our independent registered public accounting firm for the fiscal year ending December 31, 2016. If the stockholders fail to ratify the appointment of EKS&H, the Audit Committee may reconsider its selection. Even if the selection is ratified, the Audit Committee, in its discretion, may direct the appointment of a different independent registered public accounting firm at any time during the year if the Audit Committee feels that such a change would be in the best interests of the Company and our stockholders.

We do not expect representatives from EKS&H to attend the Annual Meeting.

The Board of Directors recommends that stockholders vote “FOR” the ratification of the appointment of EKS&H as our independent registered public accounting firm for the fiscal year ending December 31, 2016.

Audit and Non-audit Fees

EKS&H LLLP (“EKS&H”) served as the independent registered public accounting firm to audit our books and accounts for the fiscal years ending December 31, 2015 and December 31, 2014. The following table presents the aggregate fees billed for professional services rendered by EKS&H for the years ended December 31, 2015 and December 31, 2014.

	2015	2014
Audit fees	\$ 226,200	\$ 157,500
Audit-related fees	\$ 63,764	\$ 49,546
Tax fees	\$ 34,800	\$ -
All other fees	\$ -	\$ -

In the above table, “audit fees” are fees billed for services provided related to the audit of our annual financial statements, quarterly reviews of our interim financial statements and services normally provided by the independent accountant in connection with statutory and regulatory filings or engagements for those fiscal periods. “Audit-related fees” are fees not included in audit fees that are billed by the independent accountant for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements. “Tax fees” are fees billed by the independent accountant for professional services rendered for tax compliance, tax advice and tax planning. “All other fees” are fees billed by the independent accountant for products and services not included in the foregoing categories.

Audit Committee’s Pre-Approval Policy

It is the Audit Committee’s policy to approve in advance the types and amounts of audit, audit-related, tax and any other services to be provided by our independent accountants. In situations where it is not possible to obtain full Audit Committee approval, the Audit Committee has delegated authority to the Chairman of the Audit Committee to grant pre-approval of auditing, audit-related, tax and all other services. Any pre-approved decisions by the Chairman are required to be reviewed with the Audit Committee at its next scheduled meeting.

The Audit Committee approved 100% of the foregoing services provided by EKS&H.

PROPOSAL 3: APPROVAL OF THE FIRST AMENDMENT TO THE AMENDED AND RESTATED XTANT MEDICAL EQUITY INCENTIVE PLAN

A proposal will be presented at the Annual Meeting to approve the First Amendment to the Amended and Restated Xtant Medical Equity Incentive Plan (the "Plan"), to increase the number of shares of common stock that may be issued under the Plan from 1,400,000 shares to 1,900,000 shares.

Our Board of Directors believes that the availability of stock options, restricted stock units and other equity compensation is important to the Company's ability to attract and retain experienced employees and to provide an incentive for them to exert their best efforts on behalf of the Company. At March 31, 2016, we had only approximately 470,000 shares available for issuance under the Plan. Accordingly, on May 12, 2016, our Board of Directors approved, subject to stockholder approval, an increase in the number of shares available under the Plan.

The following discussion summarizes the material terms of the performance goals under the Plan, including a description of (i) the individuals eligible for performance awards under the Plan, (ii) the business criteria on which the underlying performance goals are based, and (iii) the applicable award limits.

The complete text of the amendment to the Plan is attached to this proxy statement as *Appendix A*. The complete text of the original Plan is attached as Exhibit 10.8 to our Quarterly Report filed with the SEC on November 16, 2015. The following description of the Plan is a summary of certain provisions of the Plan and is qualified in its entirety by reference to *Appendix A* to this proxy statement and to Exhibit 10.8 to our Quarterly Report filed with the SEC on November 16, 2015.

Increase in Shares

The Plan is limited in the number of shares available to Participants. Once the Plan has exceeded its authorized share limit, the Company's ability to use the Plan as a tool to reward and incentivize employees is diminished. Equity compensation links the incentives of employees to the Company, rewarding efforts that increase share value. If the share limit of the Plan is increased, then the Company can continue to incentivize employees and align employee interests with stockholder interests.

The proposed amendment will increase the number of authorized shares in the Plan to 1,900,000. The level of increase was selected based upon previous experience of the Plan, including the rate at which shares are used and projections for future share usage of the Plan.

Description of the Plan

The purpose of the Plan is to enable us to attract, retain and motivate key employees, directors and, on occasion, independent consultants, by providing them with stock options, restricted stock awards, stock appreciation rights ("SARs"), stock bonuses, restricted stock units and other stock grants. Stock options granted under the Plan may be either incentive stock options to employees, as defined in Section 422A of the Internal Revenue Code of 1986 (the "Code"), or non-qualified stock options. The Plan is administered by the compensation committee of our board of directors. The compensation committee is composed of persons who are both non-employee directors, as defined under Rule 16b-3 of the Securities Exchange Act of 1934, as amended, and "outside directors" within the meaning of Section 162(m) of the Code. The compensation committee has the power to determine the terms of any stock options granted under the Plan, including the exercise price, the number of shares subject to the stock option and conditions of exercise. Stock options granted under the incentive plan are generally not transferable, vest in installments and are exercisable during the lifetime of the optionee only by such optionee. The exercise price of all incentive stock options granted under the plan must be at least equal to the fair market value of the shares of common stock on the date of the grant. The specific terms of each stock option grant will be reflected in a written stock option agreement.

Federal Income Tax Consequences

The following summary constitutes a brief overview of the principal U.S. Federal income tax consequences relating to awards that may be granted under the Plan based upon current tax laws. This summary is not intended to be exhaustive and does not describe state, local, or foreign tax consequences.

Non-Qualified Stock Options. A participant will realize no taxable income at the time a non-qualified option is granted under the Plan, but generally at the time such non-qualified option is exercised, the participant will realize ordinary income in an amount equal to the excess of the fair market value of the shares on the date of exercise over the option exercise price. Upon a disposition of such shares, the difference between the amount received and the fair market value on the date of exercise will generally be treated as a long-term or short-term capital gain or loss, depending on the holding period of the shares. The company will generally be entitled to a deduction for Federal income tax purposes at the same time and in the same amount as the participant is considered to have realized ordinary income in connection with the exercise of a non-qualified option.

Incentive Stock Options. A participant will realize no taxable income, and the company will not be entitled to any related deduction, at the time any incentive stock option is granted. If certain employment and holding period conditions are satisfied, then no taxable income will result upon the exercise of such option and the company will not be entitled to any deduction in connection with such exercise. Upon disposition of the shares after expiration of the statutory holding periods, any gain realized by a participant will be taxed as long-term capital gain and any loss sustained will be long-term capital loss, and the company will not be entitled to a deduction in respect to such disposition. While no ordinary taxable income is recognized at exercise (unless there is a "disqualifying disposition", see below), the excess of the fair market value of the shares over the option exercise price is a preference item that is recognized for alternative minimum tax purposes. Except in the event of death, if shares acquired by a participant upon the exercise of an incentive stock option are disposed of by such participant before the expiration of the statutory holding periods (i.e., a "disqualifying disposition"), such participant will be considered to have realized as compensation taxed as ordinary income in the year of such disposition an amount, not exceeding the gain realized on such disposition, equal to the difference between the option price and the fair market value of such shares on the date of exercise of such option. Generally any gain realized on the disposition in excess of the amount treated as compensation or any loss realized on the disposition will constitute capital gain or loss, respectively. If a participant makes a "disqualifying disposition," generally in the fiscal year of such "disqualifying disposition," the Company will be allowed a deduction for Federal income tax purposes in an amount equal to the compensation realized by such participant.

SARs. A grant of SARs has no federal income tax consequences at the time of grant. Upon the exercise of SARs, the value of the shares and cash received is generally taxable to the grantee as ordinary income, and the company generally will be entitled to a corresponding tax deduction.

Restricted Stock. A participant receiving restricted stock under the Plan may be taxed in one of two ways: the participant (i) pays tax when the restrictions lapse, or (ii) makes a special election to pay tax in the year the grant is made. At either time, the value of the award for tax purposes is the excess of the fair market value of the shares at that time over the amount (if any) paid for the shares. This value is taxed as ordinary income and is subject to income tax withholding. The company receives a tax deduction at the same time and for the same amount taxable to the participant. If a participant elects to be taxed at grant, then, when the restrictions lapse, there will be no further tax consequences attributable to the awarded stock until disposition of the stock.

Restricted Stock Units. In general, no taxable income is realized by a participant in the Plan upon the grant of a restricted stock unit award. Such participant generally would include in ordinary income the fair market value of the award of stock at the time shares of stock are delivered to the participant. The company generally will be entitled to a tax deduction at the time and in the amount that the participant recognizes ordinary income.

Section 162(m) Limit. The Plan is intended to enable the company to provide certain forms of performance-based compensation to executive officers that will meet the requirements for tax deductibility under Section 162(m) of the Code. Section 162(m) provides that, subject to certain exceptions, the company may not deduct compensation paid to any one of certain executive officers in excess of \$1 million in any one year. Section 162(m) excludes certain performance-based compensation from the \$1 million limitation.

Plan Benefits

The Compensation Committee has the discretion to determine the type, term, conditions and recipients of awards granted under the Plan. Accordingly, it is not possible to determine the amounts of awards that will be received by any director, officer, employee or consultant under the Plan if approved by stockholders.

On May 20, 2016, NYSE MKT reported a closing price of \$1.82 for our common stock.

Equity Compensation Plan Information

The following table shows information about shares authorized for issuance under the Amended and Restated Xtant Medical Equity Incentive Plan as of December 31, 2015:

Securities authorized for issuance under equity compensation plans

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	409,081	\$ 12.90	400,000 ⁽¹⁾
Equity compensation plans not approved by security holders ⁽²⁾	255,000	\$ 6.17	N/A
Total	664,081	\$ 10.64	400,000

(1) In addition to options outstanding, the Company also has 58,820 shares of restricted stock outstanding that have been issued under the Plan.

(2) The inducement grants to our Chief Executive Officer and former President were approved by the Compensation Committee of our Board of Directors and granted outside of the Plan as an inducement material to entering into employment with the Company pursuant to Section 711(a) of the NYSE MKT Company Guide. The inducement grant to our Chief Executive Officer consists of a stock option to purchase up to 200,000 shares of our common stock, with a per share exercise price of \$6.00, which was the adjusted closing price of our common stock on the August 14, 2013 grant date. Our Chief Executive Officer's inducement grant stock option vests over five years, with 20% of the underlying shares vesting after one year and the remaining 80% vesting in forty-seven (47) equal monthly installments as to 3,333 underlying shares, beginning September 15, 2014, and one final installment as to 3,330 underlying shares. The inducement grant to our former President consists of a stock option to purchase up to 55,000 shares of our common stock, with a per share exercise price of \$6.80, which was the adjusted closing price of our common stock on the July 1, 2014 grant date. Our former President's inducement grant stock option vested over five years, with 20% of the underlying shares vesting after one year and the remaining 80% vesting in forty-seven (47) equal monthly installments as to 917 underlying shares, beginning on August 1, 2015, and one final installment as to 901 underlying shares. Our former President had ninety days from January 8, 2016 to exercise his vested stock options, and did not exercise such options in that time frame.

The Board of Directors recommends that you vote "FOR" the approval of the First Amendment to the Amended and Restated Xtant Medical Equity Incentive Plan.

PROPOSAL 4: ADVISORY VOTE TO APPROVE THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

Pursuant to Section 14A of the Exchange Act of 1934, we are conducting a non-binding advisory vote on the compensation of our named executive officers. This proposal, commonly known as a “say-on-pay” proposal, gives the Company’s stockholders the opportunity to express their views on the compensation of our named executive officers.

In determining the compensation of our named executive officers, the Compensation Committee of our Board of Directors attempts to offer compensation competitive with other similarly situated organizations in order to attract, retain and motivate the caliber of officers needed to achieve the Company’s goals and to align rewards with performance that creates long-term value for stockholders. The Company believes the compensation of its named executive officers is appropriate and aligns the long-term interests of its named executive officers with the long-term interests of its stockholders.

For these reasons, the Board of Directors recommends a vote in favor of the following resolution:

“RESOLVED, that the compensation paid to the Company’s named executive officers, as disclosed pursuant to Item 402 of Regulation S-K is hereby APPROVED.”

As an advisory vote, this proposal is not binding upon the Company. However, the Compensation Committee values the opinions expressed by stockholders in their vote on this proposal, and will consider the outcome of the vote when making future compensation decisions for named executive officers. The affirmative vote of the holders of a majority of the votes cast by our stockholders in person or represented by proxy and entitled to vote is required to approve this Proposal 4.

The Board of Directors recommends a vote “FOR” the approval, on an advisory basis, of the compensation of our named executive officers as described in this proxy statement.

ADDITIONAL INFORMATION

Stockholder Proposals

Proposals by stockholders that are submitted for inclusion in our proxy statement for our 2017 Annual Meeting must follow the procedures set forth in Rule 14a-8 under the Securities Exchange Act of 1934, as amended, and our bylaws. To be timely under Rule 14a-8, stockholder proposals must be received by our Corporate Secretary at Xtant Medical Holdings, Inc., 664 Cruiser Lane, Belgrade, Montana 59714 by February 25, 2017.

The Company's Amended and Restated Bylaws also establish an advance notice procedure with regard to nominations of persons for election to the Board of Directors and stockholder proposals to be brought before an annual meeting. Stockholder proposals and nominations may not be brought before an annual meeting unless, among other things, the stockholder's submission contained certain information concerning the proposal or the nominee, as the case may be, and other information specified in the Company's Amended and Restated Bylaws. Proposals or nominations not meeting these requirements will not be entertained at an annual meeting.

Stockholder proposals and nominations may not be brought before the 2017 Annual Meeting unless, among other things, the stockholder's submission contains certain information concerning the proposal or the nominee, as the case may be, and other information specified in the Company's Amended and Restated Bylaws, and the stockholder's submission is received by us no earlier than the close of business on January 26, 2017, and no later than February 25, 2017. Proposals or nominations not meeting these requirements will not be entertained at the 2017 Annual Meeting.

Stockholders recommending candidates for consideration by the Nominating and Corporate Governance Committee must provide the candidate's name, biographical data and qualifications. Any such recommendation should be accompanied by a written statement from the individual of his or her consent to be named as a candidate and, if nominated and elected, to serve as a director. These requirements are separate from, and in addition to, the SEC's requirements that a stockholder must meet in order to have a stockholder proposal included in the proxy statement.

Householding Information

If you share an address with any of our other stockholders, your household might receive only one copy of our proxy statement, unless you have instructed us otherwise. This delivery method is referred to as "householding" and can result in cost savings for us. To take advantage of this opportunity, we may deliver a single proxy statement to multiple stockholders who share an address. We will deliver upon oral or written request a separate copy of our proxy statement to any stockholder of a shared address to which a single copy of our proxy statement was delivered. If you prefer to receive separate copies of our proxy statement, either now or in the future, or if you currently are a stockholder sharing an address with another stockholder and wish to receive only one copy of future proxy statements for your household, please call us at (406) 388-0480 or send your request in writing to us at the following address: 664 Cruiser Lane, Belgrade, Montana 59714, Attention: Corporate Secretary.

OTHER MATTERS

Whether or not you plan to attend the meeting, please vote over the Internet or complete, sign and return the proxy card or voting instruction card sent to you in the envelope provided.

Our 2015 Annual Report on Form 10-K, which is not a part of this Proxy Statement and is not proxy soliciting material, is enclosed.

By order of the Board of Directors

/s/ Daniel Goldberger

Daniel Goldberger

Chief Executive Officer

Belgrade, Montana

May 26, 2016

**FIRST AMENDMENT
TO THE AMENDED AND RESTATED
XTANT MEDICAL EQUITY INCENTIVE PLAN**

WHEREAS, Xtant Medical Holdings, Inc., a Delaware corporation (the “**Company**”), has adopted and currently maintains the Amended and Restated Xtant Medical Equity Incentive Plan, effective June 7, 2010 and amended and restated July 8, 2011, June 24, 2015 and September 25, 2015 (the “**Plan**”);

WHEREAS, Article XIV of the Plan gives the Board of Directors of the Company (the “**Board**”) the authority to amend the Plan at any time, subject to approval by the shareholders of the Company (the “**Shareholders**”);

WHEREAS, the Plan is a central tool to reward the employees of the Company;

WHEREAS, the Board believes it is in the best interests of the Company and the Shareholders to amend the Plan to increase the number of shares available under the Plan (this **Amendment**”);

WHEREAS, the Compensation Committee of the Board has approved this Amendment pursuant to a Unanimous Written Consent of the Compensation Committee, dated as of May 12, 2016;

WHEREAS, the Board has approved this Amendment pursuant to a Unanimous Written Consent of the Board, dated as of May 12, 2016, and recommended to the Shareholders that they approve this Amendment and the increase in the number of shares available under the Plan; and

WHEREAS, the Shareholders approved the proposal to amend the Plan at the annual meeting of the Company held on June 15, 2016.

NOW, THEREFORE, the Plan is hereby amended as set forth below:

1. Section 11.1 of the Plan is hereby restated to read as set forth below:

Number of Shares. The number of Shares that are authorized for issuance under the Plan in accordance with the provisions of the Plan and subject to such restrictions or other provisions as the Committee may from time to time deem necessary shall not exceed 1,900,000, subject to the provisions regarding changes in capital. The Shares may be either authorized and unissued Shares or previously issued Shares acquired by the Plan Sponsor. This authorization may be increased from time to time by approval of the Board and by the stockholders of the Plan Sponsor if, in the opinion of counsel for the Plan Sponsor, stockholder approval is required. Shares that may be issued upon exercise of Options under the Plan shall be applied to reduce the maximum number of Shares remaining available for use under the Plan. The Plan Sponsor shall at all times during the term of the Plan and while any Awards are outstanding retain as authorized and unissued Stock at least the number of Shares from time to time required under the provisions of the Plan, or otherwise assure itself of its ability to perform its obligations hereunder.

2. This Amendment shall amend only the provisions of the Plan as set forth herein, and those provisions not expressly amended hereby shall be considered in full force and effect.

3. This Amendment may be executed in two or more counterparts, including by exchange of facsimile or other electronic copies of the signature page, each of which shall be deemed an original and all of which together shall constitute one instrument.

[Remainder of page intentionally blank]

IN WITNESS WHEREOF, the Plan Sponsor has caused this First Amendment to be duly executed, effective as of June __, 2016.

XTANT MEDICAL HOLDINGS, INC.

Plan Sponsor

By: _____

Name: _____

Title: _____

PROXY

XTANT MEDICAL HOLDINGS, INC.

664 Cruiser Lane
Belgrade, Montana 59714
(406) 388-0480

**ANNUAL MEETING OF STOCKHOLDERS – JUNE 15, 2016
PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS**

The undersigned hereby appoints Daniel Goldberger and John Gandolfo, or either of them, as proxies, each with full power of substitution, and hereby authorizes them to represent and to vote (with discretionary authority as to any and all other business that may properly come before the meeting), all of the shares of Common Stock of Xtant Medical Holdings, Inc. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held at 8:00 a.m. Eastern Time on June 15, 2016 at the Hilton Garden Inn, Dayton South/Austin Landing, 12000 Innovation Drive, Dayton, Ohio 45342, and at any adjournment, continuation or postponement thereof.

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED AS DIRECTED BY THE STOCKHOLDER(S). IF NO SUCH DIRECTIONS ARE MADE, THIS PROXY WILL BE VOTED IN ACCORDANCE WITH THE RECOMMENDATION OF THE BOARD OF DIRECTORS.

IF YOU ARE NOT VOTING ON THE INTERNET, PLEASE MARK, SIGN, DATE AND RETURN THIS PROXY CARD PROMPTLY.

Proposal 1 – Election of Class II Directors

	For	Withhold
Class II – Kent Swanson	<input type="checkbox"/>	<input type="checkbox"/>
Class II – John Deedrick	<input type="checkbox"/>	<input type="checkbox"/>
Class II – David L. Kirschman	<input type="checkbox"/>	<input type="checkbox"/>

The Board of Directors recommends a vote FOR the listed nominees under Proposal 1.

Proposal 2 – Ratification of Independent Auditors

For Against Abstain

The Board of Directors recommends a vote FOR Proposal 2.

Proposal 3 – First Amendment to the Amended and Restated Xtant Medical Equity Incentive Plan

For Against Abstain

The Board of Directors recommends a vote FOR Proposal 3.

Proposal 4 – Advisory Vote on the Compensation of our Named Executive Officers

For Against Abstain

The Board of Directors recommends a vote FOR Proposal 4.

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

Please date and sign name exactly as it appears hereon. Executors, administrators, trustees, etc. should so indicate when signing. If the stockholder is a corporation, the full corporate name should be inserted and the proxy signed by an officer of the corporation indicating his/her title.

Date: _____

Signature _____

Signature (Joint Owners) _____

Address Changes/Comments:

Please indicate whether you plan to attend this meeting: