

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549  
SCHEDULE 14A INFORMATION

**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 Rule 14a-11(c) or rule 14a-12

**OPGEN, 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.**
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708 Quince Orchard Road, Suite 205  
Gaithersburg, MD 20878

**2019 ANNUAL MEETING OF STOCKHOLDERS  
TO BE HELD ON AUGUST 22, 2019**

July 12, 2019

Dear Stockholders of OpGen, Inc.:

You are cordially invited to the 2019 Annual Meeting of Stockholders (the "Annual Meeting") of OpGen, Inc. to be held at the offices of Ballard Spahr LLP located at 1909 K Street, NW, 12<sup>th</sup> Floor, Washington, DC 20006 on August 22, 2019, beginning at 10:00 am, local time.

The formal Notice of Annual Meeting of Stockholders and Proxy Statement describing the matters to be acted upon at the Annual Meeting are contained in the following pages. Stockholders also are entitled to vote on any other matters that properly come before the Annual Meeting.

Your vote is important. Enclosed is a proxy that will entitle you to vote your shares on the matters to be considered at the Annual Meeting, even if you are unable to attend in person. Please mark the proxy to indicate your vote, date and sign the proxy and return it in the enclosed envelope as soon as possible for receipt prior to the Annual Meeting, or follow the instructions in the accompanying proxy materials to vote via the internet. Regardless of the number of shares you own, please be sure you are represented at the Annual Meeting either by attending in person or by returning your proxy or voting on the internet as soon as possible.

On behalf of OpGen, Inc., I thank you for your ongoing interest and investment in our company.

Sincerely,

A handwritten signature in blue ink, appearing to read "Evan Jones", written over a light blue horizontal line.

Evan Jones  
Chairman of the Board and Chief Executive Officer

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708 Quince Orchard Road, Suite 205  
Gaithersburg, MD 20878

**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS  
TO BE HELD ON AUGUST 22, 2019**

July 12, 2019

Dear Stockholders of OpGen, Inc.:

The 2019 Annual Meeting of Stockholders (the "Annual Meeting") of OpGen, Inc., a Delaware corporation (the "Company") will be held at the offices of Ballard Spahr LLP located at 1909 K Street, NW, 12<sup>th</sup> Floor, Washington, DC 20006 on August 22, 2019, beginning at 10:00 am local time, for the purpose of considering and voting upon the following:

1. **Election of Directors.** The election of the four directors named in the attached Proxy Statement, to serve until the next Annual Meeting of Stockholders and until their successors are elected and qualified;
2. **Reverse Stock Split.** To approve the adoption of an amendment to the Company's Amended and Restated Certificate of Incorporation, to effect a reverse stock split at a ratio of not less than five-to-one and not more than twenty-five-to-one, such ratio and the implementation and timing of such reverse stock split to be determined in the discretion of our Board of Directors;
3. **Adjournment.** To approve one or more adjournments to the Annual Meeting, if necessary or appropriate, to permit further solicitation of proxies if there are not sufficient votes at the time of the Annual Meeting cast in favor of Proposal No. Two;
4. **Ratification of Appointment of Independent Accounting Firm.** Ratification of the appointment of CohnReznick LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2019; and
5. **Other Matters.** The transaction of such other business as may lawfully come before the Annual Meeting or any adjournment(s) thereof.

The Board of Directors is not aware of any other business to come before the Annual Meeting. Pursuant to the Company's Amended and Restated Bylaws, the Board of Directors has fixed the close of business on July 9, 2019 as the record date for determination of the stockholders entitled to vote at the Annual Meeting and any adjournments thereof. Please complete, sign and submit your proxy, which is solicited by the Board of Directors, as soon as possible so that your shares can be voted at the Annual Meeting in accordance with your instructions. You can ensure that your shares are voted at the Annual Meeting by voting via the internet or by completing, signing and returning the enclosed proxy. If you do attend the Annual Meeting, you may then withdraw your proxy and vote your shares in person. In any event, you may revoke your proxy prior to its exercise. Shares represented by proxies that are returned properly signed but unmarked will be voted in favor of proposals made by us.

**This Notice of Annual Meeting of Stockholders, our Proxy Statement, the proxy card and our 2018 Annual Report to Stockholders are available online at: <http://www.pstvote.com/opgen2019>.**

BY ORDER OF THE BOARD OF DIRECTORS,  
Timothy C. Dec  
Corporate Secretary

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# 2019 ANNUAL MEETING OF STOCKHOLDERS

## PROXY STATEMENT

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**2019 ANNUAL MEETING PROXY STATEMENT**

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON AUGUST 22, 2019**

*The Notice of Annual Meeting, Proxy Statement, Proxy and 2018 Annual Report to Stockholders are available at:  
<http://www.pstvote.com/opgen2019>*

We are making these proxy materials available to you in connection with the solicitation of proxies by the Board of Directors (the "Board") of OpGen, Inc. for the 2019 Annual Meeting of Stockholders (the "Annual Meeting") and for any adjournment or postponement of the Annual Meeting. The mailing of the notice of internet availability of these proxy materials will commence on July 12, 2019.

The 2018 Annual Report includes our financial statements for the fiscal year ended December 31, 2018. You can also find a copy of our 2018 Annual Report on Form 10-K on the Internet through the Securities and Exchange Commission's electronic data system called EDGAR at [www.sec.gov](http://www.sec.gov) or through the "Investor" section of our website at [www.opgen.com](http://www.opgen.com).

The Annual Meeting will be held at the offices of Ballard Spahr LLP located at 1909 K Street, NW, 12<sup>th</sup> Floor, Washington, DC 20006 on August 22, 2019, beginning at 10:00 am, local time. In this Proxy Statement, "we," "us," "our," "OpGen" and the "Company" refer to OpGen, Inc.

This Proxy Statement is being made available to you because you own shares of our common stock, par value \$0.01 per share as of the record date, which entitles you to vote at the Annual Meeting. By use of a proxy, you can vote whether or not you attend the Annual Meeting. This Proxy Statement describes the matters we would like you to vote on and provides information on those matters.

## QUESTIONS AND ANSWERS ABOUT THE ANNUAL MEETING

### Q: What is the purpose of the Annual Meeting?

A: The purposes of the Annual Meeting are to:

1. **Election of Directors.** The election of the four directors named in the attached Proxy Statement, to serve until the next annual meeting of stockholders and until their successors are elected and qualified;
2. **Reverse Stock Split.** To approve the adoption of an amendment to the Company's Amended and Restated Certificate of Incorporation, to effect a reverse stock split at a ratio of not less than five-to-one and not more than twenty-five-to-one, or the "Reverse Stock Split," such ratio and the implementation and timing of such Reverse Stock Split to be determined in the discretion of our Board of Directors, or the "Reverse Stock Split Proposal;"
3. **Adjournment.** To approve one or more adjournments to the Annual Meeting, if necessary or appropriate, to permit further solicitation of proxies if there are not sufficient votes at the time of the Annual Meeting cast in favor of Proposal No. Two;
4. **Ratification of Appointment of Independent Accounting Firm.** Ratification of the appointment of CohnReznick LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2019; and
5. **Other Matters.** The transaction of such other business as may lawfully come before the Annual Meeting or any adjournment(s) thereof.

Other than these proposals, the Board is not aware of any other matters to be presented for a vote at the Annual Meeting.

### Q: Who is entitled to vote at the Annual Meeting?

A: Holders of record of our common stock as of the close of business on July 9, 2019, the record date for the Annual Meeting, will be entitled to notice of and to vote at the Annual Meeting and at any adjournments or postponements thereof. Holders of record of shares of common stock are entitled to vote on all matters brought before the Annual Meeting.

As of the record date of July 9, 2019, there were 17,645,720 shares of common stock outstanding and entitled to vote on the election of directors and all other matters. Holders of common stock will vote on all matters as a class. Holders are entitled to one vote for each share of common stock outstanding as of the record date.

You do not need to attend the Annual Meeting to vote your shares. Instead, you may vote your shares by marking, signing, dating and returning the enclosed proxy card or voting through the internet.

### Q: How do I vote?

A: You may vote in person at the Annual Meeting, vote by proxy through the internet or vote by proxy using the enclosed proxy card. To vote through the internet, go to <http://www.pstvote.com/opgen2019> and complete an electronic proxy card. You will be asked for a Control Number, which has been provided with the Notice of Internet Availability.

Whether you plan to attend the Annual Meeting or not, we urge you to vote by proxy to ensure your vote is counted. Voting by proxy will not affect your right to attend the Annual Meeting and vote. If you vote via the internet or properly complete your proxy card and submit it to us in time, the "proxy" (one of the individuals named on the proxy card) will vote your shares as you have directed. If you sign the proxy card but do not make specific choices, the proxy will vote your shares as recommended by the Board and, as to any other matters properly brought before the Annual Meeting, in the sole discretion of the proxy.

**Q: What is the Reverse Stock Split Proposal and why is it necessary?**

A: The OpGen common stock, par value \$0.01 per share, or common stock, is currently listed on The Nasdaq Capital Market but the trading price of our common stock does not meet the \$1.00 per share minimum bid price required by The Nasdaq Capital Market pursuant to Nasdaq Marketplace Rule 5550(a)(2). As of July 9, 2019, the closing price of our common stock was \$0.3662 per share. We have until November 4, 2019 to regain such compliance. We do not believe we will be in compliance with the minimum bid price requirement by November 4, 2019, and do not believe we meet all of the other initial listing requirements of the Nasdaq Capital Market in order to be afforded a second 180 calendar day grace period. We expect to receive a delisting notice from Nasdaq after November 4, 2019, if the Reverse Stock Split is not approved. We believe the implementation of the Reverse Stock Split will assist us in regaining compliance with The Nasdaq Capital Market minimum bid price requirements so that we can keep our Nasdaq Capital Markets listing.

**Q: What else is the Company planning with respect to its Nasdaq listing?**

A: In addition to completing the Reverse Stock Split, the Company is considering conducting a public offering of its securities and other capital-raising alternatives to raise sufficient capital to allow the Company to implement its product development, regulatory approval strategy and initial commercialization plans for its Acuitas AMR Gene Panel diagnostic tests and Acuitas Lighthouse Software informatics. We expect that any securities sold in a public offering would be registered on a Form S-1 Registration Statement. We believe it is important to complete the Reverse Stock Split prior to such financing.

**Q: What shares may I vote?**

A: You may vote all shares of common stock of the Company that you owned as of the close of business on the record date. These shares include:

1. those held directly in your name as the *stockholder of record*; and
2. those held for you as the *beneficial owner* through a bank, broker or other financial intermediary at the close of business on the record date.

Each share of common stock is entitled to one vote.

**Q: What is the difference between holding shares as a stockholder of record and as a beneficial owner?**

A: Most stockholders hold their shares through a bank, broker or other financial intermediary rather than directly in their own name. As summarized below, there are some distinctions between shares held of record and shares held beneficially.

**Stockholder of Record:** If your shares are registered directly in your name with OpGen's transfer agent, Philadelphia Stock Transfer, Inc., or the Transfer Agent, you are considered, with respect to those shares, the stockholder of record. As the stockholder of record, you have the right to grant your proxy directly to OpGen or to vote your shares in person at the Annual Meeting.

**Beneficial Owner:** If you hold shares in a stock brokerage account or through a bank or other financial intermediary, you are considered the *beneficial owner* of shares held *in street name*. Your bank, broker or other financial intermediary is considered, with respect to those shares, the stockholder of record. As the beneficial owner, you have the right to direct your bank, broker or other financial intermediary on how to vote your shares, but because you are not the stockholder of record, you may not vote these shares in person at the Annual Meeting unless you obtain a signed proxy from the stockholder of record giving you the right to vote the shares. As a beneficial owner, you are, however, welcome to attend the Annual Meeting.



**Q: What are the recommendations of the Board?**

A. The Board recommends that you vote:

1. “**FOR**” the election of all four nominees for director named in this Proxy Statement;
2. “**FOR**” the Reverse Stock Split Proposal;
3. “**FOR**” the Adjournment Proposal; and
4. “**FOR**” the ratification of the appointment of CohnReznick as our independent registered public accounting firm for the 2019 fiscal year.

The Board knows of no matters that are likely to be brought before the Annual Meeting. If any other matters properly come before the Annual Meeting, the proxy will be authorized to vote or otherwise act in his discretion on those matters.

**Q: What constitutes a quorum at the Annual Meeting?**

A: The presence in person or by proxy of the holders of a majority of the outstanding common stock is necessary to constitute a quorum at the Annual Meeting. As of the record date of July 9, 2019, there were 17,645,720 shares of our common stock outstanding, representing the same number of votes. Accordingly, the presence of the holders of at least 8,822,860 shares of our common stock will be required to establish a quorum. Both abstentions and broker non-votes, if any, are counted as present for determining the presence of a quorum.

In order for the Reverse Split Proposal to be adopted, the proposal must be approved by the affirmative vote of at least sixty-six and two-thirds percent (66 2/3%) of the outstanding shares of common stock of the Company present in person or represented by proxy and entitled to vote on the proposal. Therefore, at least 11,763,814 shares of common stock must be present in person or by proxy and vote for the Reverse Stock Split Proposal in order for it to be adopted.

**Q: What vote is required to approve each proposal?**

A: Each proposal has its own vote requirement as follows:

*Proposal 1: Election of Directors.* The nominees for election as directors at the Annual Meeting will be elected by the vote of a plurality of the shares of our common stock entitled to vote on the election, represented in person or by proxy at the Annual Meeting. This means the director nominees receiving the highest number of affirmative votes will be elected as directors. Votes withheld from a director nominee will have no effect on the election of the director from whom votes are withheld.

*Proposal 2: Reverse Stock Split Proposal.* Pursuant to our Amended and Restated Certificate of Incorporation and the Delaware General Corporation Law, the Reverse Stock Split Proposal must be approved by the affirmative vote of at least sixty-six and two-thirds percent (66 2/3%) of the outstanding shares of common stock of the Company present in person or represented by proxy and entitled to vote on the proposal.

*Proposal 3: Adjournment Proposal.* The Adjournment Proposal requires an affirmative vote of a majority of the votes cast on the Adjournment Proposal by the shares present in person or represented by proxy at the Annual Meeting and entitled to vote on the proposal.

*Proposal 4: Ratification of CohnReznick’s Appointment.* The ratification of the appointment of CohnReznick as our independent registered public accounting firm for the 2019 fiscal year requires the affirmative vote of a majority of the votes cast by all stockholders present in person or represented by proxy at the Annual Meeting and entitled to vote on the proposal. If the selection of CohnReznick as our independent registered public accounting firm is not ratified, the Audit Committee of the Board may reconsider its selection.

**Q: What is the effect of abstentions and broker non-votes?**

A: An “abstention” occurs when a stockholder sends in a proxy with explicit instructions to decline to vote regarding a particular matter or attends the Annual Meeting and elects not to vote or fails to cast a ballot. Abstentions are treated as shares present in person or by proxy and entitled to vote, so abstaining has the same effect as a negative vote for purposes of determining whether the Reverse Stock Split Proposal and Adjournment Proposal are adopted and whether our stockholders ratified the appointment of CohnReznick as our independent registered public accounting firm for the 2019 fiscal year. However, because the election of directors is determined by a plurality of the votes cast, abstentions will not be counted in determining the outcome of such proposal.

A “broker non-vote” occurs when a broker has not received voting instructions from the beneficial owner and the broker does not have discretionary authority to vote the shares because the proposal is non-routine. Brokers do not have discretionary authority to vote on the election of directors, on the Reverse Stock Split Proposal or on the Adjournment Proposal. Accordingly, brokers who do not receive instructions from the beneficial owner will be entitled to vote only on the ratification of CohnReznick’s appointment as our independent registered public accounting firm for the 2019 fiscal year.

**Q: May I change my vote?**

A: Yes. You may change your proxy instructions or revoke your proxy at any time prior to the vote at the Annual Meeting. For shares held directly in your name, you may accomplish this by: (a) delivering a written notice of revocation to the Secretary of the Company or the Secretary’s designated agent bearing a later date than the proxy being revoked, (b) signing and delivering a later dated written proxy relating to the same shares, or (c) attending the Annual Meeting and voting in person (although attendance at the Annual Meeting will not in and of itself constitute a revocation of a proxy). For shares held in street name, you may change your vote by submitting new voting instructions to your broker, trustee or nominee.

**Q: Who is paying for this proxy solicitation?**

A: We are paying for this proxy solicitation. Our officers and other regular employees may solicit proxies by mail, in person or by telephone or teletype. These officers and other regular employees will not receive additional compensation. The Company has retained a third party proxy solicitor for the Annual Meeting and estimates cost of \$5,000.00. We will reimburse banks, brokers, nominees, custodians and fiduciaries for their reasonable out-of-pocket expenses incurred in sending the proxy materials to beneficial owners of the shares.

**Q: Am I entitled to dissenters’ rights?**

A: No dissenters’ rights are available under the General Corporation Law of the State of Delaware, our Charter, or our bylaws to any stockholder with respect to either of the matters proposed to be voted on at the Annual Meeting.

**Q: How can I find out the results of the voting at the Annual Meeting?**

A: Preliminary voting results will be announced at the annual meeting. In addition, final voting results will be published in a Current Report on Form 8-K that we expect to file within three business days after the completion of the Annual Meeting. If final voting results are not available to us in time to file a Form 8-K within three business days after the Annual Meeting, we intend to file a Form 8-K to publish preliminary results and, within three business days after the final results are known to us, file an additional Form 8-K to publish the final results of the Annual Meeting.

## SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The number of shares of the Company's common stock outstanding at the close of business on July 1, 2019 was 17,645,720 shares. The following table sets forth the beneficial ownership of the Company's common stock as of July 1, 2019 by each Company director and executive officer, and by all directors and executive officers as a group. Beneficial ownership is determined in accordance with Rule 13d-3 under the Exchange Act. In computing the number of shares beneficially owned by a person or a group and the percentage ownership of that person or group, shares of our common stock subject to options and warrants currently exercisable or exercisable within 60 days after July 1, 2019 are deemed outstanding, but are not deemed outstanding for the purpose of computing the percentage ownership of any other person. To the knowledge of the directors and executive officers of the Company, as of July 1, 2019, there are no persons and/or companies who or which beneficially own, directly or indirectly, shares representing more than 5% of the voting rights attached to all outstanding shares of the Company, other than as set forth below. Unless otherwise indicated, the address of each beneficial owner listed below is c/o OpGen, Inc., 708 Quince Orchard Road, Suite 205, Gaithersburg, MD 20878.

Name and Address of Beneficial Owner	Number of Shares of common stock	Percentage Beneficially Owned
<b>Directors and Named Executive Officers</b>		
Evan Jones (1)	834,449	4.68%
R. Donald Elsey (2)	-	-
Tina S. Nova, Ph.D. (3)	3,800	*
Misti Ushio, Ph.D. (4)	5,071	*
Timothy C. Dec (5)	27,726	*
Vadim Sapiro (6)	17,193	*
All current Directors and Executive Officers as a group (6 individuals) (7)	888,239	4.96%

\* Constitutes less than 1%

(1) Consists of (i) 644,224 shares of common stock and currently exercisable warrants to acquire an additional 134,317 shares of common stock beneficially owned by jVen Capital, LLC, (ii) 5,246 shares of common stock and currently exercisable warrants to acquire an additional 834 shares of common stock owned by Mr. Jones' spouse, and (iii) stock options to purchase 49,828 shares of common stock that are currently vested or that will become vested within 60 days. Mr. Jones is a managing member of jVen Capital, LLC and has voting and investment authority over the shares owned by that entity.

(2) Mr. Elsey was elected to the Board of Directors on February 21, 2019.

(3) Consists of stock options to purchase 3,800 shares of common stock that are currently vested or that will become vested within 60 days.

(4) Consists of (i) 1,571 shares of common stock and (ii) stock options to purchase 3,500 shares of common stock that are currently vested or that will become vested within 60 days.

(5) Consists of (i) 6,658 shares of common stock, (ii) currently exercisable warrants to acquire an additional 4,071 shares of common stock, and (iii) stock options to purchase 16,997 shares of common stock that are currently vested or that will become vested within 60 days.

(6) Consists of (i) 3,004 shares of common stock, (ii) currently exercisable warrants to acquire an additional 1,393 shares of common stock, and (iii) stock options to purchase 12,796 shares of common stock that are currently vested or that will become vested within 60 days.

(7) See the beneficial ownership described in footnotes (2) through (6).

## MANAGEMENT

The Board of Directors of the Company, or the “Board,” are elected at the annual meeting of stockholders, and serve for the term for which each director is elected and until his or her successor is elected and qualified. Executive officers of the Company are elected by the Board, and serve for a term of one year and until their successors have been elected and qualified or until their earlier resignation or removal by the Board. There are no family relationships among any of the directors and executive officers of the Company. None of the executive officers or directors has been involved in any legal proceedings of the type requiring disclosure by the Company during the past ten years.

Since the annual meeting of stockholders for 2018 held in June 2018, three directors have resigned from the Board – Harry D’Andrea on November 16, 2018, Timothy J.R. Harris, Ph.D., effective June 30, 2019 and David M. Rubin, Ph.D., effective June 30, 2019. We thank Mr. D’Andrea and Dr. Harris and Dr. Rubin for their service on the Company’s Board. None of such resignations were a result of any disagreement with the Company.

On February 21, 2019, R. Donald Elsey was elected to the Board and appointed to the Audit Committee. Such election and appointment were made by the Board.

The following table sets forth the names and ages of all directors continuing in office, director nominees and executive officers of the Company and their respective positions with the Company as of the date of this Proxy Statement:

Name	Age	Position
<b><u>Directors</u></b>		
Evan Jones	62	Chief Executive Officer, Director and Chairman of the Board
R. Donald Elsey	66	Director
Tina S. Nova, Ph.D.	65	Director
Misti Ushio, Ph.D.	47	Director
<b><u>Other Executive Officers</u></b>		
Timothy C. Dec	60	Chief Financial Officer and Corporate Secretary
Vadim Sapiro	48	Chief Information Officer

### **Board of Directors**

The following information summarizes, for each of our directors, his or her principal occupations and other public company directorships for at least the last five years and information regarding the specific experiences, qualifications, attributes and skills of such director:

**Evan Jones.** Mr. Jones has served as our Chief Executive Officer since October 2013 and as Chairman of our Board since September 2010. He served as our President from October 2013 until April 2015. Since 2007, Mr. Jones has served as managing member of jVen Capital, LLC, a life sciences investment company. Previously, he co-founded Digene Corporation, a publicly traded biotechnology company focused on women’s health and molecular diagnostic testing that was sold to Qiagen N.V. (Nasdaq: QGEN) in 2007. He served as chairman of Digene’s board of directors from 1995 to 2007, as Digene’s chief executive officer from 1990 to 2006, and as Digene’s president from 1990 to 1999. Mr. Jones serves on the board of directors of Veracyte, Inc. (Nasdaq: VCYT), a leading genomic diagnostics company, since 2008 and served on the board of directors of Foundation Medicine, Inc. (Nasdaq: FMI), a cancer testing molecular informatics company, from January 2013 to July 2018. Mr. Jones received a B.A. from the University of Colorado and an M.B.A. from The Wharton School at the University of Pennsylvania. We believe that Mr. Jones’ qualifications to serve as CEO of the Company and as Chairman of our Board include his extensive experience in the molecular diagnostic testing industry, including as chief executive officer of a public company focused on molecular diagnostic testing, as well as his service as a board member with other public and private companies and Vice Chair of the board at Children’s National Medical Center in Washington, D.C.

**R. Donald Elsey.** Mr. Elsey has served on our Board since February 2019. Mr. Elsey is a biotechnology, life sciences and high technology industries veteran with extensive experience in international financial management and operations with both large cap and small cap companies. Most recently he served as Chief Financial Officer of Senseonics, Inc., a position he has held from February 2015 to January 2019. Prior to Senseonics, he was chief financial officer of Regado Biosciences Corporation. He has also served as chief financial officer of LifeCell Corporation, a privately held regenerative medicine company, and as chief financial officer of Emergent Biosolutions, a biodefense company. He also has held senior financial positions at BioVeris Corporation, Igen, Inc. and PE Corporation (Applera). Mr. Elsey currently serves on the board of directors and audit committee for RegeneRx Biopharmaceuticals, Inc. and on the board of directors and treasurer for Cancer Support Community. He holds a B.A. degree in Economics and an M.B.A. in Finance from Michigan State University and is a Certified Management Accountant. Mr. Elsey's significant in senior financial positions at both public and privately held companies, and his experience as a board and audit committee member of a public reporting company qualifies him for service on the Board and as Chair of the Audit Committee.

**Tina S. Nova, Ph.D.** Dr. Nova has been a director of OpGen since April 2017. Dr. Nova is a life science industry veteran with extensive experience building and leading novel genomics- based businesses. She currently serves as president and chief executive officer of Genome Dx, Inc., a molecular diagnostics company, a position she had held since August 2018. From September 2015 to July 2018, she served as president and chief executive officer of Molecular Stethoscope, Inc. Prior thereto, she served as senior vice president and general manager of Illumina's oncology business unit from July 2014 to August 2015. From March 2000 to April 2014, Dr. Nova was a co-founder and director, president and chief executive officer of Genoptix Medical Laboratory, which was purchased by Novartis Pharmaceuticals Corporation for nearly \$500 million in 2011. She has also held senior executive positions with Nanogen, Inc., Ligand Pharmaceuticals, Inc. and Hybritech, Inc. Dr. Nova currently serves on the board of directors for Arena Pharmaceuticals, Veracyte, Inc. and is vice chairman of the board of directors for the newly formed Rady Pediatric Genomics and Systems Medicine Institute, which is part of Rady Children's Hospital-San Diego. She holds a B.S. degree in Biological Sciences from the University of California, Irvine, and a Ph.D. in Biochemistry from the University of California, Riverside. Dr. Nova's qualifications and skills include her experience building and leading a number of companies in the health care and life science industry and her board experience on other public reporting companies.

**Misti Ushio, Ph.D.** Dr. Ushio has been a director of OpGen since March 2012. Dr. Ushio is the co-founding chief executive officer and a director of TARA Biosystems, a position she has held since February 2016. Prior thereto, she was Chief Strategy Officer and a Managing Director at Harris & Harris Group, Inc. from May 2007 to February 2016. Prior to joining Harris & Harris, Dr. Ushio worked at Merck & Co. (NYSE: MRK) for over ten years in bioprocess research & development, and was a Technology Licensing Officer at Columbia University. Dr. Ushio currently serves or has served on the boards of Accelerator-NYC, AgBiome, Enumeral Biomedical, Lodo Therapeutics, Petra Pharma, Senova Systems and SynGlyco. Dr. Ushio holds a B.S. in Chemical Engineering from Johns Hopkins University, an M.S. in Chemical Engineering from Lehigh University, and a Ph.D. in Biochemical Engineering from University College London. Dr. Ushio's qualifications to serve on our Board include her industry experience as a chief executive officer and an investor and her deep industry knowledge.

#### **Executive Officers**

The following information summarizes, for each of our officers, his principal occupations and other employment for at least the last five years:

**Evan Jones.** See above under "Board of Directors."

**Timothy C. Dec.** Mr. Dec joined OpGen as our interim Chief Financial Officer in April 2015 and became our Chief Financial Officer in May 2015. Prior to joining OpGen, Mr. Dec served as Senior Vice President and Chief Financial Officer for Clubwidesports, LLC, a start-up sports management software company, from January 2014 to April 2015. From August 2007 to December 2012, Mr. Dec served as Senior Vice President and Chief Financial Officer of Fortress International Group, Inc., a publicly traded company. Mr. Dec has served in chief financial officer or other senior financial executive roles at companies in a number of industries from September 1986 through August 2007, including three publicly traded companies listed on Nasdaq or NYSE American, such as Corvis Corporation, and with private equity-backed companies. Mr. Dec also has public accounting firm experience. Mr. Dec received his B.S. in Accounting from Mount St. Mary's University and an M.B.A. from American University.

**Vadim Sapiro.** Mr. Sapiro joined OpGen in December 2011 as Chief Information Officer. Mr. Sapiro is responsible for leading the development of the Company’s informatics applications, software, databases and information technology operations. Prior to joining OpGen, Mr. Sapiro was Senior Vice President at SAIC-Frederick, Inc. (now Leidos Biomedical Research, Inc.) from June 2008 to December 2011, overseeing the Information Systems Program for the National Cancer Institute at Frederick (now The Frederick National Laboratory for Cancer Research). From October 2006 to May 2008, Mr. Sapiro served as Vice President for Information Technology of J. Craig Venter Institute, a non-profit research institute. Mr. Sapiro served in other senior information technology roles from July 1999 through October 2006, including another non-profit research institute. Mr. Sapiro holds a B.S. in Mathematics and Computer Science from the University of Maryland.

**Board and Board Committees**

The Company’s Amended and Restated Bylaws provide that the Board, by resolution adopted by a majority of the whole Board, may designate one or more other committees, with each such committee to consist of two or more directors. As of the date of this Proxy Statement, the Board consists of four members. The Board annually elects from its members the Audit, Compensation and Compliance Committees. The Board may also from time to time appoint ad hoc committees. At the current time the Board has not appointed a Nominating and Corporate Governance Committee. The Board believes the nominating and corporate governance responsibilities are best handled at this time by the full Board given the small size of the Board and its status as an emerging growth company.

The Board held eleven meetings and acted by unanimous written consent four times in 2018. Each director attended at least 75% of the aggregate of all meetings of the Board and the Committees on which each such director served in 2018. The Board encourages all directors to attend the Company’s annual meeting of stockholders. At last year’s annual meeting of stockholders, all members of the then-current Board were present in person or by telephone.

Each of the standing Committees of the Board operates pursuant to a written Committee Charter. Copies of these Charters can be obtained free of charge from the Corporate Governance portion of the Investors section of the Company’s website, [www.opgen.com](http://www.opgen.com).

**Independence of the Board of Directors**

The Board currently consists of Messrs. Jones and Elsey and Drs. Nova and Ushio. The Board is currently considering the addition of independent directors given the departure of Drs. Harris and Rubin effective June 30, 2019, but as of the date of the Proxy Statement has not identified new candidates. The members of the Committees of the Board as of the date of this Proxy Statement are:

Name	Audit Committee (1)	Compensation Committee (2)	Compliance Committee (3)
Evan Jones			
R. Donald Elsey	Chair		
Tina S. Nova	X		Chair
Misti Ushio	X	Chair	

- (1) Harry D’Andrea was Chair of the Audit Committee until his departure from the Board on November 16, 2018. Mr. Elsey was appointed as Chair of the Audit Committee on February 21, 2019.
- (2) During 2018 and until June 30, 2019, the Compensation Committee consisted of Drs. Ushio (Chair) and Harris. Until a new independent director can be named to the Compensation Committee, the non-employee members of the Board will serve as the Compensation Committee.
- (3) During 2018 and until June 30, 2019, the Compliance Committee consisted of Drs. Nova (Chair) and Harris. Until a new independent director can be named to the Compliance Committee, the entire Board will serve as the Compliance Committee.

**Board Committees**

**Audit Committee:** As of the date of this Proxy Statement, Mr. Elsey (Chair) and Drs. Nova and Ushio serve on the Audit Committee. During 2018, Mr. D’Andrea and Drs. Rubin and Ushio served on the Audit Committee, which was chaired by Mr. D’Andrea. During 2018, Mr. D’Andrea was the designated “audit committee financial expert” as defined in the rules of the SEC. Mr. D’Andrea resigned from the Board in November 2018 and Dr. Nova was appointed to the Audit Committee in his place. In February 2019, Mr. Elsey was elected to the Board of Directors and Audit Committee, and was appointed as Chair of the Audit Committee. At that time, Dr. Nova left the Audit Committee. She was re-appointed to the Audit Committee effective July 1, 2019. Our Board has determined that each member of the Audit Committee who served during 2018 and 2019 to date is “independent” and “financially literate” for Audit Committee purposes as such terms are defined in the rules of the Securities and Exchange Commission, or SEC, and the applicable rules of The Nasdaq Stock Market. Mr. Elsey is currently identified as an “audit committee financial expert” as defined in the rules of the SEC.

The Audit Committee held eight meetings in 2018. Pursuant to its charter, the responsibilities of the Audit Committee include:

- appointing, approving the compensation of, and assessing the independence of our independent registered public accounting firm;
- approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing the audit plan with the independent registered public accounting firm and members of management responsible for preparing our financial statements;
- reviewing and discussing with management and the independent registered public accounting firm our annual and quarterly financial statements and related disclosures as well as critical accounting policies and practices used by us;
- reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting-related complaints and concerns;
- reviewing the Company's periodic reports to be filed with the SEC;
- recommending, based upon the Audit Committee's review and discussions with management and the independent registered public accounting firm, whether our audited financial statements shall be included in our Annual Report on Form 10-K;
- monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to our financial statements and accounting matters;
- preparing the Audit Committee report required by SEC rules to be included in our annual proxy statement;
- overseeing our compliance with applicable legal and regulatory requirements;
- reviewing all related person transactions for potential conflict of interest situations and approving all such transactions; and
- reviewing quarterly earnings releases.

The following constitutes the report the Audit Committee made to the Board with respect to the Company's 2018 financial statements:

**Report of the Audit Committee**

February 25, 2019

To the Board of Directors of OpGen, Inc.

Management is responsible for our internal controls and the financial reporting process. The independent registered public accounting firm is responsible for performing an independent audit of our financial statements in accordance with generally accepted auditing standards and to issue a report on our financial statements. Our responsibility is to monitor and oversee those processes. We hereby report to the Board that, in connection with the financial statements for the year ended December 31, 2018, we have:

- reviewed and discussed the audited financial statements with management and our independent registered public accounting firm;
- approved the appointment of our independent registered public accounting firm;
- reviewed and discussed with our independent registered public accounting firm the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board and the SEC; and
- received the written disclosures and the letter from our independent registered public accounting firm required by the applicable requirements of the Public Company Accounting Oversight Board regarding our independent registered public accounting firm's communications with the Audit Committee concerning independence, and discussed with our independent registered public accounting firm its independence.

Based on the discussions and our review discussed above, we recommended to the Board that the audited financial statements be included in the Company's 2018 Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

Respectfully submitted,

The Audit Committee of OpGen, Inc.

R. Donald Elsey, Chair

David M. Rubin, Member

Misti Ushio, Member

*Compensation Committee:* The Company's Compensation Committee is currently comprised of Dr. Ushio. During 2018, the Compensation Committee was comprised of Drs. Harris and Ushio, each of whom was an independent director. Dr. Harris resigned as a director effective June 30, 2019. Dr. Ushio chairs our Compensation Committee. The Compensation Committee held eight meetings and acted by consent twice during 2018. Pursuant to its charter, the duties of the Compensation Committee include:

- annually reviewing and recommending to our Board corporate goals and objectives, and determining the achievement thereof, relevant to the compensation of our Chief Executive Officer and other executive officers;
- evaluating the performance of our Chief Executive Officer in light of such corporate goals and objectives and recommending to our Board the compensation of our Chief Executive Officer;
- determining, or reviewing and recommending to our Board for approval, the compensation of our other executive officers;



- reviewing and establishing our overall management compensation philosophy and policy;
- overseeing and administering our compensation and similar plans;
- evaluating and assessing potential current compensation advisors in accordance with the independence standards identified in the applicable Nasdaq Stock Market rules;
- retaining and approving the compensation of any compensation advisors;
- reviewing and approving, or reviewing and recommending to our Board for approval, our policies and procedures for the grant of equity-based awards;
- determining or reviewing and making recommendations to our Board with respect to director compensation;
- preparing the compensation committee report required by SEC rules to be included in our annual proxy statement;
- reviewing and discussing with management the compensation discussion and analysis to be included in our annual proxy statement or Annual Report on Form 10-K; and
- reviewing and discussing with our Board corporate succession plans for the Chief Executive Officer and other key officers.

Until an additional Board member can be recruited, the Compensation Committee obligations will be fulfilled by the independent directors of the Board.

The Compensation Committee may delegate its authorities with respect to equity compensation to the Chief Executive Officer for employees, other than executive officers, and consultants. The Chief Executive Officer makes recommendations to the Compensation Committee with respect to the compensation of employees, including executive officers, other than himself. The Compensation Committee also has the authority and responsibility: (1) to review the fees paid to non-employee directors for service on the Board and its committees, and make recommendations to the Board with respect thereto; and (2) to review the Company's incentive compensation and other stock-based plans and recommend changes in such plans to the Board as needed. The policy regarding compensation paid to non-employee directors is described in this Proxy Statement and posted on our website.

*Compliance Committee.* The Compliance Committee, which was formed in September 2015, consisted of Drs. Nova and Harris during 2018, each of whom meets the Nasdaq listing standards for independence. Dr. Nova chairs our Compliance Committee. Prior to his resignation from the Board in June 2019, Dr. Harris served as a member of the Compliance Committee. Pursuant to its charter, the duties of the Compliance Committee include:

- overseeing the Company's implementation of compliance programs, policies and procedures that are designed to respond to the various compliance, legal and regulatory risks facing the Company;
- assisting the Audit Committee in fulfilling the Audit Committee's oversight responsibility for the Company's risk assessment and risk management activities relating to the integrity of the Company's financial statements; and
- performing any other duties as directed by the Board.

Until an additional Board member can be recruited, the Compliance Committee obligations will be fulfilled by the Board.

The Compliance Committee's responsibilities are limited to oversight of the Company's non-financial compliance matters, including the Company's overall compliance programs, policies and procedures, significant legal or regulatory compliance exposures and material reports to or inquiries from government or regulatory agencies. The Audit Committee retains sole oversight over matters of financial compliance including auditing, financial planning and disclosures to investors.

The Compliance Committee held four meetings in 2018.

### **Nomination of Directors**

The full Board acts to evaluate, on an annual basis, the composition of the Board and the skills, qualifications, business attributes and experience of the existing Board members. The specific process for identifying and evaluating new directors, including stockholder-recommended nominees, if any, will vary based on an assessment of the then-current needs of the Board and the Company. The Board will determine the desired profile of a new director, the competencies we are seeking, including experience in one or more areas of need, as determined by the Board. Candidates will be evaluated in light of the target criteria chosen. The Board does not have a formal diversity policy; in addition to the foregoing, it considers race and gender diversity in selection of qualified candidates. See page 17 for a description of the process by which a stockholder can propose a candidate for consideration by the Board.

### **Board Leadership Structure**

Our Board leadership structure consists of a Chairman of the Board who is also our Chief Executive Officer. Our Board assesses this leadership structure on an annual basis to ensure the interests of the Company and its stockholders are best served. Both the Chairman and the Chief Executive Officer positions are currently held by Evan Jones. Our Board has determined that its current structure, with combined Chairman and Chief Executive Officer roles is in the best interests of the Company and its stockholders at this time. A number of factors support the leadership structure chosen by the Board, including, among other:

- Mr. Jones' long term involvement with the Company has given him extensive knowledge and unique insights into the Company's business and risks, its industries and its customers, including leading the Company through a change in business focus;
- Mr. Jones involvement in the day-to-day operations of the Company positions him to elevate the most critical business issues for consideration by the Board;
- the Board's belief that having Mr. Jones serve in both capacities allows him to more effectively execute the Company's strategic initiatives and business plans and confront its challenges, particularly given the relatively small number of employees;
- the Board's understanding that a combined Chairman of the Board and CEO structure provides the Company with decisive and effective leadership with clearer accountability to our stockholders and customers; and
- the Board's view that splitting the roles would potentially make our management and governance processes less effective through undesirable duplication of work and possibly lead to blurring of clear lines of accountability and responsibility.

### **Board Role in Risk Management**

Our Board oversees the management of risks inherent in the operation of our business and the implementation of our business strategies. Our Board performs this oversight role by using several different levels of review. In connection with its reviews of the operations and corporate functions of our Company, our Board addresses the principal risks associated with those operations and corporate functions. In addition, our Board reviews the risks associated with our Company's business strategies periodically throughout the year as part of its consideration of undertaking any such business strategies.

Each of our Board committees also oversees the management of our risk that falls within the committee's areas of responsibility. In performing this function, each committee has full access to management, as well as the ability to engage advisors. Our Chief Financial Officer is responsible for identifying, evaluating and implementing risk management controls and methodologies to address any identified financial statement-related risks and reporting the same to the Audit Committee. In connection with its risk management role, our Audit Committee meets privately with representatives from our independent registered public accounting firm, and privately with our Chief Financial Officer. The Audit Committee oversees the operation of our risk management program, including the identification of the principal risks associated with our business and periodic updates to such risks, and reports to our Board regarding these activities.

The Compliance Committee oversees the management of our operational and business risks, with particular emphasis on the operational, healthcare and regulatory risks and compliance needs of the organization. Our Chief Compliance Officer is responsible for identifying, evaluating and implementing risk management controls and methodologies to address any identified operationally, healthcare and regulatory-related risks and reporting the same to the Compliance Committee.

The Compensation Committee assesses the impact risks inherent in the annual and long-term incentive plans could have on the Company. After review, the Compensation Committee does not believe that the Company's executive compensation practices or programs are likely to have a material adverse effect on the Company.

### **Delinquent Section 16(a) Reports**

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires the Company's officers and directors and persons who own more than 10% of the Company's outstanding common stock to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and any other equity securities of the Company. Directors, officers, and greater than 10% stockholders are required by SEC regulations to furnish the Company with copies of all Section 16(a) forms they file. Based solely on a review of the Company's records and written representations by the persons required to file such reports, all filing requirements of Section 16(a) were satisfied with respect to the 2018 fiscal year except that Mr. Dec did not file a Form 4 in November 2018 to report the vesting of a tranche of restricted stock units.

### **Code of Ethics**

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. A current copy of the code is posted on the Corporate Governance section of our website, which is located at [www.opgen.com](http://www.opgen.com). If we make any substantive amendments to, or grant any waivers from, the code of business conduct and ethics for any officer, we will disclose the nature of such amendment or waiver on our website or in a Current Report on Form 8-K.

### **Certain Relationships and Related Person Transactions**

Other than compensation arrangements, we describe below there were and are no transactions or series of similar transactions, during our last two fiscal years, to which we were a party or will be a party, in which: (i) the amounts involved exceeded or will exceed the lesser of \$120,000 or one percent of the average of the Company's total assets at year end for the past two completed fiscal years; and (ii) any of our directors, executive officers or holders of more than 5% of our capital stock, or any member of the immediate family of the foregoing persons, had or will have a direct or indirect material interest.

Compensation arrangements for our directors and named executive officers are described elsewhere in this Proxy Statement.

Prior to his departure from the Board on June 30, 2019, Dr. Rubin served on our Board as a representative of Merck Global Health Innovation Fund, or MGHIF, an affiliate of Merck, Inc. The Company has the following relationships with Merck and its subsidiaries:

In October 2016, the Company entered into an agreement with Merck Sharp & Dohme, a wholly-owned subsidiary of Merck Co. & Inc. (“Merck”), an affiliate of MGHIF, a principal stockholder of the Company and a related party to the Company. Under the agreement, Merck provided access to its archive of over 200,000 bacterial pathogens. The Company is initially performing molecular analyses on up to 10,000 pathogens to identify markers of resistance to support rapid decision making using the Acuitas Lighthouse, and to speed development of its rapid diagnostic products. Merck gains access to the high-resolution genotype data for the isolates as well as access to the Acuitas Lighthouse informatics to support internal research and development programs. The Company is required to expend up to \$175,000 for the procurement of materials related to the activities contemplated by the agreement. Contract life-to-date, the Company has incurred \$171,646 of procurement costs which have been recognized as research and development expense, including \$22,603 and \$146,177 during the years ended December 31, 2018 and 2017, respectively.

In December 2017, the Company entered into a subcontractor agreement with ILÚM Health Solutions, LLC, or ILÚM, an entity created by Merck’s Healthcare Services and Solutions division, whereby ILÚM provided services to the Company in the performance of the Company’s CDC contract to deploy ILÚM’s commercially-available cloud- and mobile-based software platform for infectious disease management in up to three medical sites in Colombia with the aim of improving antibiotic use in resource-limited settings. During the years ended December 31, 2018 and 2017, the Company recognized \$329,162 and \$210,180 of cost of services expense related to the contract, respectively.

In December 2017, we entered into a subcontractor agreement with ILÚM Health Solutions, LLC, or ILÚM, an entity created by Merck’s Healthcare Services and Solutions division, whereby ILÚM Health Solutions will provide services to the Company in the performance of the Company’s CDC contract to deploy ILÚM’s commercially-available cloud- and mobile-based software platform for infectious disease management in up to three medical sites in Colombia with the aim of improving antibiotic use in resource-limited settings. During the year ended December 31, 2017, the Company recognized \$210,180 of cost of services expense related to the contract.

The Company and ILÚM Health Solutions are parties to an agreement with the New York State Department of Health, or DOH, and ILÚM to develop a state-of-the-art research program to detect, track, and manage antimicrobial-resistant infections at healthcare institutions in New York State. The collaboration is called the New York State Infectious Disease Digital Health Initiative. The first portion of the collaboration is the completion of a development project, expected to last one year, that we believe will lead to a statewide program. Under the demonstration project, OpGen will work with DOH’s Wadsworth Center and ILÚM to develop an infectious disease digital health and precision medicine platform that connects healthcare institutions to DOH and uses genomic microbiology for statewide surveillance and control of antimicrobial resistance. The DOH, ILÚM and OpGen will work collaboratively to build a sustainable, flexible infectious diseases reporting, tracking and surveillance tool for antimicrobial resistance that can be applied across New York State. The Company received no revenue under the agreement during 2018.

### **Sales and Purchases of Securities**

On May 19, 2016 and June 27, 2016, the Company offered and sold units in a private offering to members of management and employees and to accredited investors, including MGHIF and jVen Capital, each unit consisting of either (i) one twenty-fifth of a share of common stock and a detachable stock purchase warrant to purchase an additional 0.03 of one share of common stock, or (ii) one share of non-voting convertible preferred stock a detachable stock purchase warrant to purchase an additional 0.03 of one share of common stock, at a price of \$1.14 per unit. The total net proceeds to the Company, after deducting offering commissions and expenses was \$9.5 million. Pursuant to the private offering the Company issued 269,765 shares of common stock, 2,309,428 shares of Series A non-voting convertible preferred stock and stock purchase warrants to acquire an additional 271,606 shares of common stock. Each share of non-voting convertible preferred stock was convertible at the option of the holder in whole or in part and from time to time into one twenty-fifth of a share of common stock, is entitled to dividends on as “as converted basis” when and if dividends are issued to common stockholders, and participates in liquidation on a *pari passu* basis with common stockholders. Holders of the Series A non-voting convertible preferred stock subsequently converted all 2,309,428 shares of preferred stock into 92,377 shares of common stock. The stock purchase warrants issued as part of the units are exercisable \$32.8125 per share beginning 90 days after closing for five years, expiring on May 18, 2021. Evan Jones, our Chief Executive Officer and Chairman of the Board is a managing member of jVen Capital, LLC and has voting and investment authority over the shares owned by jVen Capital; Timothy Harris, a director of the Company; and Timothy Dec and Vadim Sapiro, executive officers of the Company, were all investors in these offerings.

On May 31, 2017, the Company entered into the Note Purchase Agreement with jVen Capital, under which jVen Capital agreed to lend bridge financing in an aggregate principal amount of up to \$1,500,000 to the Company in the form of three \$500,000 secured convertible promissory notes. On June 14, 2017, the Company drew down on the first of three Bridge Financing Notes, with \$1 million remaining capacity available. The Company drew down on the second Bridge Financing Note on July 5, 2017 and the third Bridge Financing Note was never issued. The Company issued warrants to purchase an aggregate 25,102 shares of common stock to jVen Capital and MGHIF in connection with the Bridge Financing. The outstanding Bridge Financing Notes were repaid in full upon the closing of the July 2017 Public Offering.

As a condition to the receipt of the bridge financing, the Company issued the Second Amended & Restated Senior Secured Promissory Note (“MGHIF Note”) to MGHIF, which extended the maturity date of the promissory note from, July 14, 2017 to July 14, 2018. In return for MGHIF’s consent to such extension, the Company increased the interest rate of the MGHIF Note to 10% per annum and issued warrants to purchase shares of common stock to MGHIF equal to 20% of the principal balance of the MGHIF Note, plus interest accrued thereon, as of June 28, 2017.

On July 18, 2017, the Company closed a public offering of 18,164,195 units at \$0.40 per unit, and 6,835,805 pre-funded units at \$0.39 per pre-funded unit, raising gross proceeds of approximately \$10 million and net proceeds of approximately \$8.8 million (the “July 2017 Public Offering”). jVen Capital was one of the investors participating in the offering. Each unit included one twenty-fifth of a share of common stock and one common warrant to purchase one twenty-fifth of a share of common stock at an exercise price of \$10.625 per share. Each pre-funded unit included one pre-funded warrant to purchase one twenty-fifth of a share of common stock for an exercise price of \$0.25 per share, and one common warrant to purchase one twenty-fifth of a share of common stock at an exercise price of \$10.625 per share. The common warrants are exercisable immediately and have a five-year term from the date of issuance. Approximately \$1 million of the gross proceeds was used to repay the outstanding Bridge Financing Notes to jVen Capital in July 2017. As of December 31, 2017, all of the pre-funded warrants were exercised.

jVen Capital and three employees of the Company participated in the July 2017 Public Offering in an aggregate amount of \$816,000: (i) jVen Capital participated for \$750,000; (ii) Timothy C. Dec, Chief Financial Officer of the Company participated for \$26,000; and (iii) Vadim Sapiro, Chief Information Officer of the Company, participated \$10,000. One non-executive officer of the Company also participated in the July 2017 Public Offering.

#### **Policies for Approval of Related Person Transactions**

We have adopted a written policy that transactions with directors, officers and holders of 5% or more of our voting securities and their affiliates, each, a related person, must be approved by our Audit Committee.

#### **Communications with the Board of Directors**

Stockholders who want to communicate with members of the Board, including the independent directors, individually or as a group, 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 Chair of the Audit Committee, OpGen, Inc., 708 Quince Orchard Road, Suite 205, Gaithersburg, MD 20878. The Chair of the Audit Committee will forward all such communications directly to such Board members. Any such communications may be made on an anonymous and confidential basis.

There have been no changes to the procedures by which interested parties may communicate with the Board.

## **Procedures for Nominating a Director Candidate**

The Board considers nominations by stockholders who recommend candidates for election to the Board. The Board evaluates nominees recommended by stockholders in the same manner as it evaluates other nominees. A stockholder seeking to recommend a prospective candidate for the Board's consideration may do so by writing to the Corporate Secretary c/o OpGen, Inc., 708 Quince Orchard Road, Suite 205, Gaithersburg, Maryland 20878. Recommendations submitted for consideration by the Board in preparation for the 2020 Annual Meeting of Stockholders must be received after the close of business on March 18, 2020, which is the 120th day prior to the first anniversary of the date on which this Proxy Statement was first made available to our stockholders in connection with this Annual Meeting, and no later than the close of business on April 18, 2020, which is the 90th day prior to the first anniversary of the date on which this Proxy Statement was first made available to our stockholders in connection with this Annual Meeting. If we change the date of the 2020 Annual Meeting of Stockholders by more than 30 days from the anniversary of this year's Annual Meeting, recommendations for director candidates must be received not later than the close of business on the tenth day following the earlier of the day on which notice of the date of the meeting was mailed and public disclosure was made.

Each notice of recommendation must contain the information required under our Amended and Restated Bylaws, including: (a) for each person whom the stockholder proposes to nominate for election or reelection as a director, all information relating to such person that is required to be disclosed in solicitations of proxies for elections of directors, or is otherwise required, in each case pursuant to Regulation 14A under the Exchange Act (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected); (b) as to the stockholder giving the notice, (i) the name and address, as they appear on the Company's books, of such stockholder and (ii) the class and number of shares of the Company which are owned beneficially and of record by such stockholder of record and by the beneficial owner, if any, on whose behalf the nomination is made; and (c) as to the beneficial owner, if any, on whose behalf the nomination is made, (i) the name and address of such person and (ii) the class and number of shares of the Company which are beneficially owned by such person. At the request of the Board, any person nominated by the Board for election as a director shall furnish to the Secretary of the Company that information required to be set forth in a stockholder's notice of nomination which pertains to the nominee.

## EXECUTIVE COMPENSATION

### Summary Compensation Table for 2018 and 2017

This table provides disclosure, for the years ended December 31, 2018 and 2017 for the named executive officers, who are (1) any individual serving in the office of Chief Executive Officer during any part of 2018 and (2) the Company's two most highly compensated officers, other than the Chief Executive Officer, who were serving in such capacity on December 31, 2018.

Named Executive Officer and Principal Position	Year	Salary (\$)	Bonus (2)(\$)	Stock Awards (1)(\$)	Option Awards (1)(\$)	Non-Equity	All Other	Total (\$)
						Incentive Plan Compensation (2)(\$)	Compensation (\$)	
Evan Jones	2018	\$ 351,442	\$ -	\$ -	\$ 42,767	\$ 75,000	\$ -	\$ 469,209
Chief Executive Officer	2017	\$ 375,962	\$ -	\$ -	\$ 43,210	\$ -	\$ -	\$ 419,172
Timothy Dec	2018	\$ 289,615	\$ -	\$ -	\$ 24,438	\$ 65,000	\$ -	\$ 379,053
Chief Financial Officer	2017	\$ 291,102	\$ -	\$ 10,325	\$ 45,580	\$ -	\$ -	\$ 347,007
Vadim Sapiro	2018	\$ 289,615	\$ -	\$ -	\$ 24,438	\$ 50,000	\$ -	\$ 364,053
Chief Information Officer	2017	\$ 291,102	\$ -	\$ 10,325	\$ 38,559	\$ 50,000	\$ -	\$ 389,986

- (1) The "Stock Awards" column reflects the grant date fair value for all restricted stock units awarded under the Amended and Restated 2015 Incentive Plan, or the 2015 Plan, during 2018 and 2017. The "Option Awards" column reflects the grant date fair value for all stock option awards granted under the 2015 Plan during 2018 and 2017, respectively. These amounts are determined in accordance with FASB Accounting Standards Codification 718 (ASC 718), without regard to any estimate of forfeiture for service vesting. Assumptions used in the calculation of the amounts in these columns for 2018 and 2017 are included in a footnote to the Company's condensed consolidated audited financial statements for the year ended December 31, 2018, located in Item 8 of the Company's Annual Report on Form 10-K filed with the SEC on February 27, 2019, or the Annual Report.
- (2) On February 19, 2019, the Compensation Committee approved the aggregate accrual for 2018 incentive bonuses for the named executive officers and other employees of the Company. On April 30, 2019, the Compensation Committee recommended, and on May 1, 2019, the Board approved the 2018 incentive bonuses for the named executive officers. The 2018 bonuses were earned under a 2018 Annual Incentive Compensation Program approved by the Compensation Committee in early 2018. The incentive bonuses were earned based on the progress made during 2018 on FDA submissions for the Company's Acutas AMR Gene Panel in vitro diagnostic tests, progress towards anticipated 2019 commercialization of such tests once cleared by the FDA, advancing on the Company's publication strategy, completion of the CDC contract and finalization of the demonstration project with New York State Department of Health, and advancement of the Company's corporate compliance programs. In order to conserve cash, and to serve as a retention incentive, the payment of the approved 2018 incentive bonuses will occur on October 31, 2020 as long as the named executive officer remains with the Company.

### Employment Agreements with Our Named Executive Officers

On September 21, 2018, the Board approved a Retention Plan for Executives, or the "Retention Plan." The Company considers the establishment and maintenance of a sound and vital management team to be essential to protecting and enhancing the best interests of the Company and its stockholders. In this connection, the Company recognizes that, as is the case with many publicly held corporations, the possibility of a change in control may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its stockholders. Accordingly, the Board has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a change in control of the Company. The executive officers of the Company, as that term is defined under the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder, are the eligible participants in the Retention Plan, or the "Executives." The Executives include the named executive officers – Evan Jones, Timothy Dec and Vadim Sapiro.

The initial term of the Retention Plan is three (3) years, its term is automatically extended for one (1) year terms thereafter unless the Company provides notice of termination to the Executives at least six (6) months before the termination date; provided, that if a change in control (as defined in the Retention Plan) does occur, the term is then set at two (2) years after the date of the change in control.

The Retention Plan provides for Units to be awarded to the Executives, which can be issued in fractional Units, with each Unit equal to one percent (1%) of the “transaction value” of a change in control transaction. A total of four Units are available for award under the Retention Plan. “Transaction value” means all economic value of a change in control transaction to the Company, including any debt or other obligations assumed by the surviving entity in the transaction, amounts paid to the Company or its stockholders, milestone payments, earn-outs and forgiveness of indebtedness. For purposes of this definition, (i) in the case of the sale, exchange or purchase of the Company's equity securities, the total consideration paid for such securities (including amounts paid to holders of options, warrants and convertible securities), and (ii) in the case of a sale or disposition by the Company of assets, the total consideration paid for such assets, plus the net value of any current assets not sold by the Company.

The Units will vest and be payable only in the event an Executive has a “qualifying termination” during a defined change in control period, or remains employed by the Company or its successor at the termination date of the Retention Plan. A “qualifying termination” is a termination without cause by the Company or a termination for good reason by the Executive in the change in control period that spans from six (6) months before the change in control to the second anniversary after the change in control consummation.

The Retention Plan is binding on any successor to the Company.

On September 24, 2018, the Company entered into an Executive Change In Control and Severance Benefits Agreement with Evan Jones and amended its Executive Change In Control and Severance Benefits Agreement, each, an “Agreement,” with each of Timothy C. Dec and Vadim Sapiro.

The Agreement with Mr. Jones is a new agreement that provides that, in the event of a termination without cause by the Company or a termination for good reason by Mr. Jones, he will receive severance equal to six (6) months base salary at the time of termination. In addition, if Mr. Jones' employment is terminated without cause by the Company or any successor, or by Mr. Jones for good reason at any time within two years after a change of control of the Company, he shall receive the following additional benefits: (1) the severance payment obligation is increased to twelve (12) months; (2) acceleration, vesting and lapse of forfeiture on any outstanding equity awards granted to the Executive, and, if applicable, extended time to exercise vested stock options; and (3) payment by the Company or its successor, for a period of six (6) months, of health benefits for the Executive and/or the Executive's family at levels substantially equal to those which would have been provided to him or them in accordance with the plans, programs, practices and policies in effect as of the date immediately before the change in control consummation date.

The Agreements with the other Executives amend prior agreements to provide the same terms as described above.

For purposes of the Agreements, the following terms have the following meanings (where applicable):

“cause” means (i) executive's commission of a felony; (ii) any act or omission of executive constituting dishonesty, fraud, immoral or disreputable conduct that causes material harm to the Company; (iii) executive's violation of Company policy that causes material harm to the Company; (iv) executive's material breach of any written agreement between executive and the Company which, if curable, remains uncured after notice; or (v) executive's breach of fiduciary duty. The termination of executive's employment as a result of the death or disability is not deemed to be a termination without cause.



“change in control” means:

(i) a transaction or series of transactions (other than an offering of common stock to the general public through a registration statement filed with the SEC) whereby any “person” or related “group” of “persons” (as such terms are used in Sections 13(d) and 14(d)(2) of the Exchange Act (other than the Company, any of its subsidiaries, an employee benefit plan maintained by the Company or any of its subsidiaries or a “person” that, prior to such transaction, directly or indirectly controls, is controlled by, or is under common control with, the Company) directly or indirectly acquires beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) of securities of the Company possessing more than 50% of the total combined voting power of the Company’s securities outstanding immediately after such acquisition; or

(ii) the consummation by the Company (whether directly involving the Company or indirectly involving the Company through one or more intermediaries) of (x) a merger, consolidation, reorganization, or business combination or (y) a sale or other disposition of all or substantially all of the Company’s assets in any single transaction or series of related transactions or (z) the acquisition of assets or stock of another entity, in each case other than a transaction: (1) which results in the Company’s voting securities outstanding immediately before the transaction continuing to represent (either by remaining outstanding or by being converted into voting securities of the Company or the person that, as a result of the transaction, controls, directly or indirectly, the Company or owns, directly or indirectly, all or substantially all of the Company’s assets or otherwise succeeds to the business of the Company (the Company or such person, the Successor) directly or indirectly, at least a majority of the combined voting power of the Successor’s outstanding voting securities immediately after the transaction, and (2) after which no person or group beneficially owns voting securities representing 50% or more of the combined voting power of the Successor; provided, however, that no person or group shall be treated for purposes of this definition as beneficially owning 50% or more of the combined voting power of the Successor solely as a result of the voting power held in the Company prior to the consummation of the transaction; or

(iii) the Company’s stockholders approve a liquidation or dissolution of the Company.

“good reason” means any of the following, without executive’s consent: (i) a material diminution of executive’s responsibilities or duties (provided, however, that the acquisition of the Company and subsequent conversion of the Company to a division or unit of the acquiring company will not by itself be deemed to be a diminution of executive’s responsibilities or duties); (ii) material reduction in the level of executive’s base salary (and any such reduction will be ignored in determining executive’s base salary for purposes of calculating the amount of severance pay); (iii) relocation of the office at which executive is principally based to a location that is more than fifty (50) miles from the location at which executive performed his duties immediately prior to the effective date of a change in control; (iv) failure of a successor in a change in control to assume the severance agreement; or (v) the Company’s material breach of any written agreement between executive and the Company. Notwithstanding the foregoing, any actions taken by the Company to accommodate a disability of executive or pursuant to the Family and Medical Leave Act shall not be a good reason for purposes of the agreement. Additionally, before executive may terminate employment for a good reason, executive must notify the Company in writing within thirty (30) days after the initial occurrence of the event, condition or conduct giving rise to good reason, the Company must fail to remedy or cure the alleged good reason within the thirty (30) day period after receipt of such notice if capable of being cured within such thirty-day period, and, if the Company does not cure the good reason (or it is incapable of being cured within such thirty-day period), then executive must terminate employment by no later than thirty (30) days after the expiration of the last day of the cure period (or, if the event condition or conduct is not capable of being cured within such thirty-day period, within thirty (30) days after initial notice to the Company of the violation). Transferring executive’s employment to a successor is not itself good reason to terminate employment under the agreement, provided, however, that subparagraphs (i) through (v) above shall continue to apply to executive’s employment by the successor. This definition is intended to constitute a “substantial risk of forfeiture” as defined under Treasury Regulation 1.409A-1(d).

## Outstanding Equity Awards at Fiscal Year-End Table—2018

The following table shows the outstanding equity awards held by the named executive officers as of December 31, 2018.

Name	OPTION AWARDS					STOCK AWARDS			
	Number of Securities Underlying Unexercised Options Exercisable (1)	Number of Securities Underlying Unexercised Options (1)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options	Option Exercise Price (\$)	Option Expiration Date	Number of Shares of Stock that have not Vested	Market Value of Shares that have not Vested (\$)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Rights that have not Vested	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Rights that have not Vested (\$)
Evan Jones (3)	73	-	-	2,767.00	9/21/2020	-	-	-	-
	6,969	-	-	1.25	4/24/2024	-	-	-	-
	8,000	-	-	15.25	10/23/2024	-	-	-	-
	21,079	9,581	-	33.75	4/28/2026	-	-	-	-
	1,400	1,800	-	25.75	2/23/2027	-	-	-	-
	-	21,000	-	4.02	1/28/2028	-	-	-	-
Timothy Dec (4)	4,286	286	-	150.00	5/4/2025	250	325	-	-
	1,625	375	-	42.50	11/10/2025	-	-	-	-
	1,650	750	-	38.75	6/13/2026	-	-	-	-
	1,190	1,530	-	25.75	2/23/2027	-	-	-	-
	2,400	-	-	7.375	8/9/2027	-	-	-	-
	-	12,000	-	4.02	1/23/2028	-	-	-	-
Vadim Sapiro (5)	2	-	-	197.75	3/23/2022	-	-	-	-
	36	-	-	197.75	3/23/2022	-	-	-	-
	10	-	-	197.75	2/12/2023	-	-	-	-
	5	-	-	197.75	2/12/2023	-	-	-	-
	25	-	-	197.75	7/25/2023	-	-	-	-
	143	-	-	1.25	4/24/2024	-	-	-	-
	2,000	-	-	15.25	10/23/2024	-	-	-	-
	1,000	-	-	150.00	5/4/2025	-	-	-	-
	1,100	500	-	38.750	6/13/2026	-	-	-	-
	962	1,238	-	25.75	2/23/2027	-	-	-	-
	2,400	-	-	7.375	8/9/2027	-	-	-	-
	-	12,000	-	4.02	1/23/2028	-	-	-	-

- (1) The standard vesting schedule for all stock option grants is vesting over four years with twenty-five percent (25%) vesting on the first anniversary of the date of grant and six and one-quarter percent (6.25%) vesting on the last day of the next fiscal quarter over three years.
- (2) Calculated based on the closing price of the common stock the Nasdaq Capital Market on December 31, 2018 of \$1.30 per share.
- (3) The stock option awards made to Mr. Jones were awarded on February 15, 2011 (73 shares), April 24, 2014 (6,969 shares), October 23, 2014 (8,000 shares) and April 28, 2016 (30,660 shares) and have the vesting schedule set forth in footnote (1). Mr. Jones was granted a stock option award on February 23, 2017 (3,200), which vests over four years with twenty-five percent (25%) vesting on February 23, 2018 and six and one-quarter percent (6.25%) vesting on the first business day of each quarter thereafter over the next three years. Mr. Jones was granted a stock option award on January 23, 2018 (21,000), which vests over four years with twenty-five percent (25%) vesting on January 23, 2019 and six and one-quarter percent (6.25%) vesting on the quarterly anniversary of the first vesting date thereafter over the next three years.

- (4) Mr. Dec was granted stock option awards on May 4, 2015 (4,572 shares), November 10, 2015 (2,000 shares), June 13, 2016 (2,400 shares), February 23, 2017 (2,720), and August 9, 2017 (2,400). One-forty-eighth of Mr. Dec's stock option award granted on May 4, 2015 vested on the one month anniversary of the date of grant and thereafter vest over four years with twenty-five percent (25%) vesting on the first yearly anniversary of the date of grant and six and one-quarter percent (6.25%) vesting on the last day of the next fiscal quarter over three years. Mr. Dec's stock option awards granted on November 10, 2015 and June 13, 2016 have the vesting schedule set forth in footnote (1). Mr. Dec's stock option award granted on February 23, 2017 vests over four years with twenty-five percent (25%) vesting on February 23, 2018 and six and one-quarter percent (6.25%) vesting on the first business day of each quarter thereafter over the next three years. Mr. Dec's stock option award granted on August 9, 2017 vested on August 9, 2018. Mr. Dec was granted a stock option award on January 23, 2018 (12,000), which vests over four years with twenty-five percent (25%) vesting on January 23, 2019 and six and one-quarter percent (6.25%) vesting on the quarterly anniversary of the first vesting date thereafter over the next three years. Mr. Dec was granted restricted stock units on November 10, 2015. Twenty-five percent (25%) of the entire restricted stock units award vests on the first four anniversaries of the date of grant. Mr. Dec was granted restricted stock units on August 9, 2017. The restricted stock units vested in February 2018 upon the successful launch of the Company's Acuitas AMR Gene Panel tests in the research use only, or RUO, market.
- (5) The stock option awards granted to Mr. Sapiro on March 23, 2012 (2 shares and 36 shares), February 12, 2013 (10 shares), July 25, 2013 (25 shares), October 23, 2014 (2,000 shares) and June 13, 2016 (1,600 shares) have the vesting schedule set forth in footnote (1). The stock option award granted to Mr. Sapiro on February 12, 2013 for 5 shares vested in full on the first anniversary of the date of grant, February 12, 2014. The stock option award granted to Mr. Sapiro on April 24, 2014 for 143 shares is vesting over four years with twenty-five percent (25%) vesting on December 31, 2014 and six and one-fourth percent (6.25%) vesting quarterly thereafter in equal proportions over the remaining three years. The stock option granted to Mr. Sapiro on May 4, 2015 vested quarterly over the first year following the date of grant. The stock option award granted to Mr. Sapiro on February 23, 2017 for 2,200 shares vest over four years with twenty-five percent (25%) vesting on February 23, 2018 and six and one-quarter percent (6.25%) vesting on the first business day of each quarter over the next three years. The stock option award granted to Mr. Sapiro on August 9, 2017 for 2,400 shares vested on August 9, 2018. Mr. Sapiro was granted a stock option award on January 23, 2018 (12,000), which vests over four years with twenty-five percent (25%) vesting on January 23, 2019 and six and one-quarter percent (6.25%) vesting on the quarterly anniversary of the first vesting date thereafter over the next three years. Mr. Sapiro was granted restricted stock units on August 9, 2017. The restricted stock units vested in February 2018 upon the successful launch of the Company's Acuitas AMR Gene Panel tests in the RUO market.

## **Director Compensation**

Since May 2015, each non-employee director receives an annual cash retainer of \$25,000, payable quarterly, plus additional annual cash compensation for committee chairs (\$15,000 for Audit Committee, \$10,000 for Compensation Committee and \$7,500 for Compliance Committee) and for committee members (\$7,000 for Audit Committee, \$5,000 for Compensation Committee and \$3,500 for Compliance Committee). In addition, each new non-employee director receives an initial equity grant and each non-employee director receives an annual equity grant. On April 30, 2019, the Compensation Committee recommended, and on May 1, 2019 the Board approved, an adjusted non-employee director compensation program to include an initial grant of 30,000 restricted stock units and an annual grant to non-employee directors of 15,000 restricted stock units. All such awards are made under the 2015 Plan. The annual equity award may be pro-rated in the first year of service depending on when the non-employee director joins the Board or may be deferred until the following year.

Evan Jones, Chairman of the Board and CEO, does not receive additional compensation for service on our Board. See "**Summary Compensation Table for 2018 and 2017**" for his 2018 compensation.

Compensation for the non-employee directors for the year ended December 31, 2018 was:

<b>Name</b>	<b>Fees Earned or Paid in Cash (\$)</b>	<b>Option Awards (\$)(1)</b>	<b>All Other Compensation (\$)</b>	<b>Total (\$)</b>
Harry J. D'Andrea (2)	\$ 40,000	2,568	—	42,658
Timothy J.R. Harris (2)	\$ 33,500	2,568	—	36,068
Tina S. Nova (2)	\$ 32,500	2,568	—	35,068
David M. Rubin (3)	\$ —	—	—	—
Misti Ushio (2)	\$ 42,000	2,568	—	44,568

(1) The "Option Awards" column reflects the grant date fair value for all stock option awards granted under the 2015 Plan during 2018. These amounts are determined in accordance with FASB Accounting Standards Codification 718 (ASC 718), without regard to any estimate of forfeiture for service vesting. Assumptions used in the calculation of the amounts are included in a footnote to the Company's consolidated audited financial statements for the year ended December 31, 2018 in Item 8 of the Annual Report.

(2) As of December 31, 2018, the non-employee directors held the following vested stock options: D'Andrea 4,700; Harris 4,481; Nova 2,775; and Ushio 2,875.

(3) As managing director of MGHIF, Dr. Rubin was precluded from receiving compensation for serving as a director of OpGen, Inc.

### Compensation Risk Assessment

We believe that although a portion of the compensation provided to our executive officers and other employees is performance-based, our executive compensation program does not encourage excessive or unnecessary risk taking. This is primarily due to the fact that our compensation programs are designed to encourage our executive officers and other employees to recognize and support both short-term and long-term strategic goals, in particular in connection with our pay-for-performance compensation philosophy. As a result, we do not believe that our compensation programs are reasonably likely to have a material adverse effect on us.

### Employee Incentive Plans

The following table shows, as of December 31, 2018, the Company's equity compensation plans under which the Company's equity securities are authorized for issuance:

<b>Plan Category</b>	<b>Number of securities to be issued upon exercise of outstanding options, warrants and rights(1)</b>	<b>Weighted average exercise price of outstanding options, warrants and rights(2)</b>	<b>Number of securities remaining available for future issuance</b>
Equity compensation plans approved by security holders	211,809	\$ 20.58	50,863
Equity compensation plans not approved by security holders	—	—	—
<b>Total</b>	<b>211,809</b>	<b>\$ 20.58</b>	<b>50,863</b>

(1) Includes 250 outstanding restricted stock units for which there is no exercise price.

(2) Includes the weighted-average exercise price of stock options only.

## **2008 Plan**

Our 2008 Stock Option and Restricted Stock Plan, as amended, or 2008 Plan, was approved by our Board and stockholders in April 2008; subsequent increases in the number of shares available for awards under the 2008 Plan were approved by our Board and stockholders in January 2009, February 2011, March 2012, December 2012, April 2014 and October 2014. A total of 57,911 shares of our common stock are reserved for issuance under the 2008 Plan.

The 2008 Plan provided for the grant of stock options and restricted stock awards. The Compensation Committee determined the time or times at which a stock option will vest or become exercisable and the terms on which such option will remain exercisable. The Compensation Committee determined the conditions and restrictions and purchase price, if any, for grants or sales or restricted stock to plan participants. The Compensation Committee may also at any time accelerate the vesting or exercisability of an award.

Under the 2008 Plan, in the event of any dissolution or liquidation of the Company, the sale of all or substantially all of the Company's assets, or the merger or consolidation of the Company where the Company is not the surviving entity or which results in the acquisition of all or substantially all of the Company's then outstanding common stock, the Compensation Committee may: (a) provide for the assumption or substitution of some or all of the outstanding awards; (b) provide for a cash-out payment; or (c) in the case there is no assumption, substitution or cash-out, provide that all awards not exercised or awards providing for the future delivery of common stock will terminate upon the closing of the transaction.

Following our 2015 Equity Incentive Plan, or 2015 Plan, becoming effective, no further grants have been or will be made under our 2008 Plan.

## **2015 Plan**

The 2015 Plan provides for the granting of incentive stock options within the meaning of Section 422 of the Code to employees and the granting of non-qualified stock options to employees, non-employee directors and consultants. The 2015 Plan also provides for grants of restricted stock, restricted stock units, stock appreciation rights, dividend equivalents and stock payments to employees, non-employee directors and consultants. The 2015 Plan was amended by the Compensation Committee in February 2017 to revise the provisions with respect to net settlement of awards in response to change in regulations, and to establish standard periods for exercise of vested stock options following termination of service events.

*Administration.* The Compensation Committee administers the 2015 Plan, including the determination of the recipient of an award, the number of shares or amount of cash subject to each award, whether an option is to be classified as an incentive stock option or non-qualified stock option, and the terms and conditions of each award, including the exercise and purchase prices and the vesting and duration of the award. Our Board may appoint one or more separate committees of our Board, each consisting of one or more members of our Board, to administer our 2015 Plan with respect to employees who are not subject to Section 16 of the Exchange Act. Subject to applicable law, our Board may also authorize one or more officers to designate employees, other than employees who are subject to Section 16 of the Exchange Act, to receive awards under our 2015 Plan and/or determine the number of such awards to be received by such employees subject to limits specified by our Board.

*Authorized shares.* Under our 2015 Plan, the aggregate number of shares of our common stock authorized for issuance may not exceed (1) 54,200 plus (2) the sum of the number of shares subject to outstanding awards under the 2008 Plan as of the 2015 Plan's effective date that are subsequently forfeited or terminated for any reason before being exercised or settled, plus the number of shares subject to vesting restrictions under the 2008 Plan on the 2015 Plan's effective date that are subsequently forfeited. In addition, the number of shares that have been authorized for issuance under the 2015 Plan are automatically increased on the first day of each fiscal year beginning on January 1, 2016 and ending on (and including) January 1, 2025, in an amount equal to the lesser of (i) 4% of the outstanding shares of our common stock on the last day of the immediately preceding fiscal year, and (ii) another lesser amount determined by our Board. As of January 1, 2018, 123,023 shares remain available for future awards under the 2015 Plan.

Shares subject to awards granted under the 2015 Plan that are forfeited or terminated before being exercised or settled, or are not delivered to the participant because such award is settled in cash, will again become available for issuance under the 2015 Plan. However, shares that have actually been issued shall not again become available unless forfeited. No more than 160,000 shares may be delivered upon the exercise of incentive stock options granted under the 2015 Plan.

## **Types of Awards**

*Stock options.* A stock option is the right to purchase a certain number of shares of stock, at a certain exercise price, in the future. Under our 2015 Plan, incentive stock options and non-qualified options must be granted with an exercise price of at least 100% of the fair market value of our common stock on the date of grant. Incentive stock options granted to any holder of more than 10% of our voting shares must have an exercise price of at least 110% of the fair market value of our common stock on the date of grant. The stock option agreement specifies the date when all or any installment of the option is to become exercisable. Payment of the exercise price may be made in cash or, if provided for in the stock option agreement evidencing the award, (1) by surrendering, or attesting to the ownership of, shares which have already been owned by the optionee, (2) by delivery of an irrevocable direction to a securities broker to sell shares and to deliver all or part of the sale proceeds to us in payment of the aggregate exercise price, (3) by a “net exercise” arrangement, or (4) by any other form that is consistent with applicable laws, regulations and rules.

*Restricted stock.* Restricted stock is a share award that may be subject to vesting conditioned upon continued service, the achievement of performance objectives or the satisfaction of any other condition as specified in a restricted stock agreement. Participants who are granted restricted stock awards generally have all of the rights of a stockholder with respect to such stock, other than the right to transfer such stock prior to vesting.

*Restricted stock units.* Restricted stock units give recipients the right to acquire a specified number of shares of stock at a future date upon the satisfaction of certain conditions, including any vesting arrangement, established by our Compensation Committee and as set forth in a restricted stock unit agreement. Unlike restricted stock, the stock underlying restricted stock units will not be issued until the restricted stock units have vested and are settled, and recipients of restricted stock units generally will have no voting or dividend rights prior to the time the vesting conditions are satisfied and the award is settled.

*Dividend equivalents.* At our Compensation Committee’s discretion, performance-based restricted stock or restricted stock unit awards may provide for the right to dividend equivalents. Subject to the terms of the 2015 Plan, our Compensation Committee will determine the terms and conditions of any stock unit award, which will be set forth in a stock unit agreement to be entered into between us and each recipient.

*Stock appreciation rights.* Stock appreciation rights typically will provide for payments to the recipient based upon increases in the price of our common stock over the exercise price of the stock appreciation right. The exercise price of a stock appreciation right will be determined by our Compensation Committee, which shall not be less than the fair market value of our common stock on the date of grant. Our Compensation Committee may elect to pay stock appreciation rights in cash or in common stock or in a combination of cash and common stock.

*Performance-based awards.* Awards under our 2015 Plan may be made subject to the attainment of performance goals.

## **Other Plan Features**

*No Transfer.* Unless the agreement evidencing an award expressly provides otherwise, no award granted under the 2015 Plan may be transferred in any manner (prior to the vesting and lapse of any and all restrictions applicable to shares issued under such award), other than by will or the laws of descent and distribution, provided, however, that an incentive stock option may be transferred or assigned only to the extent consistent with Section 422 of the Code.

*Adjustments.* In the event of a recapitalization, stock split or similar capital transaction, our Compensation Committee will make appropriate and equitable adjustments to the number of shares reserved for issuance under the 2015 Plan, the limitations regarding the total number of shares underlying awards given to an individual participant in any calendar year, the number of shares that can be issued as incentive stock options, the number of shares subject to outstanding awards and the exercise price under each outstanding option or stock appreciation right.

*Change in Control.* If we are involved in a merger or other reorganization, outstanding awards will be subject to the agreement of merger or reorganization. Such agreement will provide for (1) the continuation of the outstanding awards by us if we are the surviving corporation, (2) the assumption or substitution of the outstanding awards by the surviving corporation or its parent or subsidiary, (3) immediate vesting, exercisability and settlement of the outstanding awards followed by their cancellation, or (4) settlement of the intrinsic value of the outstanding awards (whether or not vested or exercisable) in cash, cash equivalents, or equity (including cash or equity subject to deferred vesting and delivery consistent with the vesting restrictions applicable to such award or the underlying shares) followed by cancellation of such awards.

*Termination or Amendment.* Our Board may amend or terminate the 2015 Plan at any time, subject to stockholder approval where required by applicable law. Any amendment or termination may not materially impair the rights of holders of outstanding awards without their consent. No incentive stock option may be granted after the tenth anniversary of the date the 2015 Plan was adopted by our Board.

*Effective Date.* The 2015 Plan was initially adopted by our Board and subsequently approved by our stockholders in April 2015. The 2015 Plan became effective on May 4, 2015. Awards may be granted under the 2015 Plan until April 1, 2025.

## PROPOSALS TO BE ACTED UPON AT THE ANNUAL MEETING

### **PROPOSAL NO. ONE – ELECTION OF DIRECTORS**

#### **Nominees for Election of Directors**

The Board is nominating the four current directors, Evan Jones, R. Donald Elsey, Tina S. Nova, Ph.D. and Misti Ushio, Ph.D. for re-election to the Board. Each director nominee, if elected, will serve for a one year term, until his or her successor is elected and qualified, or until their earlier death, resignation or removal. Each nominated director and director nominee has consented to being named as a nominee in this Proxy Statement and to serving as a director if elected. Neither management nor the Board is aware of any reason that would cause any nominee to be unavailable to serve as a director. Discretionary authority may be exercised by the proxy holders named in the enclosed proxy to vote for a substitute nominee proposed by the Board if any nominee becomes unavailable for election. Please see pages 7 and 8 of this Proxy Statement under the heading “**Management-Board of Directors**” for information regarding the four nominees for election as a director.

The persons named in the enclosed form of proxy will vote the shares represented by such proxy for the election of the four nominees for director named below. If, at the time of the Annual Meeting, any of these nominees shall become unavailable for any reason, which event is not expected to occur, the persons entitled to vote the proxy will vote for such substitute nominee or nominees, if any, as they determine in their sole discretion.

The Board is in the process of recruiting additional Board members, but no candidate is specifically identified at this time. If additional Board members are elected to the Board by the Board in accordance with the Amended and Restated Bylaws, such director shall serve for a term that ends at the 2020 annual meeting of stockholders and his or her successor is elected and qualified.

#### **Vote Required and Recommendation**

The Board recommends a vote “For” the election of Evan Jones, R. Donald Elsey, Tina S. Nova, Ph.D. and Misti Ushio, Ph.D. to the Board. Directors are elected by a plurality of votes cast. Unless otherwise specified, the enclosed proxy will be voted “FOR” the election of the Board’s slate of nominees.

### **PROPOSAL NO. TWO - AMENDMENT TO THE AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO IMPLEMENT A REVERSE STOCK SPLIT OF THE COMPANY’S OUTSTANDING COMMON STOCK**

#### **General**

We are seeking stockholder approval for an amendment to the Company’s Amended and Restated Certificate of Incorporation, or the Charter, authorizing a Reverse Stock Split of the issued and outstanding shares of our common stock, at a ratio within a range of five-to-one and not more than twenty-five-to-one, such ratio and the implementation and timing of such Reverse Stock Split to be determined in the discretion of our Board of Directors. The form of the proposed amendment to the Charter, or the Amendment, is attached to this proxy statement as Appendix A.

On July 1, 2019, our Board of Directors approved the proposed Reverse Stock Split, and the Amendment in order to effect the Reverse Stock Split, subject to stockholder approval, and directed that the Amendment be submitted to a vote of the Company’s stockholders at the Annual Meeting.

If approved by our stockholders, and if implemented by our Board of Directors, the Reverse Stock Split will become effective at the time specified in the Amendment, as filed with the Secretary of State of the State of Delaware. The exact ratio of the Reverse Stock Split, within the five-to-one to twenty-five-to-one range, would be determined by the Board of Directors and publicly announced by the Company prior to filing the Amendment. In determining the appropriate ratio for the Reverse Stock Split, our Board of Directors will consider, among other things, factors such as:

- the minimum price per share requirements of The Nasdaq Capital Market;



- the historical trading price and trading volume of our common stock;
- the number of shares of our common stock outstanding and anticipated equity financing transactions during 2019;
- the then-prevailing trading price and trading volume of our common stock and the anticipated impact of the Reverse Stock Split on the trading market for our common stock;
- business developments affecting us; and
- prevailing general market and economic conditions.

### **Reasons for the Reverse Stock Split**

Our Board of Directors authorized the Reverse Stock Split of our common stock with the primary intent of increasing the price of our common stock in order to meet the price criteria for continued listing on The Nasdaq Capital Market. Our common stock is publicly traded and listed on The Nasdaq Capital Market under the symbol “OPGN.” Our Board of Directors believes that, in addition to increasing the price of our common stock, the Reverse Stock Split would make our common stock more attractive to a broader range of institutional and other investors.

Accordingly, for these and other reasons discussed below, we believe that effecting the Reverse Stock Split is in OpGen’s and our stockholders’ best interests. Further, in addition to completing the Reverse Stock Split, the Company is considering conducting a public offering of its securities and other capital-raising alternatives to raise sufficient capital to allow the Company to implement its product development, regulatory approval strategy and initial commercialization plans for its Acuitas AMR Gene Panel diagnostic tests and Acuitas Lighthouse Software informatics. We expect any securities sold in a public offering would be registered on a Form S-1 Registration Statement. We believe it is important to complete the Reverse Stock Split prior to such financing

On May 6, 2019, we received a notice from the Listing Qualifications Staff of The Nasdaq Stock Market LLC, or Nasdaq, notifying us that, based upon the closing bid price of our common stock, for the 30 consecutive business days prior to the notice, the Company no longer met the requirement to maintain a minimum closing bid price of \$1.00 per share, as set forth in Nasdaq Listing Rule 5550(a)(2). In accordance with Nasdaq’s Listing Rule 5810(c)(3)(A), we have a period of 180 calendar days to regain compliance with the rule. We have until November 4, 2019 to regain such compliance, but do not believe we will be able to do so without implementing a reverse stock split.

If we are not in compliance with the minimum bid price requirement by November 4, 2019, we would be required to meet the continued listing requirements for market value of publicly held shares and all other initial listing standards for The Nasdaq Capital Market, with the exception of the minimum bid price requirement, in order to be granted an additional 180-day grace period. We do not believe we will be able to meet all of the initial listing standards of The Nasdaq Capital Market at such time unless we successfully complete an equity financing, so we expect to receive a delisting notice from Nasdaq if the Reverse Stock Split Proposal is not approved. We believe effectuation of the Reverse Stock Split Proposal and the equity financing will help us avoid delisting from The Nasdaq Capital Market.

Our Board of Directors believes that the delisting of our common stock from The Nasdaq Capital Market would result in decreased liquidity and/or increased volatility in our common stock, and a diminution of institutional investor interest in our Company. Our Board also believes that a delisting could cause a loss of confidence of potential industry partners, lenders and employees, which could further harm our business and our future prospects.

Our Board of Directors believes that an increased stock price could encourage investor interest and improve the marketability of our common stock to a broader range of investors, and thus enhance our liquidity. Because of the trading volatility often associated with low-priced stocks, many brokerage firms and institutional investors have internal policies and practices that either prohibit them from investing in low-priced stocks or tend to discourage individual brokers from recommending low-priced stocks to their customers. Additionally, because brokers’ commissions on low-priced stocks generally represent a higher percentage of the stock price than commissions on higher-priced stock, the current share price of our common stock may result in an investor paying transaction costs that represent a higher percentage of total share value than would be the case if our share price were higher. Our Board of Directors believes that the higher share price resulting from the Reverse Stock Split could enable institutional investors and brokerage firms with such policies and practices to invest in our common stock.

Although we expect that the Reverse Stock Split will result in an increase in the market price of our common stock, the Reverse Stock Split may not result in a permanent increase in the market price of our common stock, which is dependent on many factors, including general economic, market and industry conditions and other factors detailed from time to time in the reports we file with the SEC.

## **Certain Risks Associated with the Reverse Stock Split**

Unexpected factors, such as our ability to successfully accomplish our business goals, market conditions and the market perception of our business may adversely affect the market price of our common stock. There can be no assurance that the total market capitalization of our common stock after the implementation of the Reverse Stock Split will be equal to or greater than the total market capitalization before the Reverse Stock Split or that the per share market price of our common stock following the Reverse Stock Split will increase in proportion to the reduction in the number of shares of our common stock outstanding before the Reverse Stock Split.

There can be no assurance that the market price per new share of our common stock after the Reverse Stock Split will remain unchanged or increase in proportion to the reduction in the number of old shares of our common stock outstanding before the Reverse Stock Split. For example, based on the closing price of our common stock on July 9, 2019 of \$0.3662 per share, if the Board of Directors were to implement the Reverse Stock Split and utilize a ratio of five-to-one, we cannot assure you that the post-split market price of our common stock would remain greater than \$1.00. We are aware that in many cases, the market price of a company's shares declines after a reverse stock split is implemented.

Accordingly, the total market capitalization of our common stock after the Reverse Stock Split, when and if implemented, may be lower than the total market capitalization before the Reverse Stock Split. Moreover, in the future, the market price of our common stock following the Reverse Stock Split may not exceed or remain higher than the market price prior to the Reverse Stock Split.

Further, the liquidity of our capital stock may be harmed by the proposed Reverse Stock Split given the reduced number of shares that will be outstanding after the Reverse Stock Split, particularly if the stock price does not remain increased as a result of the Reverse Stock Split. In addition, the proposed Reverse Stock Split may increase the number of stockholders who own odd lots (less than 100 shares) of our common stock, creating the potential for such stockholders to experience an increase in the cost of selling their shares and greater difficulty effecting sales. If we effect the Reverse Stock Split, the resulting per-share stock price may not attract institutional investors and may not satisfy the investing guidelines of such investors and, consequently, the trading liquidity of our common stock may not improve.

While the Board of Directors proposes the Reverse Stock Split to bring the price of our common stock back above \$1.00 per share in order to meet the requirements for the continued listing of our common stock on The Nasdaq Capital Market, there is no guarantee that the price of our common stock will not decrease in the future, or that for any other reason our common stock will not remain in compliance with The Nasdaq Capital Market listing standards. There can be no guarantee that the closing bid price of our common stock will remain at or above \$1.00 for ten consecutive trading days, which would be required to cure our current listing standard deficiency.

## **Potential Effects of the Proposed Reverse Stock Split**

If this proposal is approved and the Reverse Stock Split is effected, the Reverse Stock Split will be realized simultaneously and in the same ratio for all of our issued and outstanding shares of common stock. The immediate effect of the Reverse Stock Split would be to reduce the number of shares of our common stock outstanding and to increase the per-share trading price of our common stock.

However, we cannot predict the effect of any reverse stock split upon the market price of our common stock over an extended period, and in many cases, the market value of a company's common stock following a reverse stock split declines, in many cases, because of variables outside of a company's control (such as market volatility, investor response to the news of a proposed reverse stock split and the general economic environment). We cannot assure you that the trading price of our common stock after the Reverse Stock Split will rise in inverse proportion to the reduction in the number of shares of our common stock outstanding as a result of the Reverse Stock Split. Also, we cannot assure you that the Reverse Stock Split would lead to a sustained increase in the trading price of our common stock. The trading price of our common stock may change due to a variety of other factors, including our operating results and other factors related to our business and general market conditions. You should also keep in mind that the implementation of a reverse stock split does not have an effect on the actual or intrinsic value of our business or a stockholder's proportional ownership in our Company. However, should the overall value of our common stock decline after the proposed Reverse Stock Split, then the actual or intrinsic value of the shares of our common stock held by you will also proportionately decrease as a result of the overall decline in value.

*Examples of Potential Reverse Stock Split at Various Ratios.* The table below provides examples of reverse stock splits at various ratios up to twenty-five-to-one, without giving effect to the treatment of fractional shares. The actual number of shares outstanding after giving effect to the Reverse Stock Split, if effected, will depend on the actual ratio that is determined by our Board of Directors in accordance with the Amendment to the Company's Charter.

Shares outstanding at July 9, 2019	Reverse Stock Split Ratio	Shares outstanding after Reverse Stock Split
17,645,720	5 for 1	3,529,144
17,645,720	10 for 1	1,764,572
17,645,720	15 for 1	1,176,381
17,645,720	20 for 1	882,286
17,645,720	25 for 1	705,828

The resulting decrease in the number of shares of our common stock outstanding could potentially adversely affect the liquidity of our common stock, especially in the case of larger block trades.

*Effects on Ownership by Individual Stockholders.* If we implement the Reverse Stock Split, the number of shares of our common stock held by each stockholder would be reduced by multiplying the number of shares held immediately before the Reverse Stock Split by the appropriate ratio and then rounding down to the nearest whole share. We would pay cash to each stockholder in lieu of any fractional interest in a share to which each stockholder would otherwise be entitled as a result of the Reverse Stock Split, as described in further detail below. The Reverse Stock Split would not affect any stockholder's percentage ownership interest in our Company or proportionate voting power, except to the extent that interests in fractional shares would be paid in cash.

*Effect on Restricted Stock Units, Stock Options, Warrants.* In addition, we would adjust all outstanding shares of any restricted stock units, stock options and warrants entitling the holders to purchase shares of our common stock as a result of the Reverse Stock Split, as required by the terms of these securities. In particular, we would reduce the conversion ratio for each security, and would increase the exercise price in accordance with the terms of each security based on Reverse Stock Split ratio (i.e., the number of shares issuable under such securities would decrease by the ratio, and the exercise price per share would be multiplied by ratio). Also, we would reduce the number of shares reserved for issuance under our existing equity incentive plans, proportionately based on the ratio of the Reverse Stock Split. The Reverse Stock Split would not otherwise affect any of the rights currently accruing to holders of our common stock, or options or warrants exercisable for our common stock.

*Other Effects on Issued and Outstanding Shares.* If we implement the Reverse Stock Split, the rights pertaining to the issued and outstanding shares of our common stock would be unchanged after the Reverse Stock Split. Each share of our common stock issued following the Reverse Stock Split would be fully paid and non-assessable.

#### **Reservation of Right to Abandon the Proposed Amendment to our Amended and Restated Certificate of Incorporation**

Our Board of Directors reserves the right not to file the Amendment to our Charter without further action by our stockholders at any time before the effectiveness of the filing of the Amendment with the Secretary of State of the State of Delaware, even if the authority to effect the Amendment is approved by our stockholders at the Annual Meeting. By voting in favor of the Amendment, you are expressly also authorizing our Board of Directors to delay, not proceed with, and abandon, the proposed Amendment if it should so decide, in its sole discretion, that such action is in the best interests of the Company and its stockholders.

## **Procedure for Effecting the Proposed Stock Split and Exchange of Stock Certificates**

If stockholders approve this proposal and our Board of Directors does not otherwise abandon the Amendment contemplating the Reverse Stock Split, we will file with the Delaware Secretary of State a Certificate of Amendment to our Charter, in the form attached to this proxy statement as Appendix A. The Reverse Stock Split will become effective at the time and on the date of filing of, or at such later time as is specified in, the Amendment, which we refer to as the “effective time.” Beginning at the effective time, each certificate representing shares of common stock will be deemed for all corporate purposes to evidence ownership of the number of whole shares into which the shares previously represented by the certificate were combined pursuant to the Reverse Stock Split.

Upon the Reverse Stock Split, we intend to treat stockholders holding our common stock in “street name,” through a bank, broker or other nominee, in the same manner as registered stockholders whose shares are registered in their names. Banks, brokers or other nominees will be instructed to effect the Reverse Stock Split for their beneficial holders holding our common stock in “street name.” However, these banks, brokers or other nominees may have different procedures than registered stockholders for processing the Reverse Stock Split. If you hold your shares with a bank, broker or other nominee and if you have any questions in this regard, we encourage you to contact your nominee.

Following the Reverse Stock Split, stockholders holding physical certificates must exchange those certificates for new certificates and a cash payment in lieu of any fractional shares.

The Transfer Agent will advise registered stockholders of the procedures to be followed to exchange certificates in a letter of transmittal to be sent to stockholders. No new certificates will be issued to a stockholder until the stockholder has surrendered the stockholder’s outstanding certificate(s), together with the properly completed and executed letter of transmittal, to the Transfer Agent. Any old shares submitted for transfer, whether pursuant to a sale, other disposition or otherwise, will automatically be exchanged for new shares. **Stockholders should not destroy any stock certificate(s) and should not submit any certificate(s) until requested to do so.**

### **No Appraisal Rights**

No appraisal rights are available under the General Corporation Law of the State of Delaware or under our Charter, or our Amended and Restated bylaws with respect to the Reverse Stock Split. There may exist other rights or actions under state law for stockholders who are aggrieved by reverse stock splits generally.

### **Accounting Consequences**

The par value of our common stock would remain unchanged at \$0.01 per share after the Reverse Stock Split. Also, our capital account would remain unchanged, and we do not anticipate that any other accounting consequences would arise as a result of the Reverse Stock Split.

### **No Going Private Transaction**

Notwithstanding the decrease in the number of outstanding shares following the Reverse Stock Split, our Board of Directors does not intend for this transaction to be the first step in a “going private transaction” within the meaning of Rule 13e-3 of the Exchange Act.

### **Material U.S. Federal Income Tax Consequences of the Reverse Stock Split**

The following is a summary of the material U.S. federal income tax consequences of the Reverse Stock Split to holders of our shares. This summary is based on the Internal Revenue Code of 1986, as amended, or the Code, the Treasury regulations promulgated thereunder, and administrative rulings and court decisions in effect as of the date of this document, all of which may be subject to change, possibly with retroactive effect. This summary only addresses holders who hold their shares as capital assets within the meaning of the Code and does not address all aspects of U.S. federal income taxation that may be relevant to holders subject to special tax treatment, such as financial institutions, dealers in securities, insurance companies, foreign persons and tax-exempt entities. In addition, this summary does not consider the effects of any applicable state, local, foreign or other tax laws.

We have not sought and will not seek any ruling from the Internal Revenue Service, or the IRS, or an opinion from counsel with respect to the U.S. federal income tax consequences discussed below. There can be no assurance that the tax consequences discussed below would be accepted by the IRS or a court. The tax treatment of the Reverse Stock Split to holders may vary depending upon a holder's particular facts and circumstances.

We urge holders to consult with their own tax advisors as to any U.S. federal, state, local or foreign tax consequences applicable to them that could result from the Reverse Stock Split.

Except as described below with respect to cash received in lieu of fractional shares, the receipt of common stock in the Reverse Stock Split should not result in any taxable gain or loss to a holder for U.S. federal income tax purposes. The aggregate tax basis of the common stock received by a holder as a result of the Reverse Stock Split (including the basis of any fractional share to which a holder is entitled) will be equal to the aggregate basis of the existing common stock exchanged for such stock. A holder's holding period for the common stock received in the Reverse Stock Split will include the holding period of the common stock exchanged therefor.

A holder who receives cash in lieu of a fractional share of common stock will be treated as first receiving such fractional share and then receiving cash in redemption of such fractional share. A holder generally will recognize capital gain or loss on such deemed redemption in an amount equal to the difference between the amount of cash received and the adjusted basis of such fractional share.

### **Required Vote**

The affirmative vote of holders of at least sixty-six and two-thirds percent (66 2/3%) of the outstanding shares common stock as of the Record Date, is required for approval of this proposal. Therefore, abstentions and broker non-votes will have the same effect as votes against this proposal.

### **Recommendation of the Board of Directors**

The Board of Directors unanimously recommends that you vote "FOR" Proposal No. Two.

### **PROPOSAL NO. THREE – GRANT OF DISCRETIONARY AUTHORITY TO ADJOURN THE ANNUAL MEETING IF NECESSARY TO SOLICIT ADDITIONAL PROXIES**

#### **General**

In the event there are insufficient votes, in person or represented by proxy, at the time of the Annual Meeting to approve Proposal No. Two, the Board of Directors may move to adjourn the Annual Meeting, if necessary or advisable, in order to enable the Board of Directors to solicit additional proxies in favor of the approval of Proposal No. Two. In that event, the Board of Directors will ask its stockholders to vote only upon the adjournment proposal and not on Proposal Two.

### **Required Vote**

The affirmative vote of holders of a majority of the shares of our common stock present in person or by proxy at the Annual Meeting and entitled to vote is required to approve Proposal No. Three.

### **Recommendation of the Board of Directors**

The Board of Directors unanimously recommends that you vote "FOR" Proposal No. Three.

## **PROPOSAL NO. FOUR - RATIFICATION OF INDEPENDENT ACCOUNTING FIRM**

### **Independent Registered Public Accounting Firm**

On July 1, 2019, the Board unanimously approved the Audit Committee's recommendation to appoint CohnReznick LLP, or CohnReznick, as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2019, and directed that the selection of CohnReznick be submitted to the stockholders for ratification at the Annual Meeting. Although the Company is not required to submit the selection of independent registered public accountants for stockholder approval, if the stockholders do not ratify this selection, the Audit Committee may reconsider its selection of CohnReznick. The Board considers CohnReznick to be well qualified to serve as the independent auditors for the Company; however, even if the selection is ratified, the Board may direct the appointment of a different independent registered public accounting firm at any time during the current or subsequent fiscal year if the Audit Committee and Board determine that the change would be in the Company's best interests.

Representatives of CohnReznick are expected to attend the Annual Meeting and will be available to respond to appropriate questions and, if they desire, to make a statement.

### **Audit Fees**

CohnReznick LLP has served as the independent registered public accounting firm of the Company since 2013. The following table presents the aggregate fees billed to the Company by CohnReznick for its audits of the Company's consolidated annual financial statements and other services for the years ended December 31, 2018 and 2017.

	<b>2018</b>	<b>2017</b>
Audit Fees (1)	\$ 383,681	\$ 411,681
Audit Related Fees		
Tax Fees	—	—
All Other Fees	—	—
<b>Total Fees</b>	<b>\$ 383,681</b>	<b>\$ 411,681</b>

- (1) Audit Fees consist of fees billed for professional services performed by CohnReznick for the audit of our consolidated annual financial statements for the years ended December 31, 2018 and 2017, the review of our quarterly financial statements on Form 10-Q, filing of Registration Statements on Forms S-1, S-3 and S-8, and associated Consent Letters and related services that are normally provided in connection with statutory and regulatory filings or engagements.

### **Policy on Audit Committee Pre-Approval**

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 registered public accounting firm. The services requiring pre-approval by the audit committee may include audit services, audit-related services, tax services and other services. All such audit and permissible non-audit services were pre-approved in accordance with this policy during the fiscal year ended December 31, 2018. The Audit Committee considers whether the provision of each non-audit service is compatible with maintaining the independence of our independent registered public accounting firm. The responsibility to pre-approve audit and non-audit services may be delegated by the Audit Committee to one or more members of the Audit Committee; provided that any decisions made by such member or members must be presented to the full Audit Committee at its next scheduled meeting.

### **Recommendation of the Board of Directors**

The Board recommends that stockholders vote "FOR" the ratification of CohnReznick as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2019.

## ANNUAL REPORT TO STOCKHOLDERS

Included with this Proxy Statement is the Company's 2018 Annual Report to Stockholders.

### OTHER MATTERS

Management and the Board of the Company know of no matters to be brought before the Annual Meeting other than as set forth herein. However, if any such other matters properly are presented to the stockholders for action at the Annual Meeting and any adjournments or postponements thereof, it is the intention of the proxy named in the enclosed proxy card to vote in his discretion on all matters on which the shares represented by such proxy are entitled to vote.

### DELIVERY OF DOCUMENTS TO STOCKHOLDERS SHARING AN ADDRESS

Only one Notice of Internet Availability of Proxy Materials is being delivered to stockholders sharing an address unless we have received contrary instructions from one or more of the stockholders. Upon the written or oral request of a stockholder, we will deliver promptly a separate copy of the Notice of Internet Availability of Proxy Materials to a stockholder at a shared address to which a single copy was delivered. Stockholders desiring to receive a separate copy now or in the future may contact us at our corporate offices located at 708 Quince Orchard Road, Suite 205, Gaithersburg, MD 20878, or by telephone: (240) 813-1260.

Stockholders who share an address but are receiving multiple copies of the Notice of Internet Availability of Proxy Materials may contact us through our corporate offices at 708 Quince Orchard Road, Suite 205, Gaithersburg, MD 20878, or by telephone: (240) 813-1260 to request that a single copy be delivered.

### STOCKHOLDER PROPOSALS

We expect to hold our next annual meeting of stockholders in July 2020. Proposals from stockholders intended to be presented at the next annual meeting of stockholders should be addressed to OpGen, Inc., Attention: Corporate Secretary, 708 Quince Orchard Road, Suite 205, Gaithersburg, MD 20878. We must receive the proposals by no earlier than 120 days and no later than 90 days prior to the first anniversary of the date on which this Proxy Statement was first made available to our stockholders in connection with this Annual Meeting, or no earlier than March 18, 2020 and no later than April 18, 2020. Upon receipt of any such proposal, we shall determine whether or not to include any such proposal in the proxy statement and proxy for next year's annual meeting in accordance with applicable law. It is suggested that stockholders forward such proposals by Certified Mail—Return Receipt Requested. After April 18, 2020, which is 90 days prior to the first anniversary of the date on which this Proxy Statement was first made available to our stockholders, any stockholder proposal submitted outside the process of Rule 14a-8 will be considered to be untimely. Any nominations for director positions will be accepted in accordance with the procedures described in this Proxy Statement under the heading "**Procedures for Nominating a Director Candidate.**"

**BY ORDER OF THE BOARD OF DIRECTORS  
OF OPGEN, INC.**



Evan Jones, Chairman of the Board of Directors

**Appendix A**

**CERTIFICATE OF AMENDMENT  
OF THE  
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION  
OF  
OPGEN, INC.**

OpGen, Inc., a corporation duly organized and validly existing under and by virtue of the General Corporation Law of the State of Delaware (the "DGCL");

**DOES HEREBY CERTIFY AS FOLLOWS:**

**FIRST:** The name of the corporation (the "Corporation") is: OpGen, Inc.

**SECOND:** The Amended and Restated Certificate of Incorporation of the Corporation was filed with the office of the Secretary of State of Delaware on May 7, 2015 (the "Restated Certificate"), a Certificate of Correction of the Restated Certificate (the "Certificate of Correction") was filed with the office of the Secretary of State of Delaware on June 6, 2015 (the "Certificate of Correction") and a Certificate of Amendment of the Amended and Restated Certificate of Incorporation (the "Amendment" and together with the Restated Certificate and the Certificate of Correction, the "Charter").

**THIRD:** The Charter is hereby amended as follows:

(a) Article FOURTH of the Charter, is hereby supplemented by addition of the following paragraphs as new sixth and seventh paragraphs under "A. Common Stock.":

Upon this Certificate of Amendment becoming effective pursuant to the General Corporation Law of the State of Delaware (the "Effective Time"), the shares of Common Stock issued and outstanding or held in treasury immediately prior to the Effective Time (the "Old Common Stock") shall be reclassified into a different number of shares of Common Stock (the "New Common Stock") such that each [[five] to [twenty-five]] shares of Old Common Stock shall, at the Effective Time, be automatically reclassified into one share of New Common Stock. From and after the Effective Time, certificates representing the Old Common Stock shall represent the number of whole shares of New Common Stock into which such Old Common Stock shall have been reclassified pursuant to the immediately preceding sentence. No fractional shares of Common Stock shall be issued as a result of such reclassification. In lieu of any fractional shares to which the stockholder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the then fair value of the Common Stock as determined in good faith by the Board of Directors of the Corporation.

From and after the Effective Time, the term "New Common Stock" as used in this Article FOURTH shall mean the Common Stock as provided in this Amended and Restated Certificate of Incorporation, as amended and corrected and as further amended by this Certificate of Amendment. The par value of the New Common Stock shall be \$0.01 per share.

**FOURTH:** The foregoing amendment was duly adopted in accordance with the provisions of Section 242 of the DGCL.

**FIFTH:** This Certificate of Amendment shall be deemed effective upon its filing with the Secretary of State of the State of Delaware.

**IN WITNESS WHEREOF**, the undersigned has duly executed this Certificate of Amendment on this \_\_ day of \_\_\_\_\_, 2019.

**OPGEN, INC.**

By:  
Name:  
Title:





Proposal Four: Ratification of the appointment of CohnReznick LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2019.

For / /

Against / /

Abstain / /

The undersigned hereby revokes any proxies as to said shares heretofore given by the undersigned and ratifies and confirms all that said proxy lawfully may do by virtue hereof.

**THE SHARES REPRESENTED HEREBY WILL BE VOTED AS SPECIFIED HEREON WITH RESPECT TO THE ABOVE PROPOSALS, BUT IF NO SPECIFICATION IS MADE THEY WILL BE VOTED FOR THE PROPOSALS LISTED ABOVE. THE ABOVE-NAMED ATTORNEYS AND PROXIES SHALL HAVE THE DISCRETION TO VOTE YOUR SHARES AS TO ANY ADDITIONAL MATTER PROPERLY PRESENTED AT THE ANNUAL MEETING.**

Please mark, date and sign exactly as your name appears hereon, including designation as executor, trustee, etc., if applicable, and return the proxy in the enclosed postage-paid envelope as promptly as possible. It is important to return this proxy properly signed in order to exercise your right to vote if you do not attend the meeting and vote in person. A corporation must sign in its name by the president or other authorized officer. All co-owners and each joint owner must sign.

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature(s)

Address if different from that on envelope:

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City, State and Zip Code

Please check if you intend to be present at the Annual Meeting: \_\_\_\_