
SCHEDULE 14A INFORMATION

**Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934
(Amendment No.)**

Filed by the Registrant

Filed by a party other than the Registrant

Check the appropriate box:

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

HTG MOLECULAR DIAGNOSTICS, INC.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement if other than the Registrant)

Payment of Filing Fee (Check the appropriate box)

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

Title of each class of securities to which transaction applies:

Aggregate number of securities to which transaction applies:

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

Proposed maximum aggregate value of transaction:

Total fee paid:

- Fee paid previously with preliminary materials.
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

Amount previously paid:

Form, Schedule or Registration Statement No.:

Filing party:

Date Filed:

HTG MOLECULAR DIAGNOSTICS, INC.

3430 E. Global Loop
Tucson, Arizona 85706

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held On August 14, 2019

Dear Stockholder:

You are cordially invited to attend the 2019 Annual Meeting of Stockholders of HTG Molecular Diagnostics, Inc., a Delaware corporation (the "Company"). The meeting will be held on August 14, 2019 at 1:00 p.m. local time at the Company's offices located at 3430 E. Global Loop, Tucson, Arizona 85706 for the following purposes:

1. To elect the Board of Directors' two nominees for director named herein to hold office until the 2022 Annual Meeting of Stockholders.
2. To ratify the selection by the Audit Committee of the Board of Directors of BDO USA, LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2019.
3. To conduct any other business properly brought before the meeting.

These items of business are more fully described in the Proxy Statement accompanying this Notice.

The record date for the annual meeting is June 17, 2019. Only stockholders of record at the close of business on that date may vote at the meeting or any adjournment thereof.

By Order of the Board of Directors



Shaun D. McMeans
Secretary

Tucson, Arizona
July 2, 2019

You are cordially invited to attend the meeting in person. Whether or not you expect to attend the meeting, please complete, date, sign and return the proxy card that may be mailed to you, or vote over the telephone or the internet as instructed in these materials, as promptly as possible in order to ensure your representation at the meeting. Even if you have voted by proxy, you may still vote in person if you attend the meeting. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder.

HTG MOLECULAR DIAGNOSTICS, INC.

**3430 E. Global Loop
Tucson, Arizona 85706**

**PROXY STATEMENT
FOR THE 2019 ANNUAL MEETING OF STOCKHOLDERS**

To Be Held On August 14, 2019

QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING

Why did I receive a notice regarding the availability of proxy materials on the internet?

Pursuant to rules adopted by the Securities and Exchange Commission (the "SEC"), we have elected to provide access to our proxy materials over the internet. Accordingly, we have sent you a Notice of Internet Availability of Proxy Materials (the "Notice") because the Board of Directors (sometimes referred to as the "Board") of HTG Molecular Diagnostics, Inc. (sometimes referred to as "we," "us," "our," the "Company" or "HTG") is soliciting your proxy to vote at the 2019 Annual Meeting of Stockholders, including at any adjournments or postponements of the meeting. All stockholders will have the ability to access the proxy materials on the website referred to in the Notice or request to receive a printed set of the proxy materials. Instructions on how to access the proxy materials over the internet or to request a printed copy may be found in the Notice.

We intend to mail the Notice on July 2, 2019 to all stockholders of record entitled to vote at the annual meeting.

Will I receive any other proxy materials by mail?

We may send you a proxy card, along with a second Notice, on or after July 12, 2019.

How do I attend the annual meeting?

The meeting will be held on Wednesday, August 14, 2019 at 1:00 p.m. local time at the Company's offices located at 3430 E. Global Loop, Tucson, Arizona 85706. Directions to the annual meeting are: From I-10 E or I-10 W in or around Tucson, Arizona, take exit 264 for Palo Verde Road; turn south on Palo Verde Road (for approximately 1.7 miles); turn right onto East Hemisphere Loop (for approximately 344 feet); turn right onto East Global Loop; and your destination will be on the left. Information on how to vote in person at the annual meeting is discussed below.

Who can vote at the annual meeting?

Only stockholders of record at the close of business on June 17, 2019 will be entitled to vote at the annual meeting. On this record date, there were 28,706,047 shares of common stock outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Your Name

If on June 17, 2019, your shares were registered directly in your name with HTG's transfer agent, American Stock Transfer & Trust Company, LLC, then you are a stockholder of record. As a stockholder of record, you may vote in person at the meeting or vote by proxy. Whether or not you plan to attend the meeting, we urge you to fill out and return the proxy card that may be mailed to you or vote by proxy over the telephone or on the internet as instructed below to ensure your vote is counted.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank

If on June 17, 2019 your shares were held, not in your name, but rather in an account at a brokerage firm, bank, dealer or other similar organization, then you are the beneficial owner of shares held in "street name" and the Notice is being forwarded to you by that organization. The organization holding your account is considered to be the stockholder of record for purposes of voting at the annual meeting. As a beneficial owner, you have the right to direct your broker or other agent regarding how to vote the shares in your account. You are also invited to attend the annual meeting. However, since you are not the stockholder of record, you may not vote your shares in person at the meeting unless you request and obtain a valid proxy from your broker or other agent.

What am I voting on?

There are two matters scheduled for a vote:

- Proposal 1: Election of the Board's two nominees for director named herein to hold office until the 2022 Annual Meeting of Stockholders; and
- Proposal 2: Ratification of the selection by the Audit Committee of the Board of Directors of BDO USA, LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2019.

What if another matter is properly brought before the meeting?

The Board of Directors knows of no other matters that will be presented for consideration at the annual meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on those matters in accordance with their best judgment.

How do I vote?

You may either vote "For" all the nominees to the Board of Directors or you may "Withhold" your vote for any nominee you specify. For each of the other matters to be voted on, you may vote "For" or "Against" or abstain from voting.

The procedures for voting are fairly simple:

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record, you may vote in person at the annual meeting, vote by proxy over the telephone, vote by proxy through the internet or vote by proxy using a proxy card that you may request or that we may elect to deliver at a later time. Whether or not you plan to attend the meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the meeting and vote in person even if you have already voted by proxy.

- To vote in person, come to the annual meeting and we will give you a ballot when you arrive.
- To vote using the proxy card, simply complete, sign and date the proxy card that may be delivered to you and return it promptly in the envelope provided. If you return your signed proxy card to us before the annual meeting, we will vote your shares as you direct.
- To vote over the telephone, dial toll-free 1-800-PROXIES (1-800-776-9437), or 718-921-8500 for international callers, and follow the recorded instructions. You will be asked to provide the company number and control number from the Notice. Your telephone vote must be received by 11:59 p.m., Eastern Time, on August 13, 2019 to be counted.
- To vote through the internet, go to www.voteproxy.com and follow the on-screen instructions to complete an electronic proxy card or scan the QR code on your proxy notice with your smartphone. You will be asked to provide the company number and control number from the Notice. Your internet vote must be received by 11:59 p.m., Eastern Time, on August 13, 2019 to be counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank, or other agent, you should have received a Notice containing voting instructions from that organization rather than from HTG. Simply follow the voting instructions in the Notice to ensure that your vote is counted. To vote in person at the annual meeting, you must obtain a valid proxy from your broker, bank or other agent. Follow the instructions from your broker or bank included with these proxy materials, or contact your broker or bank to request a proxy form.

Internet proxy voting may be provided to allow you to vote your shares online, with procedures designed to ensure the authenticity and correctness of your proxy vote instructions. However, please be aware that you must bear any costs associated with your internet access, such as usage charges from internet access providers and telephone companies.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you owned as of the close of business on June 17, 2019.

What happens if I do not vote?*Stockholder of Record: Shares Registered in Your Name*

If you are a stockholder of record and do not vote by completing your proxy card, by telephone, through the internet or in person at the annual meeting, your shares will not be voted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner and do not instruct your broker, bank, or other agent how to vote your shares, the question of whether your broker or nominee will still be able to vote your shares depends on whether the New York Stock Exchange ("NYSE") deems the particular proposal to be a "routine" matter. Brokers and nominees can use their discretion to vote "uninstructed" shares with respect to matters that are considered to be "routine," but not with respect to "non-routine" matters. Under the rules and interpretations of the NYSE, "non-routine" matters are matters that may substantially affect the rights or privileges of stockholders, such as mergers, stockholder proposals, elections of directors (even if not contested), executive compensation (including any advisory stockholder votes on executive compensation and on the frequency of stockholder votes on executive compensation), and certain corporate governance proposals, even if management-supported. Accordingly, your broker or nominee may not vote your shares on Proposal 1 without your instructions, but may vote your shares on Proposal 2 even in the absence of your instruction.

What if I return a proxy card or otherwise vote but do not make specific choices?

If you return a signed and dated proxy card or otherwise vote without marking voting selections, your shares will be voted, as applicable, "For" the election of the two nominees for director and "For" the ratification of the selection by the Audit Committee of the Board of Directors of BDO USA, LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2019. If any other matter is properly presented at the meeting, your proxyholder (one of the individuals named on your proxy card) will vote your shares using his or her best judgment.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. In addition to these proxy materials, our directors and employees may also solicit proxies in person, by telephone, or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. We may also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

What does it mean if I receive more than one Notice?

If you receive more than one Notice, your shares may be registered in more than one name or in different accounts. Please follow the voting instructions on the Notices to ensure that all of your shares are voted.

Can I change my vote after submitting my proxy?*Stockholder of Record: Shares Registered in Your Name*

Yes. You can revoke your proxy at any time before the final vote at the meeting. If you are the record holder of your shares, you may revoke your proxy in any one of the following ways:

- You may submit another properly completed proxy card with a later date.
 - You may grant a subsequent proxy by telephone or through the internet.
 - You may send a timely written notice that you are revoking your proxy to the Company's Secretary at 3430 E. Global Loop, Tucson, Arizona 85706.
 - You may attend the annual meeting and vote in person. Simply attending the meeting will not, by itself, revoke your proxy.
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Your most current proxy card or telephone or internet proxy is the one that is counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If your shares are held by your broker or bank as a nominee or agent, you should follow the instructions provided by your broker or bank.

When are stockholder proposals and director nominations due for next year's annual meeting?

To be considered for inclusion in next year's proxy materials, your proposal must be submitted in writing by March 4, 2020, to Attn: Corporate Secretary, 3430 E. Global Loop, Tucson, Arizona 85706. If you wish to submit a proposal (including a director nomination) at the meeting that is not to be included in next year's proxy materials, you must do so between April 16, 2020 and May 16, 2020. You are also advised to review the Company's Bylaws, which contain additional requirements relating to advance notice of stockholder proposals and director nominations.

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting, who will separately count, for the proposal to elect directors, votes "For," "Withhold" and broker non-votes, and for the proposal to ratify the Audit Committee's selection of BDO USA, LLP as our independent registered public accounting firm, votes "For" and "Against," abstentions and, if applicable, broker non-votes. Abstentions will be counted towards the vote total for Proposal 2 and will have the same effect as "Against" votes. Broker non-votes will be counted towards the presence of a quorum but will not be counted towards the vote total for any proposal.

What are "broker non-votes"?

As discussed above, when a beneficial owner of shares held in "street name" does not give instructions to the broker or nominee holding the shares as to how to vote on matters deemed by the NYSE to be "non-routine," the broker or nominee cannot vote the shares. These unvoted shares are counted as "broker non-votes."

How many votes are needed to approve each proposal?

For the election of directors, the two nominees receiving the most "For" votes from the holders of shares present in person or represented by proxy and entitled to vote on the election of directors will be elected. Only votes "For" will affect the outcome.

To be approved, Proposal 2, ratification of the selection of BDO USA, LLP as the Company's independent registered public accounting firm for its fiscal year ending December 31, 2019, must receive "For" votes from the holders of a majority of shares present in person or represented by proxy and entitled to vote on the matter. If you "Abstain" from voting, it will have the same effect as an "Against" vote. Broker non-votes will have no effect.

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if stockholders holding at least a majority of the outstanding shares entitled to vote are present at the meeting in person or represented by proxy. On the record date, there were 28,706,047 shares outstanding and entitled to vote. Thus, the holders of 14,353,024 shares must be present in person or represented by proxy at the meeting to have a quorum.

Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you vote in person at the meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, the holders of a majority of shares present at the meeting in person or represented by proxy may adjourn the meeting to another date.

How can I find out the results of the voting at the annual meeting?

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 four business days after the annual meeting. If final voting results are not available to us in time to file a Form 8-K within four business days after the meeting, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an additional Form 8-K to publish the final results.

Proposal 1
Election Of Directors

The Company's Board of Directors is divided into three classes. Each class consists, as nearly as possible, of one-third of the total number of directors, and each class has a three-year term. Vacancies on the Board may be filled only by persons elected by a majority of the remaining directors. A director elected by the Board to fill a vacancy in a class, including vacancies created by an increase in the number of directors, shall serve for the remainder of the full term of that class and until the director's successor is duly elected and qualified.

The Board of Directors presently has eight members. There are two Class I directors whose term of office expires in 2019. The nominees for election at the annual meeting, Lee R. McCracken and James T. LaFrance are current Class I directors elected by our stockholders. If elected at the annual meeting, each of the two nominees would serve until the 2022 annual meeting and until his successor has been duly elected and qualified, or, if sooner, until the director's death, resignation or removal. It is the Company's policy to invite directors and nominees for director to attend the annual meeting. Six directors attended the 2018 Annual Meeting of Stockholders, consisting of Ann F. Hanham, Ph.D., Donnie M. Hardison, Timothy B. Johnson, James T. LaFrance, Lee R. McCracken and Michelle R. Griffin.

Directors are elected by a plurality of the votes of the holders of shares present in person or represented by proxy and entitled to vote on the election of directors. Accordingly, the two nominees receiving the highest number of affirmative votes will be elected. Shares represented by executed proxies will be voted, if authority to do so is not withheld, for the election of the two nominees named herein. If any nominee becomes unavailable for election as a result of an unexpected occurrence, your shares that would have been voted for that nominee instead may be voted for the election of a substitute nominee proposed by the Board of Directors. Each person nominated for election has agreed to serve if elected. Our management has no reason to believe that any nominee will be unable to serve.

**The Board of Directors Recommends
A Vote "For" Each Named Nominee.**

<u>Name</u>	<u>Age</u>	<u>Position(s)</u>
John L. Lubniewski	54	President, Chief Executive Officer and Director
Shaun D. McMeans	57	Senior Vice President, Chief Financial Officer, Treasurer and Secretary
Timothy B. Johnson	57	Executive Chairman
Ann F. Hanham, Ph.D.	66	Lead Independent Director
Michelle R. Griffin	52	Director
Harry A. George	70	Director
Donnie M. Hardison	68	Director
James T. LaFrance	60	Director
Lee R. McCracken	61	Director

The following is a brief biography of each nominee, each director whose term will continue after the annual meeting and each of our executive officers.

Nominees for Election for a Three-year Term Expiring at the 2022 Annual Meeting

James (Jim) T. LaFrance. Mr. LaFrance has served on our Board of Directors since December 2015. Mr. LaFrance has over thirty years of diagnostic industry experience, and has worked since January 2015 as a sales, marketing, strategy development and commercial operational management consultant for LaFrance Consulting LLC, a firm he founded. He currently serves on three additional boards, Vermillion, Inc (Nasdaq: VRML) as Chairman; BioArray Genetics, Inc., a private company, as Chairman, and as an independent director of privately held Personal Genome Diagnostics. He served as Chief Executive Officer of Vermillion, Inc. (Nasdaq: VRML) in 2014 and as a CEO for Omnyx, LLC, a UPMC/GE Healthcare joint venture from 2012 to 2013. Mr. LaFrance held a series of senior management roles at Ventana Medical Systems (now Roche Tissue Diagnostics), including general management of the North American and international commercial operations. Prior to working for Ventana, Mr. LaFrance served in leadership roles in strategic marketing and business development at Bayer Diagnostics. He earned a Bachelor of Arts degree in Economics from the University of Connecticut and holds a Master's in Business Administration from the University of Notre Dame. Our Board of Directors believes that Mr. LaFrance's extensive industry and executive experience, and his experience serving on the board of directors of another public company qualify him to serve on our Board of Directors.

Lee R. McCracken. Mr. McCracken has served on our Board of Directors since October 2015. Mr. McCracken currently is the Chief Executive Officer and a member of the board of directors of Drawbridge Health, Inc., a company focused on enabling personal diagnostic testing, positions he has held since June 2017. From May 2016 to May 2017 and from April 2013 to March 2014, he served as a strategic and restructuring consultant in the regenerative medicine and diagnostic sectors for McCracken Consulting, a consulting firm he founded. Between April 2014 and May 2016, Mr. McCracken was Chief Executive Officer of Gensignia Life Sciences, Inc., a molecular diagnostics company. Earlier in his career, Mr. McCracken held a number of executive positions or roles with significant responsibility at several biotechnology and therapeutics companies, including Pathwork Diagnostics, Inc., Prometheus Laboratories Inc., GenStar Therapeutics Corporation, CombiChem Inc., and Allergan Inc., as well as at the investment companies, 3i Capital and Union Venture. Mr. McCracken received his M.B.A. from the Anderson School of Management at the University of California, Los Angeles, his Master of Computer Science (MCS) from the University of Dayton, and his B.S. in Commerce from Santa Clara University. Our Board of Directors believes Mr. McCracken's extensive executive and industry experience and his broad knowledge of molecular diagnostics qualify him to serve on our Board of Directors.

Directors Continuing in Office Until the 2020 Annual Meeting

Harry A. George. Mr. George has served on our Board of Directors since 2002 and served as the chair of our Board of Directors from December 2007 until September 2013. Mr. George co-founded Solstice Capital, a venture capital firm, in 1995 and serves as its Managing General Partner. Mr. George serves as President and CFO of Radiance Therapeutics where he also serves on the board of directors. Mr. George has served as a member of the board of directors of a number of private and public companies and is currently serving on the boards of directors of Medipacs, Inc., Post.Bid.Ship, Inc., AdiCyte, Inc. and RxActuator, Inc. and Splash Pharmaceuticals, Inc. Mr. George is also a member of the boards of directors of several non-profit organizations, including Southern Arizona Leadership Council, Desert Angels and Start-up Tucson, a member of the Board of Visitors of the McGuire Center for Entrepreneurship, and an advisor to Tech Launch Arizona. Prior to 1995, Mr. George was co-founder, Director, and Vice-President of Finance for Interleaf Inc., a software products company. Prior to his time at Interleaf, Mr. George was co-founder, Director and Vice President of Finance of Kurzweil Computer Products, Inc., a computer products company, which subsequently was purchased by Xerox Imaging Systems. Mr. George received an A.B. from Bowdoin College and, in 2012, received an Honorary Doctorate of Science from the University of Arizona. Also in 2012, the Arizona BioIndustry Association conferred upon Mr. George the John McGarrity Bioscience Leader of the Year Award. Our Board of Directors believes Mr. George's detailed knowledge of our company and long tenure with us, together with his more than 40 years of experience serving as founder, operating officer, or investor with successful rapid growth technology-related companies qualify him to serve on our Board of Directors.

Donnie M. Hardison. Mr. Hardison has served on our Board of Directors since May 2016. He currently is the President and Chief Executive Officer, and serves on the board of directors, of Biotheranostics, Inc., a molecular diagnostic company focused on oncology, positions he has held since February 2017. From April 2017 to January 2017, Mr. Hardison served as the sole proprietor of DMH Consulting, a management consulting firm, which he founded. Between April 2010 and March 2016, Mr. Hardison was the President and Chief Executive Officer of Good Start Genetics, a genetic testing company. For more than 20 years prior to that, Mr. Hardison held a number of executive and senior management positions at companies including Laboratory Corporation of America (“LabCorp”) a clinical laboratory company, Exact Sciences Corporation, a molecular diagnostics company, OnTarget, Inc., a sales and marketing consulting company, Quest Diagnostics Inc., a clinical laboratory company, SmithKline Beecham Corporation, a pharmaceutical company, and others. He currently serves as an independent director on the boards of directors of several private companies, including Seventh Sense Biosystems, Boston Microfluidics and IQuity, Inc. He also served on the board of directors of Exact Sciences Corporation (Nasdaq: EXAS) from May 2000, through its initial public offering in February 2001, until August 2007. Mr. Hardison received his Bachelor of Arts degree, in political science, from the University of North Carolina, Chapel Hill. Our Board of Directors believes that Mr. Hardison’s broad private and public company background, his extensive executive and industry experience, his experience with newly emerging and well-established companies, and his extensive commercial and operational experience qualify him to serve on our Board of Directors.

John L. Lubniewski. Mr. Lubniewski has served as our Chief Executive Officer and as a member of our Board of Directors since April 2019 and previously served as our President and Chief Operating Officer since April 2018. Prior to this he served as our Senior Vice President and Chief Business Officer since April 2011. Mr. Lubniewski joined us from Ventana, a medical diagnostics company and member of the Roche Group and global headquarters of Roche Tissue Diagnostics (“RTD”) where he served in leadership roles for nine years both before and after the acquisition of Ventana by Roche in March 2008. From August 2010 to April 2011, Mr. Lubniewski was Senior Vice President and Lifecycle Leader, Advanced Staining Platforms at Ventana. From January 2008 to August 2010, Mr. Lubniewski served as Senior Vice President and Lifecycle Leader, Clinical Assays at RTD, with responsibility for three lifecycle teams, technical marketing and medical marketing and global accountability for all RTD clinical assay products. Prior to the Roche acquisition of Ventana, Mr. Lubniewski served at Ventana as Senior Vice President, Advanced Staining Business Unit, Vice President Worldwide Marketing and Translational Diagnostic Business Unit, and General Manager, Research Products. In these roles, Mr. Lubniewski was responsible for a variety of assay and platform development and commercialization efforts. Prior to Ventana, Mr. Lubniewski worked for over ten years at Coming, Inc., a manufacturing company, in a variety of divisional, sector and corporate sales and marketing roles. Mr. Lubniewski earned a B.S. in Chemical Engineering from Clarkson University.

Directors Continuing in Office Until the 2021 Annual Meeting

Ann F. Hanham Ph.D. Dr. Hanham has served on our Board of Directors since August 2016 and has served as our Lead Independent Director since April 2019. Prior to her appointment as Lead Independent Director, Dr. Hanham served as the chair of our Board of Directors from March 2017 to March 2019. Since March 2017, Dr. Hanham has provided independent management consulting as a sole proprietor. Previously, she was the founding and managing partner of BAR Capital LLC, an investment company, a position she has held from December 2013 to March 2017. From February 2000 to November 2013, Dr. Hanham was the Managing Director and General Partner of Burrill and Company, a life science investment company. Prior to that, Dr. Hanham held positions of increasing responsibility in product development, medical affairs, and clinical and regulatory affairs at various companies, including InterMune Inc., Otsuka America Pharmaceuticals, Inc. (“Otsuka”), Celtrix Pharmaceuticals, Inc. (“Celtrix”), and Becton Dickinson and Company (“BD”). InterMune, Inc., Otsuka and Celtrix are, or prior to respective acquisitions, were clinical-stage biopharmaceutical companies, and BD is a life sciences discovery and diagnostics company. Dr. Hanham also currently serves on the board of directors of SCYNEXIS (Nasdaq: SCYX). Dr. Hanham received her B.Sc. degree from the University of Toronto, Canada; her M.Sc. degree, in biology, from Simon Fraser University, Canada; and her Ph.D. degree, in biology, from the University of British Columbia, Canada. Our Board of Directors believes that Dr. Hanham’s extensive industry and executive experience, and her experience serving on the board of directors of other public companies qualifies her to serve on our Board of Directors.

Michelle R. Griffin. Ms. Griffin has served on our Board of Directors since August 2018. Ms. Griffin currently serves as a member of the board of directors and chair of the audit committee for Acer Therapeutics, Inc. (Nasdaq: ACER) and Adaptive Biotechnologies Corp (Nasdaq: ADPT). She has also served on the board of directors and as audit committee chair for PhaseRx, Inc. (Nasdaq:PZRX) from 2016 to 2018, OncoGenex Pharmaceuticals Inc. (Nasdaq: OGXI) from 2008 to 2011, and Sonus Pharmaceuticals, Inc. (Nasdaq: SNUS) from 2004 to 2008; as chair of the board of directors for Universal Cells, Inc. from 2017 until its acquisition by Astellas Pharma Inc. in 2018; as a member of the board of directors of Virginia Mason Health System and Virginia Mason Medical Center from 2014 to 2018; and as a member of the board of directors for Polynoma LLC from 2012 to 2014. Ms. Griffin served as executive vice president, operations, and chief financial officer at OncoGenex from 2011 to 2013; served as acting chief executive, senior vice president and chief operating officer at Trubion Pharmaceuticals, Inc. from 2009 until its acquisition in 2010 and as its chief financial officer from 2006 to 2009; and served as senior vice president and chief financial officer of Dendreon Corp. from 2005 to 2006. Ms. Griffin began her career in the biopharmaceuticals industry in 1994 at Corixa Corp. (Nasdaq: CRXA) and served as its chief financial officer from its IPO in 1997 until 2005 when Corixa was acquired by GlaxoSmithKline plc. She received a post-graduate certificate in accounting and an MBA from Seattle University, a B.S. in statistics and marketing from George Mason University and has passed the certified public accountant exam. Our Board of Directors believes that Ms. Griffin’s financial and accounting expertise and extensive executive experience qualifies her to serve on our Board of Directors.

Timothy (TJ) B. Johnson. Mr. Johnson has served as the Executive Chairman of our Board of Directors since March 2019 and as a member of our Board of Directors since January 2008. Mr. Johnson previously served as our Chief Executive Officer from January 2008 until March 2019. He also served as our President from January 2008 until April 2018. Mr. Johnson joined us from LVC Consulting, a consulting company, where he was a partner from April 2007 to January 2008. Prior to April 2007, Mr. Johnson spent five years in leadership roles at Ventana Medical Systems, Inc. (“Ventana”), a medical diagnostics company, prior to its acquisition by Roche Holdings, Inc. (“Roche”). At Ventana, Mr. Johnson held the positions of Senior Vice President, Global Business Services, Senior Vice President, Corporate Development and Operations, and Vice President/General Manager, Operations and Lean Systems. In these roles, Mr. Johnson’s responsibilities included product technical support, worldwide marketing, corporate development, strategic planning and manufacturing. Prior to working at Ventana, Mr. Johnson had a 12-year career at Hillenbrand Industries, Inc., a global diversified industrial company, where he held several leadership roles in the corporate offices and in the Hill-Rom Division, including Vice President, Global Marketing, Vice President/General Manager, Hill-Rom AirShields, Vice President, Operations, and Vice President, Continuous Improvement and Strategic Planning. Mr. Johnson spent part of his early career at PricewaterhouseCoopers LLP, a public accounting firm. Mr. Johnson previously served on the board of directors of Kalypto Medical, Inc. and was the Industry co-chair for the Biosciences Leadership Council of Southern Arizona. He earned a B.S. in Business from Indiana University. Our Board of Directors believes that Mr. Johnson’s extensive executive background in general management, strategic planning and managing operations of a diagnostic company and service as our Chief Executive Officer qualify him to serve on our Board of Directors.

Executive Officers

Set forth below is biographical information for our executive officers other than Mr. Lubniewski, whose biographical information is set forth above

Shaun D. McMeans. Mr. McMeans has served as our Senior Vice President and Chief Financial Officer since February 2018 and as our Vice President and Chief Financial Officer since February 2012. Prior to joining us, Mr. McMeans was Vice President – Finance of Securaplane Technologies, Inc., a product supply company and division of Meggitt PLC, an aerospace, defense and energy conglomerate, from May 2011 to February 2012. Mr. McMeans was a financial consultant from February 2008 to April 2011, working both in an individual capacity and as a partner for Tatum LLC, a consulting company. Prior to February 2008, Mr. McMeans was Chief Financial Officer for The Long Companies, a full service residential and commercial real estate division of Berkshire Hathaway, Inc. Mr. McMeans also worked for over five years at LXU Healthcare, Inc., a manufacturer and distributor of specialty surgical equipment, as Controller and then Chief Financial and Operating Officer. In his early career, Mr. McMeans worked in roles of increasing responsibility, including Director of Finance, for Burnham Holdings, Inc., formerly Burnham Corporation, a manufacturer and distributor of residential and commercial hydronic heating equipment. Mr. McMeans received his B.S. in Accounting from The Pennsylvania State University.

INFORMATION REGARDING THE BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

Independence of The Board of Directors

As required under the Nasdaq Stock Market (“Nasdaq”) listing standards, a majority of the members of a listed company’s board of directors must qualify as “independent,” as affirmatively determined by its board of directors. The Board consults with the Company’s counsel to ensure that the Board’s determinations are consistent with relevant securities and other laws and regulations regarding the definition of “independent,” including those set forth in pertinent listing standards of Nasdaq, as in effect from time to time.

Consistent with these considerations, after review of all relevant identified transactions or relationships between each director, or any of his or her family members, and the Company, its senior management and its independent auditors, the Board has affirmatively determined that all of our current directors other than Mr. Johnson and Mr. Lubniewski are, and all of our former directors who served during any portion of the last fiscal year were, independent directors within the meaning of the applicable Nasdaq listing standards. In making this determination, the Board found that none of these directors, other than Mr. Johnson and Mr. Lubniewski, had a material or other disqualifying relationship with the Company.

Board Leadership Structure

As a general policy, our Board of Directors believes that separation of the positions of chair and Chief Executive Officer reinforces the independence of the Board from management, creates an environment that encourages objective oversight of management's performance and enhances the effectiveness of the Board as a whole.

Effective March 31, 2019, Mr. Johnson was appointed by our Board of Directors to serve as our Executive Chairman, and Mr. Lubniewski was appointed by our Board of Directors to serve as our Chief Executive Officer, replacing Mr. Johnson in such capacity. As our Executive Chairman, Mr. Johnson advises our management, including our Chief Executive Officer, on various strategic matters. We believe that separation of the positions of Executive Chairman and Chief Executive Officer reinforces the independence of the Board of Directors in its oversight of our business and affairs. In addition, we have a separate chair for each committee of our Board of Directors. The chair of each committee is expected to report at least annually to our Board of Directors on the activities of their respective committee in fulfilling their responsibilities as detailed in their respective charters or specify any shortcomings should that be the case.

In addition, effective March 31, 2019, our Board of Directors designated Dr. Hanham to serve as our Lead Independent Director. As Lead Independent Director, Dr. Hanham presides over Board of Directors meetings, sets meeting agendas, ensures the duties, responsibilities and roles of members of our Board of Directors are clearly understood, ensures that our Board of Directors receives appropriate and timely information, material and reports from management regarding our business, provides input to the Board regarding candidates for nomination or appointment to the Board and Board committees, and performs such additional duties as set forth in our bylaws and as our Board of Directors may otherwise determine and delegate.

Role of the Board in Risk Oversight

One of the key functions of our Board of Directors is informed oversight of our risk management process. The Board does not have a standing risk management committee, but rather administers this oversight function directly through the Board of Directors as a whole, as well as through various standing Board committees that address risks inherent in their respective areas of oversight. The risk oversight process includes receiving regular reports from Board committees and members of senior management to enable our Board to understand our risk identification, risk management and risk mitigation strategies with respect to areas of potential material risk, including operations, finance, legal, regulatory, strategic and reputational risk. In particular, our Board of Directors is responsible for monitoring and assessing strategic risk exposure and our Audit Committee has the responsibility to consider and discuss our major financial risk exposures and the steps our management has taken to monitor and control these exposures, including guidelines and policies to govern the process by which risk assessment and management is undertaken. The Audit Committee also monitors compliance with legal and regulatory requirements. Oversight by the Audit Committee includes direct communication with our external auditors. Our Nominating and Governance Committee monitors the effectiveness of our corporate governance practices, including whether they are successful in preventing illegal or improper liability-creating conduct. Our Compensation Committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking.

Meetings of The Board of Directors

The Board of Directors met 16 times during the last fiscal year. Each Board member attended 75% or more of the aggregate number of meetings of the Board and of the committees on which he or she served, held during the portion of the last fiscal year for which he or she was a director or committee member.

Information Regarding Committees of the Board of Directors

The Board maintains an Audit Committee, a Compensation Committee and a Nominating and Governance Committee. The following table provides membership and meeting information for 2018 for each of the foregoing Board committees:

<u>Name</u>	<u>Audit</u>	<u>Compensation</u>	<u>Nominating and Governance</u>
John L. Lubniewski			
Timothy B. Johnson			
Harry A. George	X		
Michelle R. Griffin (1)	X*	X	
Ann F. Hanham, Ph.D.			X*
Donnie M. Hardison		X*	
James T. LaFrance (1)	X	X	X
Lee R. McCracken		X	X
Lewis J. Shuster (2)	X		
Total meetings in 2018	6	12	3

* Committee Chairperson

(1) Mr. LaFrance served on our Compensation Committee until May 22, 2019, at which time Ms. Griffin was appointed by the Board to replace him as a Compensation Committee member.

(2) Mr. Shuster's service on our Audit Committee ended concurrently with the expiration of his term of office at our 2018 Annual Shareholder's Meeting.

The Board of Directors has determined that each member of each committee meets the applicable Nasdaq rules and regulations regarding "independence" and each member is free of any relationship that would impair his or her individual exercise of independent judgment with regard to the Company.

Board Committees

Our Board of Directors has established an Audit Committee, a Compensation Committee and a Nominating and Governance Committee.

Audit Committee

The Audit Committee of the Board of Directors was established by the Board in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), to oversee the Company's corporate accounting and financial reporting processes and audits of its financial statements. For this purpose, the Audit Committee performs several functions, including, among other things:

- evaluating the performance, independence and qualifications of our independent auditors and determining whether to retain our existing independent auditors or engage new independent auditors;
 - reviewing and approving the engagement of our independent auditors to perform audit services and any permissible non-audit services;
 - monitoring the rotation of partners of our independent auditors on our engagement team as required by law;
 - prior to engagement of any independent auditor, and at least annually thereafter, reviewing relationships that may reasonably be thought to bear on their independence, and assessing and otherwise taking the appropriate action to oversee the independence of our independent auditor;
 - reviewing our annual and quarterly financial statements and reports, including the disclosures contained under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations," and discussing the statements and reports with our independent auditors and management;
 - reviewing with our independent auditors and management significant issues that arise regarding accounting principles and financial statement presentation and matters concerning the scope, adequacy and effectiveness of our financial controls;
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- reviewing with management and our auditors any earnings announcements and other public announcements regarding material developments;
- establishing procedures for the receipt, retention and treatment of complaints received by us regarding financial controls, accounting or auditing matters and other matters;
- preparing the report that the SEC requires in our annual proxy statement;
- reviewing and providing oversight of any related-person transactions in accordance with our related-person transaction policy and reviewing and monitoring compliance with legal and regulatory responsibilities, including our code of business conduct and ethics;
- reviewing our major financial risk exposures, including the guidelines and policies to govern the process by which risk assessment and risk management is implemented;
- reviewing on a periodic basis our investment policy; and
- reviewing and evaluating on an annual basis the performance of the Audit Committee, including compliance of the Audit Committee with its charter.

The Audit Committee is composed of three directors: Ms. Griffin, Mr. George and Mr. LaFrance. Ms. Griffin serves as the chair of the Audit Committee. The Board has adopted a written Audit Committee charter that is available to stockholders on the Company's website at www.htgmolecular.com.

The Board of Directors reviews the Nasdaq listing standards definition of independence for Audit Committee members on an annual basis and has determined that all members of the Company's Audit Committee are independent (as independence is currently defined in Rule 5605(c)(2)(A)(i) and (ii) of the Nasdaq listing standards).

The Board of Directors has also determined that Ms. Griffin qualifies as an "audit committee financial expert," as defined in applicable SEC rules. The Board made a qualitative assessment of Ms. Griffin's level of knowledge and experience based on a number of factors, including her formal education and experience in financial and executive roles.

Report of the Audit Committee of the Board of Directors*

The Audit Committee has reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2018 with management of the Company. The Audit Committee has discussed with the independent registered public accounting firm the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board ("PCAOB") as outlined in Auditing Standard 1301, Communications with Audit Committees, and the SEC. The Audit Committee has also received the written disclosures and the letter from the independent registered public accounting firm required by applicable requirements of the PCAOB regarding the independent accountants' communications with the Audit Committee concerning independence, and has discussed with the independent registered public accounting firm the accounting firm's independence. Based on the foregoing, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

Ms. Michelle R. Griffin (Chair)

Mr. Harry A. George

Mr. James T. LaFrance

* *The material in this report is not "soliciting material," is not deemed "filed" with the SEC and is not to be incorporated by reference in any filing of the Company under the Exchange Act or the Securities Act of 1933, as amended (the "Securities Act"), whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.*

Compensation Committee

The Compensation Committee is composed of three directors: Mr. Hardison, Mr. McCracken and Ms. Griffin. Mr. Hardison serves as the chair of the Compensation Committee. All members of the Compensation Committee are independent (as independence is currently defined in Rule 5605(d)(2) of the Nasdaq listing standards). The Board has adopted a written Compensation Committee charter that is available to stockholders on the Company's website at www.htgmolecular.com.

The functions of the Compensation Committee include, among other things:

- reviewing, modifying and approving (or if it deems appropriate, making recommendations to the full Board of Directors regarding) our overall compensation strategy and policies;
 - reviewing and recommending to our Board of Directors the compensation and other terms of employment of our executive officers;
 - reviewing and recommending to our Board of Directors the performance goals and objectives relevant to the compensation of our executive officers and assessing their performance against these goals and objectives;
 - reviewing and approving (or if it deems it appropriate, making recommendations to the full Board of Directors regarding) the equity incentive plans, compensation plans and similar programs advisable for us, as well as modifying, amending or terminating existing plans and programs;
 - evaluating risks associated with our compensation policies and practices and assessing whether risks arising from our compensation policies and practices for our employees are reasonably likely to have a material adverse effect on us;
 - reviewing and approving (or if it deems it appropriate, making recommendations to the full Board of Directors regarding) the type and amount of compensation to be paid or awarded to our non-employee board members;
 - establishing policies for allocating between long-term and currently paid out compensation, between cash and non-cash compensation and the factors used in deciding between the various forms of compensation;
 - establishing policies with respect to votes by our stockholders to approve executive compensation as required by Section 14A of the Exchange Act and determining our recommendations regarding the frequency of advisory votes on executive compensation;
 - reviewing and assessing the independence of compensation consultants, legal counsel and other advisors as required by Section 10C of the Exchange Act;
 - establishing elements of corporate performance for purposes of increasing or decreasing compensation;
 - administering our equity incentive plans;
 - establishing policies with respect to equity compensation arrangements;
 - reviewing regional and industry-wide compensation practices and trends to assess the competitiveness of our executive compensation programs and evaluating the effectiveness of our compensation policy and strategy in achieving expected benefits to us;
 - reviewing the adequacy of its charter on a periodic basis;
 - reviewing with management and approving our disclosures under the caption “Compensation Discussion and Analysis” in our periodic reports or proxy statements to be filed with the SEC, if applicable;
 - preparing the report that the SEC requires in our annual proxy statement, if applicable; and
 - reviewing and assessing on an annual basis the performance of the Compensation Committee.
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Compensation Committee Processes and Procedures

Typically, the Compensation Committee meets at least twice annually and with greater frequency if necessary. The agenda for each meeting is usually developed by the Chair of the Compensation Committee, in consultation with the Chief Executive Officer. The Compensation Committee meets regularly in executive session. However, from time to time, various members of management and other employees as well as outside advisors or consultants may be invited by the Compensation Committee to make presentations, to provide financial or other background information or advice or to otherwise participate in Compensation Committee meetings. The Chief Executive Officer may not participate in, or be present during, any deliberations or determinations of the Compensation Committee regarding his compensation or individual performance objectives. The charter of the Compensation Committee grants the Compensation Committee full access to all books, records, facilities and personnel of the Company. In addition, under the charter, the Compensation Committee has the authority to obtain, at the expense of the Company, advice and assistance from compensation consultants and internal and external legal, accounting or other advisors and other external resources that the Compensation Committee considers necessary or appropriate in the performance of its duties. The Compensation Committee has direct responsibility for the oversight of the work of any consultants or advisers engaged for the purpose of advising the Committee. In particular, the Compensation Committee has the sole authority to retain, in its sole discretion, compensation consultants to assist in its evaluation of executive and director compensation, including the authority to approve the consultant's reasonable fees and other retention terms. Under the charter, the Compensation Committee may select, or receive advice from, a compensation consultant, legal counsel or other adviser to the Compensation Committee, other than in-house legal counsel and certain other types of advisers, only after taking into consideration six factors, prescribed by the SEC and Nasdaq, that bear upon the adviser's independence; however, there is no requirement that any adviser be independent.

During the past fiscal year, after taking into consideration the six factors prescribed by the SEC and Nasdaq described above, our compensation committee retained Radford, an Aon Hewitt company and a provider of compensation market intelligence to the technology and life sciences industries, to provide a report summarizing relevant benchmark data relating to industry-appropriate peers and make recommendations regarding base salary, target total cash (base salary plus target cash incentives) and the amounts and terms of long-term equity incentive awards for our executives as well as to benchmark and make recommendations regarding the initial and annual cash retainer amounts for directors and chairpersons of our Board of Directors and the various committees and the amounts and terms of initial and annual long-term equity incentive awards for directors. No work performed by Radford during fiscal year 2018 raised a conflict of interest.

Nominating and Governance Committee

The Nominating and Governance Committee of the Board of Directors is responsible for identifying, reviewing and evaluating candidates to serve as directors of the Company (consistent with criteria approved by the Board), reviewing and evaluating incumbent directors, recommending candidates for election to the Board of Directors, making recommendations to the Board regarding the membership of the committees of the Board, assessing the performance of the Board and developing a set of corporate governance principles for the Company.

The Nominating and Governance Committee is composed of three directors: Dr. Hanham, Mr. LaFrance and Mr. McCracken. All members of the Nominating and Governance Committee are independent (as independence is currently defined in Rule 5605(a)(2) of the Nasdaq listing standards). The Board has adopted a written Nominating and Governance Committee charter that is available to stockholders on the Company's website and www.htgmolecular.com.

Candidates for director nominees are reviewed in the context of the current composition of our Board of Directors, our operating requirements and the long-term interests of our stockholders. The Nominating and Governance Committee considers such factors as possessing relevant expertise upon which to be able to offer advice and guidance to management, having sufficient time to devote to the affairs of the Company, demonstrated excellence in his or her field, having the ability to exercise sound business judgment and having the commitment to rigorously represent the long-term interests of the Company's stockholders. The Nominating and Governance Committee typically also considers diversity, age, skills and such other factors as it deems appropriate, given the current needs of the Board and the Company, to maintain a balance of knowledge, experience and capability. However, the Nominating and Governance Committee retains the right to modify the standards by which it reviews director nominees from time to time.

In the case of incumbent directors whose terms of office are set to expire, the Nominating and Governance Committee reviews these directors' overall service to the Company during their terms, including the number of meetings attended, level of participation, quality of performance and any other relationships and transactions that might impair the directors' independence. In the case of new director candidates, the Nominating and Governance Committee also determines whether the nominee is independent for Nasdaq purposes, which determination is based upon applicable Nasdaq listing standards, applicable SEC rules and regulations and the advice of counsel, if necessary. The Nominating and Governance Committee uses its and the other Board members' network of contacts to compile a list of potential candidates, but may also engage, if it deems appropriate, a professional search firm. The Nominating and Governance Committee conducts any appropriate and necessary inquiries into the backgrounds and qualifications of possible candidates after considering the function and needs of the Board. The Nominating and Governance Committee meets to discuss and consider the candidates' qualifications and selects candidates for recommendation to the Board by majority vote.

The Nominating and Governance Committee will consider director candidates recommended by stockholders. The Nominating and Governance Committee does not intend to alter the manner in which it evaluates candidates, based on whether or not the candidate was recommended by a stockholder. Stockholders who wish to recommend individuals for consideration by the Nominating and Governance Committee to become nominees for election to the Board may do so by delivering a written recommendation to the Nominating and Governance Committee at the following address: Attn: Corporate Secretary, 3430 E. Global Loop, Tucson, AZ 85706 at least 120 days prior to the anniversary date of the mailing of the Company's proxy statement for the last annual meeting of stockholders. Submissions must include the full name of the proposed nominee, a description of the proposed nominee's business experience for at least the previous five years, complete biographical information, a description of the proposed nominee's qualifications as a director and the number of shares beneficially owned by the nominating stockholder as of the date of submission. Any such submission must be accompanied by the written consent of the proposed nominee to be named as a nominee and to serve as a director if elected.

Stockholder Communications With The Board Of Directors

The Company's Board has adopted a formal process by which stockholders may communicate with the Board or any of its directors. Stockholders who wish to communicate with the Board may do so by sending written communications addressed to: Attn: Corporate Secretary, 3430 E. Global Loop, Tucson, Arizona, 85706. These communications will be reviewed by the Secretary, who will determine whether the communication is appropriate for presentation to the Board or the relevant director. The purpose of this screening is to allow the Board to avoid having to consider irrelevant or inappropriate communications (such as advertisements, solicitations and hostile communications).

Code of Ethics

The Company has adopted the Code of Business Conduct and Ethics that applies to all officers, directors and employees. The Code of Business Conduct and Ethics is available on the Company's website at www.htgmolecular.com. If the Company makes any substantive amendments to the Code of Business Conduct and Ethics or grants any waiver from a provision of the Code to any executive officer or director, the Company will promptly disclose the nature of the amendment or waiver on its website.

Proposal 2

Ratification of Selection of Independent Registered Public Accounting Firm

The Audit Committee of the Board of Directors has selected BDO USA, LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2019 and has further directed that management submit the selection of its independent registered public accounting firm for ratification by the stockholders at the annual meeting. BDO USA, LLP has audited the Company's financial statements since June 25, 2014. Representatives of BDO USA, LLP are expected to be present at the annual meeting. They will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

Neither the Company's Bylaws nor other governing documents or law require stockholder ratification of the selection of BDO USA, LLP as the Company's independent registered public accounting firm. However, the Audit Committee of the Board is submitting the selection of BDO USA, LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Audit Committee of the Board will reconsider whether or not to retain that firm. Even if the selection is ratified, the Audit Committee of the Board in its discretion may direct the appointment of different independent auditors at any time during the year if they determine that such a change would be in the best interests of the Company and its stockholders.

The affirmative vote of the holders of a majority of the shares present in person or represented by proxy and entitled to vote on the matter at the annual meeting will be required to ratify the selection of accounting firm.

Principal Accountant Fees and Services

The following table represents aggregate fees billed to the Company for the fiscal years ended December 31, 2018 and 2017 by BDO USA, LLP, the Company's principal accountant.

Fee Category	December 31,	
	2018	2017
Audit fees (1)	\$ 419,213	\$ 551,265
Audit-related fees	—	—
Tax fees	—	—
All other fees	—	—
Total fees	<u>\$ 419,213</u>	<u>\$ 551,265</u>

- (1) Audit fees consist of fees for professional services provided primarily in connection with the annual audit of our financial statements, quarterly reviews and services associated with SEC registration statements and other documents issued in connection with securities offerings including comfort letters and consents.

All fees described above were pre-approved by the Audit Committee.

Pre-Approval Policies and Procedures.

Pursuant to its charter, the Audit Committee must review and approve, in advance, the scope and plans for the audits and the audit fees and approve in advance (or, where permitted under the rules and regulations of the SEC, subsequently) all non-audit services to be performed by the independent auditor that are not otherwise prohibited by law and any associated fees. The Audit Committee may delegate to one or more members of the committee the authority to pre-approve audit and permissible non-audit services, as long as this pre-approval is presented to the full committee at scheduled meetings. All fees described above were pre-approved by the Audit Committee.

**The Board Of Directors Recommends
A Vote "For" Proposal 2.**

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth certain information regarding the ownership of the Company's common stock as of June 15, 2019 by: (i) each director; (ii) each of the Company's named executive officers; (iii) all executive officers and directors of the Company as a group; and (iv) all those known by the Company to be beneficial owners of more than five percent of its common stock.

The table is based upon information supplied by officers, directors and principal stockholders, Schedules 13G filed with the SEC and other sources believed to be reliable by the Company. Unless otherwise indicated in the footnotes to this table and subject to community property laws where applicable, the Company believes that each of the stockholders named in this table has sole voting and investment power with respect to the shares indicated as beneficially owned. Applicable percentages are based on 28,706,047 shares outstanding on June 15, 2019, adjusted as required by rules promulgated by the SEC. The number of shares of common stock used to calculate the percentage ownership of each listed beneficial owner includes the shares of common stock underlying options or convertible securities held by such beneficial owner that are exercisable or convertible within 60 days following June 15, 2019. Unless otherwise indicated, the address for each person or entity listed in the table is c/o HTG Molecular Diagnostics, Inc., 3430 E. Global Loop, Tucson, Arizona 85706.

<u>Name and address of beneficial owner</u>	<u>Common Stock Beneficially Owned</u>	
	<u>Shares</u>	<u>Percentage</u>
Greater than 5% stockholders		
FMR LLC (1) 245 Summer Street Boston, MA 02210	3,607,849	12.6%
Stonepine Capital Management (2) 919 NW Bond Street, Suite 204 Bend, OR 97703	2,675,889	9.3%
Select Medical Technology and Devices Portfolio 245 Summer Street Boston, MA 02210	2,392,976	8.3%
T. Rowe Price Associates, Inc. 100 E. Pratt Street Baltimore, MD 21202	1,999,100	7.0%
T. Rowe Price Health Sciences Fund, Inc. 100 E. Pratt Street Baltimore, MD 21202	1,629,330	5.7%
QIAGEN NV (3) Hulsterweg 82, 5912 PL Venlo, The Netherlands	1,620,447	5.5%
Directors and named executive officers		
Timothy B. Johnson (4)	482,221	1.7%
John L. Lubniewski (5)	292,749	*
Shaun D. McMeans (6)	216,621	*
Ann Hanham (7)	30,531	*
Harry A. George (8)	208,896	*
Donnie M. Hardison (9)	42,000	*
James T. LaFrance (10)	42,000	*
Lee McCracken (11)	34,500	*
Michelle R. Griffin (12)	6,666	*
All current executive officers and directors as a group (9 persons) (13)	1,356,184	4.6%

* Represents beneficial ownership of less than one percent.

- (1) Abigail P. Johnson is a director, the Vice Chairman, the Chief Executive Officer and President of FMR LLC. Members of the Johnson family, including Abigail P. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of the FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have entered into a shareholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of the Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Abigail P. Johnson has the sole power to vote or direct the voting of the shares owned directly by the various investment companies registered under the Investment Company Act advised by Fidelity Management & Research Company, a wholly owned subsidiary of FMR LLC, which power resides with the Fidelity Funds' Boards of Trustees. Fidelity Management & Research Company carries out the voting of the shares under written guidelines established by Fidelity Funds' Board of Trustees. This information is based on the Schedule 13G filed on February 13, 2019 with the SEC.
 - (2) Stonepine Capital Management, LLC, a California limited liability company is the general partner and investment advisor of investment funds, including Stonepine Capital, L.P., a Delaware limited partnership. Jon M. Plexico and Timothy P. Lynch are the control persons of the general partner. These filers have filed a Schedule 13G jointly, but not as members of a group, and each disclaims membership in a group. Each filer also disclaims beneficial ownership of the stock except to the extent of that person's pecuniary interest therein. In addition, the filing of the Schedule 13G on behalf of Stonepine Capital, L.P. should not be construed as an admission that it is, and it disclaims that it is, a beneficial owner, as defined in Rule 13d-3 under the Securities Act of 1934, of any of the stock covered by the 13G. This information is based on the Schedule 13G filed on February 13, 2019 with the SEC
 - (3) The 833,333 shares of common stock are held of record by QIAGEN North American Holdings, Inc., a wholly owned subsidiary of QIAGEN N.V.
 - (4) Includes 273,868 shares and 4,688 restricted stock units that Mr. Johnson has the right to acquire from us within 60 days of June 15, 2019 pursuant to the exercise of stock options and the vesting of restricted stock units.
 - (5) Includes 168,725 shares and 3,125 restricted stock units that Mr. Lubniewski has the right to acquire from us within 60 days of June 15, 2019 pursuant to the exercise of stock options and the vesting of restricted stock units.
 - (6) Includes 118,155 shares and 1,563 restricted stock units that Mr. McMeans has the right to acquire from us within 60 days of June 15, 2019 pursuant to the exercise of stock options and the vesting of restricted stock units.
 - (7) Includes 25,727 shares and 2,500 restricted stock units that Dr. Hanham has the right to acquire from us within 60 days of June 15, 2019 pursuant to the exercise of stock options and the vesting of restricted stock units.
 - (8) Consists of (i) 144,366 shares beneficially owned by Solstice Capital II LP and (ii) 28,000 shares and 2,500 restricted stock units that Mr. George has the right to acquire from us within 60 days of June 15, 2019 pursuant to the exercise of stock options and the vesting of restricted stock units. Mr. George is the managing member of Solstice Capital II LP and has joint voting and investment power over the shares held by Solstice Capital II LP.
 - (9) Includes 32,000 shares and 2,500 restricted stock units that Mr. Hardison has the right to acquire from us within 60 days of June 15, 2019 pursuant to the exercise of stock options and the vesting of restricted stock units.
 - (10) Includes 32,000 shares and 2,500 restricted stock units that Mr. LaFrance has the right to acquire from us within 60 days of June 15, 2019 pursuant to the exercise of stock options and the vesting of restricted stock units.
 - (11) Includes 23,000 shares and 2,500 restricted stock units that Mr. McCracken has the right to acquire from us within 60 days of June 15, 2019 pursuant to the exercise of stock options and the vesting of restricted stock units.
 - (12) Includes 6,666 shares that Ms. Griffin has the right to acquire from us within 60 days of June 15, 2019 pursuant to the exercise of stock options.
 - (13) The number of shares beneficially owned consists of (a) the shares described in Notes (4) through (12).
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Section 16(A) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires the Company’s directors and executive officers, and persons who own more than ten percent of a registered class of the Company’s equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and other equity securities of the Company. Officers, directors and greater than ten percent stockholders are required by SEC regulation to furnish the Company with copies of all Section 16(a) forms they file.

To the Company’s knowledge, based solely on a review of the copies of such reports furnished to the Company and written representations that no other reports were required, during the fiscal year ended December 31, 2018, all Section 16(a) filing requirements applicable to its officers, directors and greater than ten percent beneficial owners were complied with.

Executive Compensation

Summary Compensation Table

The following table shows for the fiscal years ended December 31, 2018 and 2017, compensation awarded to or paid to, or earned by, the Company’s named executive officers, which consist of the Company’s principal executive officer and the Company’s two other most highly compensated executive officers as of December 31, 2018, as follows:

- Timothy B. Johnson, Executive Chairman and former Chief Executive Officer;
- John L. Lubniewski, our President and Chief Executive Officer; and
- Shaun D. McMeans, our Senior Vice President and Chief Financial Officer.

Summary Compensation Table

Name and principal position	Year	Salary (\$)	Bonus (\$) (1)	Stock awards (\$ (2)	Option awards (\$ (3)	Non-equity incentive plan compensation (\$ (4)	All other compensation (\$ (5)	Total (\$)
Timothy B. Johnson <i>Executive Chairman and former Chief Executive Officer</i>	2018	426,250	200,000	708,343	510,000	166,183	741	2,011,517
	2017	409,500	167,500	117,600	36,480	267,800	38,408	1,037,288
John L. Lubniewski <i>President and Chief Executive Officer</i>	2018	327,230	100,000	413,775	340,000	116,007	741	1,297,753
	2017	306,792	105,739	58,800	38,400	160,346	20,492	690,569
Shaun D. McMeans <i>Senior Vice President and Chief Financial Officer</i>	2018	288,608	50,000	270,437	340,000	91,438	741	1,041,224
	2017	255,738	80,110	50,600	35,520	134,316	18,786	575,070

- (1) The dollar amounts in this column represent the following bonus payments: For Mr. Johnson, \$200,000 paid in 2018 in recognition of certain financing transactions in 2018, \$142,500 paid in 2017 in recognition of 2016 corporate performance and our achievement of the financing goal described in note (4) below and \$25,000 paid in 2017 in recognition of certain commercial and other financing transactions in 2016; for Mr. Lubniewski, \$100,000 paid in 2018 in recognition of certain financing transactions in 2018, \$85,739 paid in 2017 in recognition of 2016 corporate performance and our achievement of the financing goal described in note (4) below and \$20,000 paid in 2017 in recognition of certain commercial and other financing transactions in 2016; and for Mr. McMeans, \$50,000 paid in 2018 in recognition of certain financing transactions in 2018, \$70,110 paid in 2017 in recognition of 2016 corporate performance and our achievement of the financing goal described in note (4) below, and \$10,000 paid in 2017 in recognition of certain commercial and other financing transactions in 2016.
- (2) The dollar amounts in this column represent the aggregate grant date fair value of restricted stock unit (“RSU”) awards granted in 2018 and 2017, as applicable. For further discussion of valuation assumptions, see Note 13 “Stock-based Compensation” to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on March 7, 2019.

- (3) The dollar amounts in this column represent the aggregate grant date fair value of stock option awards granted in 2018 and 2017, as applicable. These amounts have been computed in accordance with FASB ASC Topic 718, using the Black-Scholes option pricing model. For a discussion of valuation assumptions, see Note 13 “Stock-based Compensation” to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on March 7, 2019.
- (4) Amounts shown represent annual performance-based bonuses earned for 2018 and 2017. In April 2017, our Board of Directors made the receipt of the annual performance-based bonuses for 2016 expressly conditioned upon the completion by us of a financing transaction or series of related financing transactions in which we raised aggregate gross proceeds in excess of \$12.0 million and, with respect to each named executive officer, his continued employment through completion of such financing transaction(s). Because payment of the performance-based bonuses for 2016 was made expressly conditioned on the achievement of the foregoing financing goal (which was achieved in May 2017), the non-equity incentive plan compensation reportable for 2016 for each named executive officer was \$0, and the performance-based bonuses paid with respect to 2016 are reflected as a bonus for 2017 as described in note (1) above.
- (5) Amount shown represents premiums for life, disability and accidental death and dismemberment insurance paid by us on behalf of the named executive officer and reimbursement to the named executive officers of the employee portion of taxes paid at the vesting of the RSU awards granted on August 26, 2016 which vested in February and August of 2017.

Annual Base Salary

The base salary of our named executive officers is generally set forth in each officer’s employment letter agreement with us and periodically reviewed and adjusted by our Board of Directors, based on the recommendation of the compensation committee of our Board of Directors and following analyses conducted by independent third-party consultants. At the beginning of 2018, the base salaries for our named executive officers were \$412,000, \$308,358 and \$258,300, for Mr. Johnson, Mr. Lubniewski and Mr. McMeans, respectively. In February 2018, the base salary for Mr. McMeans was increased to \$275,000. In connection with Mr. Lubniewski’s promotion to President and Chief Operating Officer in April 2018, Mr. Lubniewski’s base salary was increased to \$335,000. In August 2018, the base salaries for Mr. Johnson and Mr. McMeans were increased to \$450,000 and \$315,000, respectively.

Annual Performance-Based Bonus Opportunity

In addition to base salaries, our named executive officers are eligible to receive annual performance-based bonuses, which are designed to provide appropriate incentives to our executives to achieve defined annual corporate goals and to reward our executives for individual achievement towards these goals. As with annual base salary, the target annual performance-based bonus percentage for each of our named executive officers is determined by our Board of Directors based upon input from independent third-party consultants. The annual performance-based bonus each named executive officer is awarded is generally based on the extent to which we achieve the corporate goals that our Board of Directors establishes each year. At the end of the year, our Board of Directors reviews our performance against each corporate goal and approves the extent to which we achieved each of our corporate goals.

Our Board of Directors will generally consider each named executive officer’s individual contributions towards reaching our annual corporate goals but does not typically establish specific individual goals for our named executive officers. There is no minimum bonus percentage or amount established for the named executive officers and, thus, the bonus amounts vary from year to year based on corporate and individual performance. For 2018, Mr. Johnson was eligible to receive a target bonus of up to 50% of his base salary pursuant to the terms of his employment letter agreement described below through August 15, 2018 and 55% of his base salary thereafter. For 2018, Mr. Lubniewski was eligible to receive a target bonus of up to 40% of his base salary pursuant to the terms of his employment letter agreement described below through April 15, 2018 and 50% of his base salary thereafter. For 2018, Mr. McMeans was eligible to receive a target bonus of up to 40% of his base salary pursuant to the terms of his employment letter agreement described below through August 15, 2018 and 45% of his base salary thereafter.

The corporate goals established by our Board of Directors for 2018 were based upon commercial and financial goals. Specific goals included financial performance, progress with biopharmaceutical company collaborative development programs and market and commercialization metrics in Europe. The financial goals were weighted at 70% towards overall corporate goal achievement and the commercial goals were weighted at 30% towards overall corporate goal achievement. There was no minimum percentage of corporate goals that was required to be achieved to earn a bonus. No specific individual goals were established for any of our named executive officers for 2018.

In January 2019, our Board of Directors determined that the 2018 corporate goals had been achieved at an aggregate level of 75%. As a result, on January 24, 2019, our Board of Directors awarded the following performance-based bonuses to our named executive officers:

Executive Officer	Title	2018 Bonus Amount
Timothy B. Johnson	Executive Chairman and former Chief Executive Officer	\$ 166,183
John L. Lubniewski	President and Chief Executive Officer	\$ 116,007
Shaun D. McMeans	Senior Vice President and Chief Financial Officer	\$ 91,438

Equity-Based Incentive Awards

Our equity-based incentive awards are designed to align our interests with those of our employees and consultants, including our named executive officers. Our Board of Directors or any authorized committee thereof is responsible for approving equity grants, which include to date, stock options and RSUs. Vesting of the stock option and RSU awards is tied to continuous service with us and serves as an additional retention measure. Our executives generally are awarded an initial stock option grant upon commencement of employment. Additional equity awards may occur periodically to specifically incentivize executives to achieve certain corporate goals or to reward executives for exceptional performance. As of December 31, 2018, our named executive officers have been granted both stock option awards and RSUs.

Prior to the initial public offering, we granted all equity awards pursuant to the 2011 Plan and the 2001 Plan. All equity awards granted since our initial public offering have been granted pursuant to the 2014 Plan, the terms of which are described below under “—Equity Benefit Plans.” All stock options are granted with a per share exercise price equal to no less than the fair market value of a share of our common stock on the date of the grant of such award.

Generally, our stock option awards vest over a one to four-year period subject to the holder’s continuous service to us and may be granted with an early exercise feature. Such early exercise feature allows the holder to exercise and receive unvested shares of our stock, so that the holder may have a greater opportunity for gains on the shares to be taxed at long-term capital gains rates rather than ordinary income rates. From time to time as our Board of Directors considers appropriate, we may grant stock options or RSUs that vest upon achievement of performance goals.

Agreements with Named Executive Officers

We have entered into letter agreements with each of our named executive officers. The letter agreements generally provide for at-will employment and set forth the named executive officer’s initial base salary, eligibility for employee benefits, in some cases, and severance benefits upon a qualifying termination of employment. In addition, each of our named executive officers has executed a form of our standard confidential information and invention assignment agreement. The key terms of the letter agreements with our named executive officers are described below. Any potential payments and benefits due upon a qualifying termination of employment or a change in control are further described below under “—Potential Payments and Benefits upon Termination or Change in Control.”

Employment Letter Agreement with Mr. Johnson. We entered into an amended and restated letter agreement with Mr. Johnson in December 2014 that replaced his previous letter agreement and became effective in May 2015. The agreement sets forth certain agreed upon terms and conditions of employment. Mr. Johnson was initially entitled to receive an annual base salary of \$400,000 (most recently increased in August 2018 to \$450,000), an annual target performance bonus of up to 50% of his base salary (increased in August 2018 to 55% of base salary) as determined by our Board of Directors, and certain severance benefits, the terms of which are described below under “—Potential Payments and Benefits upon Termination or Change of Control.” Mr. Johnson’s base salary and target bonus percentage were subject to modification from time to time in the discretion of our Board of Directors or any authorized committee thereof.

Effective March 31, 2019, Mr. Johnson transitioned from the role of Chief Executive Officer to Executive Chairman. In connection with this transition, we entered into an amended and restated employment agreement with Mr. Johnson. Pursuant to the agreement, Mr. Johnson’s annual base salary was reduced to \$100,000 and he will no longer be eligible to receive an annual target bonus.

Employment Letter Agreement Mr. Lubniewski. We entered into an amended and restated letter agreement with Mr. Lubniewski in December 2014 that replaced his previous letter agreement and became effective in May 2015. The agreement sets forth certain agreed upon terms and conditions of employment. Mr. Lubniewski was initially entitled to receive an annual base salary of \$293,500 (most recently increased in April 2018 to \$335,000), an annual target performance bonus of up to 40% of his base salary (increased in April 2018 to 50% of base salary) as determined by our Board of Directors, and certain severance benefits, the terms of which are described below under “—Potential Payments and Benefits upon Termination or Change of Control.” Mr. Lubniewski’s base salary and target bonus percentage are subject to modification from time to time in the discretion of our Board of Directors or any authorized committee thereof.

Effective March 31, 2019, Mr. Lubniewski was appointed by our Board of Directors as our President and Chief Executive Officer. In connection with his appointment, we entered into an amended and restated employment agreement with Mr. Lubniewski. Pursuant to the agreement, Mr. Lubniewski’s salary was increased to \$385,000, and he became eligible to receive an annual target performance bonus of up to 55% of his base salary as determined by our Board of Directors following analysis conducted by independent third-party consultants.

Employment Letter Agreement with Mr. McMeans. We entered into an amended and restated letter agreement with Mr. McMeans in December 2014 that replaced his previous letter agreement and became effective in May 2015. The agreement sets forth certain agreed upon terms and conditions of employment. Mr. McMeans was initially entitled to an annual base salary of \$246,000 (most recently increased in August 2018 to \$315,000), an annual target performance bonus of up to 40% of his base salary (increased in August 2018 to 45% of base salary) as determined by our Board of Directors, and certain severance benefits, the terms of which are described below under “—Potential Payments and Benefits upon Termination or Change of Control.” Mr. McMeans’ base salary and target bonus percentage are subject to modification from time to time in the discretion of our Board of Directors or any authorized committee thereof.

Potential Payments and Benefits upon Termination or Change of Control

Under the terms of the amended and restated letter agreements of our named executive officers who are currently executive officers, upon the executive’s termination without “cause,” or resignation for “good reason,” each as defined below, such executive is eligible to receive continued base salary payments and COBRA premium payments for a specified period, which is 12 months for Mr. Lubniewski and nine months for Mr. McMeans. Additionally, upon the executive’s termination without “cause” or resignation for “good reason” in connection with a change of control, the executive is eligible to receive continued base salary payments and COBRA premium payments for 18 months, in the case of Mr. Lubniewski, and 12 months in the case of Mr. McMeans. Prior to the effective date of Mr. Johnson’s transition to Executive Chairman and the amendment and restatement of his employment agreement, he was eligible to receive continued base salary payments and COBRA premium payments for 18 months. Effective as of March 31, 2019, Mr. Johnson is not entitled to severance payments or benefits upon termination or change of control.

For purposes of the amended and restated letter agreements, “cause” generally means the occurrence of any of the following events, conditions or actions with respect to the executive: (1) conviction of any felony or crime involving fraud or dishonesty; (2) participation in any material fraud, material act of dishonesty or other material act of misconduct against us; (3) willful and habitual neglect of the executive’s duties after written notice and opportunity to cure; (4) material violation of any fiduciary duty or duty of loyalty owed to us; (5) breach of any material term of any material contract with us which has a material adverse effect on us; (6) knowing violation of any material company policy which has a material adverse effect on us; or (7) knowing violation of state or federal law in connection with the performance of the executive’s job which has a material adverse effect on us.

For purposes of each of the named executive officer’s amended and restated letter agreements, “good reason” generally means the following events, conditions or actions taken by us with respect to the executive without cause and without the executive’s express written consent: (1) a material reduction in base salary; (2) a material reduction in the executive’s authority, duties or responsibilities; (3) a material reduction in the authority, duties or responsibilities of the supervisor to whom the executive is required to report; or (4) a relocation of the executive’s principal place of employment to a place that increases the executive’s one-way commute by more than 50 miles.

Each of our named executive officers holds stock options and RSUs under our equity incentive plans that were granted subject to our form of stock option and RSU agreements. A description of the termination and change of control provisions in such equity incentive plans and stock options and RSUs granted thereunder is provided below under “— Equity Benefit Plans” and the specific vesting terms of each named executive officer’s stock options and RSUs are described below under “— Outstanding Equity Awards at Fiscal Year-End.”

Outstanding Equity Awards at Fiscal year-end

The following table presents information concerning equity awards held by our named executive officers as of December 31, 2018.

Name	Grant Date/Vesting Commencement Date	Option Awards					Stock Awards				
		Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$)	
Timothy B. Johnson	(1) 3/01/2009	4,655	—	—	4.30	3/01/2019	—	—	—	—	
	(1) 3/01/2010	6,983	—	—	4.30	3/01/2020	—	—	—	—	
	(1) 4/13/2010	675	—	—	4.30	4/13/2020	—	—	—	—	
	(1) 10/21/2010	581	—	—	4.30	10/21/2020	—	—	—	—	
	(1) 1/20/2011	675	—	—	4.30	1/20/2021	—	—	—	—	
	(1) 4/26/2011	29,797	—	—	2.15	4/26/2021	—	—	—	—	
	(1) 2/01/2013	18,328	—	—	2.15	2/01/2023	—	—	—	—	
	(1) 8/06/2013	9,311	—	—	2.15	8/06/2023	—	—	—	—	
	(1) 3/20/2014	43,267	—	—	2.15	3/20/2024	—	—	—	—	
	(2) 12/29/2014	9,311	—	—	12.89	12/29/2024	—	—	—	—	
	(2) 2/16/2016	85,314	19,686	—	2.36	2/15/2026	—	—	—	—	
	(1) 2/13/2017	19,000	—	—	1.92	2/13/2027	—	—	—	—	
	(2) 8/16/18	18,750	131,250	—	3.40	8/16/28	—	—	—	—	
(3) 8/16/18	—	—	—	—	—	65,624	223,122	—	—		
John L. Lubniewski	(1) 4/26/2011	13,036	—	—	2.15	4/26/2021	—	—	—	—	
	(1) 3/08/2012	2,793	—	—	2.15	3/08/2022	—	—	—	—	
	(1) 2/01/2013	3,503	—	—	2.15	2/01/2023	—	—	—	—	
	(1) 8/06/2013	13,036	—	—	2.15	8/06/2023	—	—	—	—	
	(1) 3/20/2014	29,818	—	—	2.15	3/20/2024	—	—	—	—	
	(2) 12/29/2014	3,724	—	—	12.89	12/29/2024	—	—	—	—	
	(2) 2/16/2016	28,439	6,561	—	2.36	2/15/2026	—	—	—	—	
	(1) 2/13/17	20,000	—	—	1.92	2/13/2027	—	—	—	—	
	(2) 8/16/18	12,500	87,500	—	3.40	8/16/28	—	—	—	—	
	(3) 8/16/18	—	—	—	—	—	43,750	148,750	—	—	
Shaun D. McMeans	(1) 3/08/2012	8,380	—	—	2.15	3/08/2022	—	—	—	—	
	(1) 2/01/2013	1,854	—	—	2.15	2/01/2023	—	—	—	—	
	(1) 8/06/2013	13,036	—	—	2.15	8/06/2023	—	—	—	—	
	(1) 3/20/2014	30,308	—	—	2.15	3/20/2024	—	—	—	—	
	(2) 12/29/2014	2,327	—	—	12.89	12/29/2024	—	—	—	—	
	(2) 2/16/2016	16,250	3,750	—	2.36	2/15/2026	—	—	—	—	
	(1) 2/13/2017	18,500	—	—	1.92	2/13/2027	—	—	—	—	
	(2) 8/16/18	12,500	87,500	—	3.40	8/16/28	—	—	—	—	
(3) 8/16/18	—	—	—	—	—	21,874	74,372	—	—		

(1) Fully vested.

(2) Stock options vest over four years as follows: 1/16 of the outstanding shares vest at the end of each calendar quarter over a period of approximately four years, subject to the individual's continued service with us through each vesting date.

- (3) RSUs vest over four years as follows: 1/16 of the award vests at the end of each calendar quarter over a period of approximately four years, subject to the individual's continued service with us through each vesting date.

Equity Benefit Plans

2014 Equity Incentive Plan

Our Board of Directors adopted the 2014 Plan in December 2014 and our stockholders approved the 2014 Plan in April 2015. The 2014 Plan became effective on May 5, 2015 in connection with our initial public offering.

Stock Awards. The 2014 Plan provides for the grant of incentive stock options ("ISOs"), nonstatutory stock options ("NSOs"), stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards, and other forms of equity compensation (collectively "stock awards"), all of which may be granted to employees, including officers, non-employee directors and consultants of us and our affiliates. Additionally, the 2014 Plan provides for the grant of performance cash awards. ISOs may be granted only to employees. All other awards may be granted to employees, including officers, and to non-employee directors and consultants.

Share Reserve. Initially, the aggregate number of shares of our common stock that may be issued pursuant to stock awards under the 2014 Plan was the sum of (1) 925,616 shares, plus (2) the number of shares (not to exceed 608,819 shares) (i) reserved for issuance under our 2011 Plan at the time the 2014 Plan became effective, and (ii) any shares subject to outstanding stock options or other stock awards that were granted under our 2011 Plan or 2001 Plan that, on or after the effective date of the 2014 Plan, are forfeited, terminate, expire or are otherwise not issued. In March 2019, our Board of Directors approved an amendment to the 2014 Plan pursuant to Nasdaq Rule 5635(c)(4) to reserve an additional 200,000 shares of common stock to be issued exclusively for grants of awards to individuals who were not previously employees or non-employee directors of the Company (or following a bona fide period of non-employment with the Company), as an inducement material to the individual's entry into employment with the Company within the meaning of Nasdaq Rule 5635(c)(4). Additionally, the number of shares of our common stock reserved for issuance under the 2014 Plan automatically increases on January 1 of each year, beginning on January 1, 2016 and continuing through and including January 1, 2024, by 4% of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our Board of Directors. The maximum number of shares of our common stock that may be issued upon the exercise of ISOs under the 2014 Plan is 1,800,000 shares.

No person may be granted stock awards covering more than 200,000 shares of our common stock under the 2014 Plan during any calendar year pursuant to stock options, stock appreciation rights and other stock awards whose value is determined by reference to an increase over an exercise or strike price of at least 100% of the fair market value on the date the stock award is granted. Additionally, no person may be granted in a calendar year a performance stock award covering more than 200,000 shares of our common stock or a performance cash award having a maximum value in excess of \$2,000,000. Such limitations were designed to help assure that any deductions to which we would otherwise be entitled with respect to such awards would not be subject to the \$1,000,000 limitation on the income tax deductibility of compensation paid to any covered executive officer imposed by Section 162(m) of the Code. The exemption from the deduction limit under Section 162(m) of the Code for "performance-based compensation" has been repealed, effective for taxable years beginning after December 31, 2017.

If a stock award granted under the 2014 Plan expires or otherwise terminates without being exercised in full, or is settled in cash, the shares of our common stock not acquired pursuant to the stock award again will become available for subsequent issuance under the 2014 Plan. In addition, the following types of shares of our common stock under the 2014 Plan may become available for the grant of new stock awards under the 2014 Plan: (1) shares that are forfeited to or repurchased by us prior to becoming fully vested; (2) shares withheld to satisfy income or employment withholding taxes; or (3) shares used to pay the exercise or purchase price of a stock award. Shares issued under the 2014 Plan may be previously unissued shares or reacquired shares bought by us on the open market. As of December 31, 2018, option awards covering an aggregate of 1,676,802 shares of our common stock and an additional 227,707 RSU awards had been granted under the 2014 Plan and were outstanding.

Administration. Our Board of Directors, or a duly authorized committee thereof, has the authority to administer the 2014 Plan. Our Board of Directors may also delegate to one or more of our officers the authority to (1) designate employees (other than other officers) to be recipients of certain stock awards, and (2) determine the number of shares of common stock to be subject to such stock awards. Subject to the terms of the 2014 Plan, our Board of Directors or the authorized committee, referred to herein as the plan administrator, determines recipients, dates of grant, the numbers and types of stock awards to be granted and the terms and conditions of the stock awards, including the period of their exercisability, vesting schedule and change of control provision applicable to a stock award, if any. Subject to the limitations set forth below, the plan administrator will also determine the exercise price, strike price or purchase price of awards granted and the types of consideration to be paid for the award.

The plan administrator has the authority to modify outstanding awards under the 2014 Plan. Subject to the terms of the 2014 Plan, the plan administrator has the authority to reduce the exercise, purchase or strike price of any outstanding stock award, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Stock Options. ISOs and NSOs are granted pursuant to stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2014 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Stock options granted under the 2014 Plan vest at the rate specified by the plan administrator.

The plan administrator determines the term of stock options granted under the 2014 Plan, up to a maximum of ten years. Unless the terms of an optionholder's stock option agreement provide otherwise, if an optionholder's service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause, the optionholder may generally exercise any vested options for a period of three months following the cessation of service. The option term may be extended in the event that exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading policy. If an optionholder's service relationship with us or any of our affiliates ceases due to disability or death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested stock options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock options generally terminate immediately upon the termination of the individual for cause. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft or money order, (2) a broker-assisted cashless exercise, (3) the tender of shares of our common stock previously owned by the optionholder, (4) a net exercise of the option if it is an NSO, and (5) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, stock options generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. An optionholder may designate a beneficiary, however, who may exercise the option following the optionholder's death.

Tax Limitations on Incentive Stock Options. The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an optionholder during any calendar year under all of our stock plans may not exceed \$100,000. Stock options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and (2) the term of the ISO does not exceed five years from the date of grant.

Restricted Stock Awards. Restricted stock awards may be granted pursuant to restricted stock award agreements adopted by the plan administrator. Restricted stock awards may be granted in consideration for (1) cash, check, bank draft or money order, (2) services rendered to us or our affiliates, or (3) any other form of legal consideration. Common stock acquired under a restricted stock award may, but need not, be subject to a share repurchase option in our favor in accordance with a vesting schedule to be determined by the plan administrator. A restricted stock award may be transferred only upon such terms and conditions as set by the plan administrator. Except as otherwise provided in the applicable award agreement, restricted stock awards that have not vested may be forfeited or repurchased by us upon the participant's cessation of continuous service for any reason.

Restricted Stock Unit Awards. Restricted stock unit awards are granted pursuant to restricted stock unit award agreements adopted by the plan administrator. RSUs may be granted in consideration for any form of legal consideration. An RSU award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. RSUs typically vest and underlying shares of common stock are delivered as outlined in the applicable RSU agreements following the grantee's satisfaction of minimum statutory employee tax withholding requirements, where applicable. Employee RSU agreements generally provide that vesting is accelerated only in certain circumstances, that delivery of the underlying shares of common stock is conditioned on the grantee's satisfying certain vesting conditions outlined in the award, and that the grantee's employment continue with the Company through the vesting date. Additionally, dividend equivalents may be credited in respect of shares covered by an RSU award. Except as otherwise provided in the applicable award agreement, RSUs that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

Stock Appreciation Rights. Stock appreciation rights are granted pursuant to stock appreciation grant agreements adopted by the plan administrator. The plan administrator determines the strike price for a stock appreciation right, which generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Upon the exercise of a stock appreciation right, we will pay the participant an amount equal to the product of (1) the excess of the per share fair market value of our common stock on the date of exercise over the strike price, multiplied by (2) the number of shares of common stock with respect to which the stock appreciation right is exercised. A stock appreciation right granted under the 2014 Plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator.

The plan administrator determines the term of stock appreciation rights granted under the 2014 Plan, up to a maximum of ten years. Unless the terms of a participant's stock appreciation right agreement provide otherwise, if a participant's service relationship with us or any of our affiliates ceases for any reason other than cause, disability or death, the participant may generally exercise any vested stock appreciation right for a period of three months following the cessation of service. The stock appreciation right term may be further extended in the event that exercise of the stock appreciation right following such a termination of service is prohibited by applicable securities laws. If a participant's service relationship with us, or any of our affiliates, ceases due to disability or death, or a participant dies within a certain period following cessation of service, the participant or a beneficiary may generally exercise any vested stock appreciation right for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock appreciation rights generally terminate immediately upon the occurrence of the event giving rise to the termination of the individual for cause. In no event may a stock appreciation right be exercised beyond the expiration of its term.

Performance Awards. The 2014 Plan permits the grant of performance-based stock and cash awards that, prior to the repeal of the exemption from the deduction limit under Section 162(m) of the Code for "performance-based compensation," could qualify as performance-based compensation that is not subject to the \$1,000,000 limitation on the income tax deductibility of compensation paid to a covered executive officer imposed by Section 162(m) of the Code.

The performance goals that may be selected include one or more of the following: (1) earnings (including earnings per share and net earnings); (2) earnings before interest, taxes and depreciation; (3) earnings before interest, taxes, depreciation and amortization; (4) earnings before interest, taxes, depreciation, amortization and legal settlements; (5) earnings before interest, taxes, depreciation, amortization, legal settlements and other income (expense); (6) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense) and stock-based compensation; (7) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense), stock-based compensation and changes in deferred revenue; (8) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense), stock-based compensation, other non-cash expenses and changes in deferred revenue; (9) total stockholder return; (10) return on equity or average stockholder's equity; (11) return on assets, investment, or capital employed; (12) stock price; (13) margin (including gross margin); (14) income (before or after taxes); (15) operating income; (16) operating income after taxes; (17) pre-tax profit; (18) operating cash flow; (19) sales or revenue targets; (20) increases in revenue or product revenue; (21) expenses and cost reduction goals; (22) improvement in or attainment of working capital levels; (23) economic value added (or an equivalent metric); (24) market share; (25) cash flow; (26) cash flow per share; (27) cash balance; (28) cash burn; (29) cash collections; (30) share price performance; (31) debt reduction; (32) implementation or completion of projects or processes (including, without limitation, clinical study initiation, clinical study enrollment and dates, clinical study results, regulatory filing submissions, regulatory filing acceptances, regulatory or advisory committee interactions, regulatory approvals, and product supply); (33) stockholders' equity; (34) capital expenditures; (35) debt levels; (36) operating profit or net operating profit; (37) workforce diversity; (38) growth of net income or operating income; (39) billings; (40) bookings; (41) employee retention; (42) initiation of studies by specific dates; (43) budget management; (44) submission to, or approval by, a regulatory body (including, but not limited to the FDA) of an applicable filing or a product; (45) regulatory milestones; (46) progress of internal research or development programs; (47) acquisition of new customers; (48) customer retention and/or repeat order rate; (49) improvements in sample and test processing times; (50) progress of partnered programs; (51) partner satisfaction; (52) timely completion of clinical studies; (53) submission of 510(k)s or pre-market approvals and other regulatory achievements; (54) milestones related to samples received and/or tests or panels run; (55) expansion of sales in additional geographies or markets; (56) research progress, including the development of programs; (57) strategic partnerships or transactions (including in-licensing and out-licensing of intellectual property); and (58) to the extent that an award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by our Board of Directors.

The performance goals may be based on a company-wide basis, with respect to one or more business units, divisions, affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise (i) in the award agreement at the time the award is granted or (ii) in such other document setting forth the performance goals at the time the goals are established, we will appropriately make adjustments in the method of calculating the attainment of performance goals as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of any "extraordinary items" as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by us achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock-based compensation and the award of bonuses under our bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles; (12) to exclude the effect of any other unusual, non-recurring gain or loss or other extraordinary item; and (13) to exclude the effects of the timing of acceptance for review and/or approval of submissions to the FDA or any other regulatory body. In addition, we retain the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of the performance goals and to define the manner of calculating the performance criteria we select to use for such performance period. The performance goals may differ from participant to participant and from award to award.

Other Stock Awards. The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan administrator will set the number of shares under the stock award and all other terms and conditions of such awards.

Changes to Capital Structure. In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to (1) the class and maximum number of shares reserved for issuance under the 2014 Plan, (2) the class and maximum number of shares by which the share reserve may increase automatically each year, (3) the class and maximum number of shares that may be issued upon the exercise of ISOs, (4) the class and maximum number of shares subject to stock awards that can be granted in a calendar year (as established under the 2014 Plan pursuant to Section 162(m) of the Code) and (5) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

Corporate Transactions. In the event of certain specified significant corporate transactions, the plan administrator has the discretion to take any of the following actions with respect to stock awards:

- arrange for the assumption, continuation or substitution of a stock award by a surviving or acquiring entity or parent company;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring entity or parent company;
- accelerate the vesting of the stock award and provide for its termination at or prior to the effective time of the corporate transaction;
- arrange for the lapse of any reacquisition or repurchase right held by us;
- cancel or arrange for the cancellation of the stock award in exchange for such cash consideration, if any, as our Board of Directors may deem appropriate; or
- make a payment equal to the excess of (1) the value of the property the participant would have received upon exercise of the stock award over (2) the exercise price otherwise payable in connection with the stock award.

Our plan administrator is not obligated to treat all stock awards, even those that are of the same type, in the same manner.

Under the 2014 Plan, a corporate transaction is generally the consummation of (1) a sale or other disposition of all or substantially all of our assets, (2) a sale or other disposition of at least 90% of our outstanding securities, (3) a merger, consolidation or similar transaction following which we are not the surviving corporation, or (4) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

Change of Control. The plan administrator may provide, in an individual award agreement or in any other written agreement between a participant and us that the stock award will be subject to additional acceleration of vesting and exercisability in the event of a change of control. For example, certain of our employees may receive an award agreement that provides for vesting acceleration upon the individual's termination without cause or resignation for good reason (including a material reduction in the individual's base salary, duties, responsibilities or authority, or a material relocation of the individual's principal place of employment with us) in connection with a change of control. Under the 2014 Plan, a change of control is generally (1) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation or similar transaction; (2) a consummated merger, consolidation or similar transaction immediately after which our stockholders cease to own more than 50% of the combined voting power of the surviving entity; (3) a consummated sale, lease or exclusive license or other disposition of all or substantially of our assets; or (4) our stockholders approve a plan of our complete dissolution or liquidation or our complete dissolution or liquidation otherwise occurs.

All stock options granted under the 2014 Plan to our named executive officers provide that vesting and exercisability of such stock options will be accelerated in full following a change in control if, immediately prior to or within 12 months after the effective time of such change in control, the optionholder's continuous service terminates due to an involuntary termination without cause or due to a voluntary termination with good reason. Several terms are specifically defined in the 2014 Plan for purposes of this "double-trigger" provision; in particular, (i) "good reason" is generally defined as (1) a material reduction in the optionholder's annual base salary, except pursuant to a salary reduction program affecting substantially all of our employees that does not disproportionately affect the optionholder; (2) a material reduction in the optionholder's authority, duties or responsibilities; (3) any failure by us to continue any material benefit plan or program in which the optionholder was participating immediately prior to the change in control, or any action by us that would adversely affect the optionholder's participation in or reduce his/her benefits under such benefit plan or program, or deprive him/her of any fringe benefit enjoyed immediately prior to the change in control, unless, taken as a whole, we provide for optionholder participation in comparable benefit plans or programs; (4) a relocation of the optionholder's principal place of employment more than 50 miles; or (5) a material breach by us of any provision of the 2014 Plan or an option agreement under the 2014 Plan or any other material agreement between the optionholder and us concerning the terms and conditions of employment or service with us; and (ii) "cause" is generally defined as the occurrence of any of the following events: (A) the optionholder's commission of any felony or any crime involving fraud, dishonesty or moral turpitude under the laws of the United States or any state thereof; (B) the optionholder's attempted commission of, or participation in, a fraud or act of dishonesty against us; (C) the optionholder's intentional, material violation of any contract or agreement between the optionholder and us or of any statutory duty owed to us; (D) the optionholder's unauthorized use or disclosure of our confidential information or trade secrets; or (E) the optionholder's gross misconduct.

Amendment and Termination. Our Board of Directors has the authority to amend, suspend, or terminate the 2014 Plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. No ISOs may be granted after the tenth anniversary of the date our Board of Directors adopted the 2014 Plan.

2011 Equity Incentive Plan

General. Our Board of Directors and our stockholders approved our 2011 Plan in March 2011. The 2011 Plan was subsequently amended by our Board of Directors and our stockholders, most recently in February 2014. The 2011 Plan is the successor to and continuation of our 2001 Plan. As of December 31, 2018, option awards under the 2011 Plan covering an aggregate of 349,432 shares of our common stock were outstanding. No additional awards will be granted under the 2011 Plan and all outstanding awards granted under the 2011 Plan that are repurchased, forfeited, expire or are cancelled will become available for grant under the 2014 Plan in accordance with its terms. Our Board of Directors, or a duly authorized committee thereof, has the authority to administer the 2011 Plan. Our Board of Directors may also delegate certain authority to one or more of our officers. The plan administrator has the authority to modify outstanding awards under our 2011 Plan, including the authority to reduce the exercise, purchase or strike price of any outstanding stock award, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Stock Options. ISOs and NSOs are granted pursuant to stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2011 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Stock options granted under the 2011 Plan vest at the rate specified by the plan administrator.

The plan administrator determines the term of stock options granted under the 2011 Plan, up to a maximum of 10 years. Unless the terms of an optionholder's stock option agreement provide otherwise, if an optionholder's service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause, the optionholder may generally exercise any vested stock options for a period of three months following the cessation of service. The stock option term may be extended in the event that exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading policy. If an optionholder's service relationship with us or any of our affiliates ceases due to disability or death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested stock options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock options generally terminate immediately upon the termination of the individual for cause. In no event may an option be exercised beyond the expiration of its term.

Corporate Transactions. Unless otherwise provided in a stock award agreement or other written agreement between us and a participant, in the event of certain specified significant corporate transactions, the plan administrator has the discretion to take any of the following actions with respect to stock awards:

- arrange for the assumption, continuation or substitution of a stock award by a surviving or acquiring entity or parent company;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring entity or parent company;
- accelerate the vesting, in whole or in part, of the stock award and provide for its termination prior to the effective time of the corporate transaction;
- arrange for the lapse of any reacquisition or repurchase right held by us;
- cancel or arrange for the cancellation of the stock award in exchange for such cash consideration, if any, as our Board of Directors may deem appropriate; or
- make a payment equal to the excess of (a) the value of the property the participant would have received upon exercise of the stock award over (b) the exercise price otherwise payable in connection with the stock award.

Our plan administrator is not obligated to treat all stock awards, even those that are of the same type, in the same manner.

Under the 2011 Plan, a corporate transaction is generally defined as the consummation of (1) a sale or other disposition of all or substantially all of our assets, (2) a sale or other disposition of at least 90% of our outstanding securities, (3) a merger, consolidation or similar transaction following which we are not the surviving corporation, or (4) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

Change of Control. The plan administrator may provide, in an individual award agreement or in any other written agreement between a participant and us that the stock award will be subject to additional acceleration of vesting and exercisability in the event of a change of control. Under the 2011 Plan, a change of control is generally defined as (1) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation or similar transaction, (2) a consummated merger, consolidation or similar transaction immediately after which our stockholders cease to own more than 50% of the combined voting power of the surviving entity, (3) approval by the stockholders or our Board of Directors of a plan of complete dissolution or liquidation of us or our complete dissolution or liquidation occurs or (4) a consummated sale, lease or exclusive license or other disposition of all or substantially of our assets.

Certain stock options granted under the 2011 Plan, including the stock options held by our named executive officers, provide that if immediately prior to a change of control the participant's service with the Company has not terminated, the option will accelerate vesting with respect to 25% of the then-unvested portion of the option; if the option continues, the remaining 75% of the unvested option will continue to vest on the option's original schedule prior to the change of control and will accelerate vesting in full in the event that the participant's continuous service is terminated without cause or by the participant for good reason within the 12 months following the change of control. "Good reason" for purposes of this "double-trigger" provision is generally defined as (1) an assignment of duties or responsibilities to the participant that results in a material diminution of the participant's function; (2) a material reduction in the participant's annual base salary; (3) failure to continue the participant's benefit plans or programs, any action that would adversely affect the participant's participation in any benefit plan, reduce the participant's benefits under any benefit plan or deprive the participant of any fringe benefit; or (4) a relocation of the participant's business office more than 50 miles.

2001 Stock Option Plan

Our Board of Directors and our stockholders approved our 2001 Plan, which became effective in February 2001. The 2001 Plan terminated and no further awards were granted under the 2001 Plan upon the effective date of the 2011 Plan. As of December 31, 2018, there were outstanding stock options under our 2001 Plan covering a total of 21,003 shares of our common stock.

2014 Employee Stock Purchase Plan

General. Our Board of Directors adopted the ESPP in December 2014 and our stockholders approved the ESPP in April 2015. The ESPP became effective on May 5, 2015 in connection with our initial public offering. The purpose of the ESPP is to retain the services of new employees and secure the services of new and existing employees while providing incentives for such individuals to exert maximum efforts toward our success and that of our affiliates. The ESPP is intended to qualify as an “employee stock purchase plan” within the meaning of Section 423 of the Code. As of the date hereof, no shares of our common stock have been purchased under the ESPP. Our Board of Directors has delegated its authority to administer the ESPP to our Compensation Committee.

The ESPP initially authorized the issuance of 110,820 shares of our common stock pursuant to purchase rights granted to our employees or to employees of any of our designated affiliates. The number of shares of our common stock reserved for issuance automatically increases on January 1 of each calendar year, from January 1, 2016 through January 1, 2024 by the least of (1) 1% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, (2) 195,000 shares, or (3) a number determined by our Board of Directors that is less than (1) and (2).

Offerings and Purchases. The ESPP is implemented through a series of offerings of purchase rights to eligible employees. Under the ESPP, we may specify offerings with durations of not more than 27 months, and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for employees participating in the offering. Generally, all regular employees, including executive officers, subject to certain restrictions, employed by us or by any of our designated affiliates, may participate in the ESPP and may contribute, normally through payroll deductions, up to 15% of their earnings for the purchase of our common stock under the ESPP. Unless otherwise determined by our Board of Directors, common stock will be purchased for accounts of employees participating in the ESPP at a price per share equal to the lower of (1) 85% of the fair market value of a share of our common stock on the first date of an offering or (2) 85% of the fair market value of a share of our common stock on the date of purchase.

Changes to Capital Structure. In the event that there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or similar transaction, the Board of Directors will make appropriate adjustments to (1) the number of shares reserved under the ESPP, (2) the maximum number of shares by which the share reserve may increase automatically each year and (3) the number of shares and purchase price of all outstanding purchase rights.

Corporate Transactions. In the event of certain significant corporate transactions, including the consummation of: (1) a sale of all our assets, (2) the sale or disposition of 90% of our outstanding securities, (3) a merger or consolidation where we do not survive the transaction and (4) a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction, any then-outstanding rights to purchase our stock under the ESPP may be assumed, continued or substituted for by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue or substitute for such purchase rights, then the participants’ accumulated payroll contributions will be used to purchase shares of our common stock within ten business days prior to such corporate transaction, and such purchase rights will terminate immediately.

Plan Amendments, Termination. Our Board of Directors has the authority to amend or terminate our ESPP, provided that except in certain circumstances any such amendment or termination may not materially impair any outstanding purchase rights without the holder’s consent. We will obtain stockholder approval of any amendment to our ESPP as required by applicable law or listing requirements.

401(k) Plan

We maintain a tax-qualified retirement plan that provides eligible employees with an opportunity to save for retirement on a tax advantaged basis. All participants’ interests in their deferrals are 100% vested when contributed. In 2018, we made no matching contributions into the 401(k) plan. Pre-tax contributions are allocated to each participant’s individual account and are then invested in selected investment alternatives according to the participants’ directions. The 401(k) plan is intended to qualify under Sections 401(a) and 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) plan and earnings on those contributions are not taxable to the employees until distributed from the 401(k) plan, and all contributions are deductible by us when made.

Director Compensation

The following table shows for the fiscal year ended December 31, 2018 certain information with respect to the compensation of all non-employee directors of the Company:

Director Compensation for Fiscal 2018

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$) (1)	Option Awards (\$) (2)	Total (\$)
Ann F. Hanham	72,500	8,275	33,100	113,875
Harry A. George	42,500	8,275	33,100	83,875
Donnie M. Hardison	45,000	8,275	33,100	86,375
James T. LaFrance	51,250	8,275	33,100	92,625
Lee R. McGCracken	43,750	8,275	33,100	85,125
Lewis J. Shuster (3)	31,250	—	—	31,250
Michelle R. Griffin (4)	18,750	—	66,200	84,950

- (1) As of December 31, 2018, the aggregate number of unvested stock awards (other than options) held by our non-employee directors were: 2,500 for each of Dr. Hanham, Mr. George, Mr. Hardison, Mr. LaFrance and Mr. McGCracken; Ms. Griffin did not hold any such awards. The dollar amounts in this column represent the aggregate grant date fair value of RSU awards granted in 2018. For further discussion of valuation assumptions, see Note 13 “Stock-based Compensation” to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on March 7, 2019.
- (2) As of December 31, 2018, the aggregate number of outstanding options to purchase our common stock held by our non-employee directors were: Dr. Hanham: 26,000, Mr. George: 28,000; Mr. Hardison: 32,000; Mr. LaFrance: 32,000; Mr. McGCracken: 32,000 and Ms. Griffin: 20,000. The dollar amounts in this column represent the aggregate grant date fair value of stock option awards granted in 2018. These amounts have been computed in accordance with FASB ASC Topic 718, using the Black-Scholes option pricing model. For further discussion of valuation assumptions, see Note 13 “Stock-based Compensation” to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on March 7, 2019.
- (3) Mr. Shuster’s service on our Board of Directors ended in August 2018.
- (4) Ms. Griffin joined our Board of Directors in August 2018.

We have reimbursed and will continue to reimburse all of our non-employee directors for their travel, lodging and other reasonable expenses incurred in attending meetings of our Board of Directors and committees of our Board of Directors, and will pay for the travel, lodging and other reasonable expenses incurred by our employee directors to attend meetings of our Board of Directors and, as applicable, committees of our Board of Directors.

Pursuant to our non-employee director compensation policy, non-employee director compensation for service on our Board of Directors was as follows as of January 1, 2018:

- an annual cash retainer of \$35,000;
- an additional annual cash retainer of \$30,000 for service as chair of our Board of Directors;
- an additional annual cash retainer of \$15,000, \$10,000 and \$7,500 for service as the chair of our Audit Committee, Compensation Committee and Nominating and Governance Committee, respectively;
- an additional annual cash retainer of \$7,500, \$5,000 and \$3,750 for service as member of our Audit Committee, Compensation Committee and Nominating and Governance Committee, respectively;
- an automatic annual option grant to purchase 6,000 shares of our common stock for each non-employee director serving on the Board of Directors on the date of each annual stockholder meeting, in each case vesting monthly in equal installments over a one-year period such that the stock option is fully vested on the first anniversary of the date of grant; and
- upon first joining our Board of Directors an automatic initial option grant to purchase 10,000 shares of our common stock on the date of grant. One-third of the shares will vest twelve months after the date of grant and the remaining shares will vest monthly in equal installments over a two-year period thereafter such that the stock option is fully vested on the third anniversary of the date of grant. A director who, in the one year prior to his or her initial election to serve on the Board of Directors as a non-employee director, served as an employee of the company will not be eligible for an initial grant.

In August 2018, the non-employee director compensation policy was amended and restated, as a result of an analysis conducted by third-party independent consultants, such that non-employee director compensation for service on our Board of Directors is now as follows:

- an annual cash retainer of \$35,000;
- an additional annual cash retainer of \$30,000 for service as chair of our Board of Directors;
- an additional annual cash retainer of \$15,000, \$10,000 and \$7,500 for service as the chair of our Audit Committee, Compensation Committee and Nominating and Governance Committee, respectively;
- an additional annual cash retainer of \$7,500, \$5,000 and \$3,750 for service as member of our Audit Committee, Compensation Committee and Nominating and Governance Committee, respectively;
- an automatic annual option grant to purchase 10,000 shares of our common stock and an automatic RSU award for 2,500 shares of our common stock for each non-employee director who is serving on the Board of Directors on the date of each annual stockholder meeting and who has served as a member of our Board of Directors for a minimum of six months, in each case vesting on the earliest to occur of (i) the date that is 12 months following the grant date and (ii) the following year's annual stockholder meeting; and
- upon first joining our Board of Directors an automatic initial option grant to purchase 20,000 shares of our common stock on the date of grant. One-third of the shares will vest twelve months after the date of grant and the remaining shares will vest monthly in equal installments over a two-year period thereafter such that the stock option is fully vested on the third anniversary of the date of grant. A director who, in the one year prior to his or her initial election to serve on the Board of Directors as a non-employee director, served as an employee of the company will not be eligible for an initial grant.

Each of the option grants described above will vest and become exercisable subject to the director's continuous service with us through each applicable vesting date, provided that each option will vest in full upon a change of control, as defined under the 2014 Plan. The stock options will be granted under the 2014 Plan, the terms of which are described in more detail above under "– Equity Benefit Plans – 2014 Equity Incentive Plan."

Transactions With Related Persons

Related-Person Transactions policy and Procedures

We have adopted a written related-person transactions policy that sets forth our policies and procedures regarding the identification, review, consideration and oversight of “related-person transactions.” For purposes of our policy only, a “related-person transaction” is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we and any “related person” are participants involving an amount that exceeds the lesser of \$120,000 or one percent of the average of the Company’s total assets at year-end for the last two completed fiscal years.

Transactions involving compensation for services provided to us as an employee, consultant or director are not considered related-person transactions under this policy. A “related person” is any executive officer, director or a holder of more than five percent of our common stock, including any of their immediate family members and any entity owned or controlled by such persons.

Under the policy, where a transaction has been identified as a related-person transaction, management must present information regarding the proposed related-person transaction to our Audit Committee (or, where review by our Audit Committee would be inappropriate, to another independent body of our Board of Directors) for review. The presentation must include a description of, among other things, the material facts, the direct and indirect interests of the related persons, the benefits of the transaction to us and whether any alternative transactions are available. To identify related-person transactions in advance, we rely on information supplied by our executive officers, directors and certain significant stockholders. In considering related-person transactions, our Audit Committee or other independent body of our Board of Directors takes into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs and benefits to us;
- the impact on a director’s independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the terms of the transaction;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties or to or from our employees generally.

In the event a director has an interest in the proposed transaction, the director must recuse himself or herself from the deliberations and approval. The policy requires that, in determining whether to approve, ratify or reject a related-person transaction, the Audit Committee consider, in light of known circumstances, whether the transaction is in, or is not inconsistent with, the best interests of the Company and its stockholders, as the Audit Committee determines in the good faith exercise of its discretion.

Certain Related-Person Transactions

The following sections summarize transactions since January 1, 2017 to which we have been a party, in which the amount involved in the transaction exceeded the lesser of \$120,000 or one percent of the average of the Company’s total assets at year-end for the last two completed fiscal years, and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our capital stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other arrangements, which are described under “Executive Compensation” and “Director Compensation.”

Transactions with QIAGEN Manchester Limited and Affiliates

In November 2016, we entered into a Master Assay Development, Commercialization and Manufacturing Agreement (“Governing Agreement”) with QIAGEN Manchester Limited (“QML”), and we concurrently entered into a stock purchase agreement with QIAGEN North American Holdings, Inc. (“QNAH”). Both QML and QNAH are wholly owned subsidiaries of QIAGEN N.V. Pursuant to the shares of our common stock acquired by QNAH under the stock purchase agreement, QNAH became a greater than 5% holder of our common stock.

In June 2017, we entered into a first statement of work (“SOW One”) with QML under the Governing Agreement. SOW One addresses the initial activities to be performed by us and QML in support of the development and potential commercialization of a NGS-based companion diagnostic assay that is the subject of a sponsor project agreement between QML and a biopharmaceutical company (“Pharma One”). SOW One was subsequently amended on December 18, 2017 and March 30, 2018 in connection with the completion of initial-phase development activities under SOW One. Under SOW One, as amended, QML agreed to pay us low, single-digit millions of dollars for the Pharma One development work performed under SOW One, and we and QML agreed to share any net profits resulting from performance of the development work as determined pursuant to the Governing Agreement. On May 16, 2018, SOW One was terminated by QML following and as a result of the termination of the related sponsor project agreement by Pharma One. For additional details regarding the terms of SOW One, please refer to Note 16 to our consolidated financial statements contained in our Annual Report on Form 10-K filed with the SEC on March 7, 2019.

In connection with SOW One, the Governing Agreement was amended to provide that neither party may terminate SOW One or the Governing Agreement to the extent it relates to SOW One in the event of a change of control.

In October 2017, we entered into a second statement of work (“SOW Two”) under the Governing Agreement with QML. SOW Two was made effective as of June 2, 2017 (“Onset Date”), and was amended on August 7, 2018, August 13, 2018, September 27, 2018 and February 5, 2019. SOW Two, as amended, addresses development activities conducted by us and QML since the Onset Date and those expected to be further conducted by parties in connection with a sponsor project agreement, dated June 2, 2017, between QML and Bristol-Myers Squibb. The initial-phase investigational use only (“IUO”) development activities under SOW Two have been completed and the first two amendments of SOW Two relate to the next phases, which include the use of the IUO assay developed in the initial-phase in a retrospective clinical trial and in additional disease indications. The third amendment to SOW Two provides that profit sharing relating to the original development activities and the development activities contemplated by the first SOW Two amendment will, in each case, commence upon the later of (i) the third amendment effective date, which is September 27, 2018, and (ii) the completion of the respective development activities, rather than at the end of each calendar quarter, provided that such modification to the profit-sharing commencement date only applies to development activities that had not yet been subject to profit-sharing as of the third amendment effective date. Under SOW Two, as amended, QML has agreed to pay us mid-single digit millions of dollars for the development work performed and expected to be performed by us and QML under SOW Two. In addition, we will share in any net profits (as determined under the Governing Agreement) generated during the work on an approximately quarterly basis throughout the term of SOW Two, except as otherwise specified in the third amendment to SOW Two. For additional details regarding the terms of SOW Two, please refer to Note 16 to our consolidated financial statements contained in our Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on March 7, 2019.

In January 2018, we entered into a third statement of work (“SOW Three”) under the Governing Agreement with QML. SOW Three addresses the development activities for a NGS-based clinical-trial assay (“SOW Three Project”) in connection with a sponsor project agreement between QML and a pharmaceutical company (“Pharma Three”). We amended SOW Three on September 21, 2018 in connection with the completion of initial assay development activities under SOW Three. The first amendment to SOW Three provides for the development of an IUO assay, subsequent retrospective testing of clinical trial samples, design verification and, subject to satisfactory achievement of relevant performance and regulatory milestones, regulatory submissions in the United States and European Union necessary for the commercialization of a companion diagnostic for a corresponding Pharma Three drug. Under SOW Three, as amended, QML has agreed to pay us low, single-digit millions of dollars for the development work performed and expected to be performed by us and QML under SOW Three. In addition, we will share in any net profits (as determined under the Governing Agreement) generated during the work on an approximately quarterly basis throughout the term of SOW Three. For additional details regarding the terms of SOW Three, please refer to Note 16 to our consolidated financial statements contained in our Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on March 7, 2019.

In October 2017, we issued a subordinated convertible promissory note (the “QNAH Convertible Note”) to QIAGEN North American Holdings, Inc. (“QNAH”) in the principal amount of \$3.0 million against receipt of cash proceeds equal to such principal amount. The QNAH Convertible Note bears simple interest at the rate of 3.0% per annum and matures on October 26, 2020. Our indebtedness under the QNAH Convertible Note is expressly subordinated in right of payment to the prior repayment in full of our indebtedness under our Growth Term Loan. QNAH may elect to convert all or any portion of the outstanding principal balance of the QNAH Convertible Note and all unpaid accrued interest thereon at any time prior to the maturity date into shares of our common stock at a conversion price of \$3.984 per share.

Since October 26, 2017, the outstanding principal amount of the QNAH Convertible Note has remained at \$3.0 million. No accrued interest has been paid and all accrued interest will become due on the maturity date of October 26, 2020.

Employment Arrangements

We currently have written employment agreements with our executive officers. For information about our employment agreements with our named executive officers, refer to “Executive Compensation – Agreements with our Named Executive Officers.”

Equity Awards Granted to Executive Officers and Directors

We have granted equity awards to our executive officers and directors, as more fully described in “Executive Compensation – Outstanding Equity Awards at Fiscal Year-End.”

Indemnification Agreements

We have entered into, and intend to continue to enter into, separate indemnification agreements with our directors and executive officers, in addition to the indemnification provided for in our amended and restated bylaws. These agreements, among other things, require us to indemnify our directors and executive officers for certain expenses, including attorneys’ fees, judgments, fines and settlement amounts incurred by a director or executive officer in any action or proceeding arising out of their services as one of our directors or executive officers or any other company or enterprise to which the person provides services at our request. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit us and our stockholders. A stockholder’s investment may be harmed to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Householding of Proxy Materials

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for Notices of Internet Availability of Proxy Materials or other annual meeting materials with respect to two or more stockholders sharing the same address by delivering a single Notice of Internet Availability of Proxy Materials or other annual meeting materials addressed to those stockholders. This process, which is commonly referred to as “householding,” potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are Company stockholders will be “householding” the Company’s proxy materials. A single Notice of Internet Availability of Proxy Materials will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be “householding” communications to your address, “householding” will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in “householding” and would prefer to receive a separate Notice of Internet Availability of Proxy Materials, please notify your broker or the Company. The Company undertakes to promptly deliver on request, a separate copy of the annual report, proxy statement or Notice of Internet Availability of Proxy Materials to a stockholder at a shared address to which a single copy of the document was delivered. Direct your written request to HTG Molecular Diagnostics, Inc., Corporate Secretary, 3430 E. Global Loop, Tucson, AZ 85706 or call the Company’s telephone number at (877) 289-2615. Stockholders who currently receive multiple copies of the Notices of Internet Availability of Proxy Materials at their addresses and would like to request “householding” of their communications should contact their brokers.

OTHER MATTERS

The Board of Directors knows of no other matters that will be presented for consideration at the annual meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on such matters in accordance with their best judgment.

By Order of the Board of Directors



Shaun D. McMeans
Secretary

July 2, 2019

A copy of the Company's Annual Report to the Securities and Exchange Commission on Form 10-K for the fiscal year ended December 31, 2018 is available without charge upon written request to: Corporate Secretary, HTG Molecular Diagnostics, Inc., 3430 E. Global Loop, Tucson, AZ 85706.

ANNUAL MEETING OF STOCKHOLDERS OF
HTG MOLECULAR DIAGNOSTICS, INC.

August 14, 2019

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NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIAL:

The Notice of Meeting, proxy statement and proxy card are available at <http://www.astproxyportal.com/ast/20074/>

Please sign, date and mail
your proxy card in the
envelope provided as soon
as possible.

↓ Please detach along perforated line and mail in the envelope provided. ↓

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THE BOARD OF DIRECTORS RECOMMENDS YOU VOTE "FOR" BOTH NOMINEES LISTED IN PROPOSAL 1 AND "FOR" PROPOSAL 2.
PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE

1. To elect the following Class I Director Nominees

FOR BOTH NOMINEES

WITHHOLD AUTHORITY
FOR BOTH NOMINEES

FOR ALL EXCEPT
(See instructions below)

NOMINEES:

- James T. LaFrance
 Lee R. McCracken

INSTRUCTIONS: To withhold authority to vote for any individual nominee(s), mark "FOR ALL EXCEPT" and fill in the circle next to each nominee you wish to withhold, as shown here: ●

To change the address on your account, please check the box at right and indicate your new address in the address space above. Please note that changes to the registered name(s) on the account may not be submitted via this method.

2. To ratify the appointment of BDO USA, LLP as HTG Molecular Diagnostics, Inc.'s independent registered public accounting firm for the fiscal year ending December 31, 2019.

FOR AGAINST ABSTAIN

NOTE: The proxies are authorized to vote on such other business as may properly come before the meeting or any adjournment thereof.

MARK "X" HERE IF YOU PLAN TO ATTEND THE MEETING.

Signature of Stockholder

Date:

Signature of Stockholder

Date:

Note: Please sign exactly as your name or names appear on this Proxy. When shares are held jointly, each holder should sign. When signing as executor, administrator, attorney, trustee or guardian, please give full title as such. If the signer is a corporation, please sign full corporate name by duly authorized officer, giving full title as such. If signer is a partnership, please sign in partnership name by authorized person.

HTG MOLECULAR DIAGNOSTICS, INC.
THIS PROXY IS SOLICITED ON BEHALF OF
THE BOARD OF DIRECTORS OF HTG MOLECULAR DIAGNOSTICS, INC.

The undersigned hereby appoints John L. Lubniewski and Shaun D. McMeans, as proxies and attorneys-in-fact of the undersigned, each with the power to act without the other and with the power of substitution, and hereby authorizes them to represent and vote all shares of common stock of HTG Molecular Diagnostics, Inc. (the "Company") standing in the name of the undersigned on June 17, 2019, with all powers which the undersigned would possess if present at the 2019 Annual Meeting of Stockholders of the Company to be held on August 14, 2019 or at any adjournment or postponement thereof. Receipt of the Notice of the 2019 Annual Meeting of Stockholders and Proxy Statement and the 2019 Annual Report is hereby acknowledged.

(Continued and to be signed on the reverse side.)

ANNUAL MEETING OF STOCKHOLDERS OF HTG MOLECULAR DIAGNOSTICS, INC.

August 14, 2019

PROXY VOTING INSTRUCTIONS

INTERNET - Access "www.voteproxy.com" and follow the on-screen instructions or scan the QR code with your smartphone. Have your proxy card available when you access the web page.



TELEPHONE - Call toll-free **1-800-PROXIES** (1-800-776-9437) in the United States or **1-718-921-8500** from foreign countries from any touch-tone telephone and follow the instructions. Have your proxy card available when you call.

Vote online/phone until 11:59 PM EDT the day before the meeting.

MAIL - Sign, date and mail your proxy card in the envelope provided as soon as possible.

IN PERSON - You may vote your shares in person by attending the Annual Meeting.

GO GREEN - e-Consent makes it easy to go paperless. With e-Consent, you can quickly access your proxy material, statements and other eligible documents online, while reducing costs, clutter and paper waste. Enroll today via www.astfinancial.com to enjoy online access.

COMPANY NUMBER	
ACCOUNT NUMBER	

NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIAL:
The Notice of Meeting, proxy statement and proxy card are available at <http://www.astproxyportal.com/ast/20074/>

↓ Please detach along perforated line and mail in the envelope provided you are not voting via telephone or the Internet. ↓

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THE BOARD OF DIRECTORS RECOMMENDS YOU VOTE "FOR" BOTH NOMINEES LISTED IN PROPOSAL 1 AND "FOR" PROPOSAL 2. PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE .

1. To elect the following Class I Director Nominees

- FOR BOTH NOMINEES
- WITHHOLD AUTHORITY FOR BOTH NOMINEES
- FOR ALL EXCEPT (See instructions below)

NOMINEES:
 James T. LaFrance
 Lee R. McCracken

2. To ratify the appointment of BDO USA, LLP as HTG Molecular Diagnostics, Inc.'s independent registered public accounting firm for the fiscal year ending December 31, 2019. FOR AGAINST ABSTAIN

NOTE: The proxies are authorized to vote on such other business as may properly come before the meeting or any adjournment thereof.

INSTRUCTIONS: To withhold authority to vote for any individual nominee(s), mark "FOR ALL EXCEPT" and fill in the circle next to each nominee you wish to withhold, as shown here: ●

MARK "X" HERE IF YOU PLAN TO ATTEND THE MEETING.

To change the address on your account, please check the box at right and indicate your new address in the address space above. Please note that changes to the registered name(s) on the account may not be submitted via this method.

Signature of Stockholder _____ Date: _____ Signature of Stockholder _____ Date: _____

Note: Please sign exactly as your name or names appear on this Proxy. When shares are held jointly, each holder should sign. When signing as executor, administrator, attorney, trustee or guardian, please give full title as such. If the signer is a corporation, please sign full corporate name by duly authorized officer, giving full title as such. If signer is a partnership, please sign in partnership name by authorized person.

Important Notice of Availability of Proxy Materials for the Stockholder Meeting of

HTG MOLECULAR DIAGNOSTICS, INC.

To Be Held On:

August 14, 2019 at 1:00 p.m.

at 3430 E. Global Loop, Tucson, AZ 85706

COMPANY NUMBER	
ACCOUNT NUMBER	
CONTROL NUMBER	

This communication presents only an overview of the more complete proxy materials that are available to you on the Internet. We encourage you to access and review all of the important information contained in the proxy materials before voting.

If you want to receive a paper or e-mail copy of the proxy materials you must request one. There is no charge to you for requesting a copy. To facilitate timely delivery please make the request as instructed below before 8/02/19.

Please visit <http://www.astproxyportal.com/ast/20074/>, where the following materials are available for view:

- Notice of Annual Meeting of Stockholders
- Proxy Statement
- Form of Electronic Proxy Card
- Annual Report on Form 10-K

TO REQUEST MATERIAL: TELEPHONE: 888-Proxy-NA (888-776-9962) 718-921-8562 (for international callers)

E-MAIL: info@astfinancial.com

WEBSITE: <https://us.astfinancial.com/OnlineProxyVoting/ProxyVoting/RequestMaterials>

TO VOTE:



ONLINE: To access your online proxy card, please visit www.voteproxy.com and follow the on-screen instructions or scan the QR code with your smartphone. You may enter your voting instructions at www.voteproxy.com up until 11:59 PM Eastern Time the day before the cut-off or meeting date.

IN PERSON: You may vote your shares in person by attending the Annual Meeting.

TELEPHONE: To vote by telephone, please visit www.voteproxy.com to view the materials and to obtain the toll free number to call.

MAIL: You may request a card by following the instructions above.

1. To elect the following Class I Director Nominees

NOMINEES:

James T. LaFrance
Lee R. McGracken

2. To ratify the appointment of BDO USA, LLP as HTG Molecular Diagnostics, Inc.'s independent registered public accounting firm for the fiscal year ending December 31, 2019.

NOTE: The proxies are authorized to vote on such other business as may properly come before the meeting or any adjournment thereof.

Please note that you cannot use this notice to vote by mail.