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

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SCHEDULE 14A  
(RULE 14a-101)  
INFORMATION REQUIRED IN PROXY STATEMENT

SCHEDULE 14A INFORMATION

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

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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 under §240.14a-12

**SYNTHETIC BIOLOGICS, INC.**

*(Name of Registrant as Specified in Its Charter)*

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*(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)*

Payment of Filing Fee (Check the appropriate box):

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

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

(2) Aggregate number of securities to which transaction applies:

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

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

Fee paid previously with preliminary materials.

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

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

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9605 Medical Center Drive, Suite 270  
Rockville, MD 20850  
(301) 417-4364

**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS**

To the Stockholders of Synthetic Biologics, Inc.:

We hereby notify you that the 2020 Annual Meeting of Stockholders of Synthetic Biologics, Inc., a Nevada corporation (the "Company"), will be held on September 17, 2020 at 9:30 a.m. (Eastern Time), at the offices of the Company, 9605 Medical Center Drive, Suite 270, Rockville, Maryland 20850, for the following purposes:

- (1) to elect the four (4) nominees for director named herein to hold office until our next annual meeting of stockholders and until their successors are duly elected and qualified;
- (2) to ratify the appointment of BDO USA, LLP as our independent registered public accounting firm for the year ending December 31, 2020;
- (3) to approve the Synthetic Biologics, Inc. 2020 Stock Incentive Plan;
- (4) to transact such other business as may properly come before the meeting or any adjournments or postponements of the meeting.

The matters listed in this notice of meeting are described in detail in the accompanying Proxy Statement. Our Board of Directors has fixed the close of business on July 30, 2020 as the record date for determining those stockholders who are entitled to notice of and to vote at the meeting or any adjournment or postponement of our 2020 Annual Meeting of Stockholders. The list of the stockholders of record as of the close of business on July 30, 2020 will be made available for inspection at the meeting and during the ten days preceding the meeting at the Company's offices located at 9605 Medical Center Drive, Suite 270, Rockville, Maryland 20850.

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE 2020 ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON SEPTEMBER 17, 2020:**

**THE NOTICE OF ANNUAL MEETING OF STOCKHOLDERS, THE PROXY STATEMENT AND OUR ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2019 ARE AVAILABLE ELECTRONICALLY AT [WWW.SYNTHETICBIOLOGICS.COM](http://WWW.SYNTHETICBIOLOGICS.COM).**

Along with the attached Proxy Statement, we are sending to you our Annual Report on Form 10-K for the year ended December 31, 2019. Such annual report, which includes our audited financial statements, is not to be regarded as proxy solicitation material.

**YOUR VOTE IS IMPORTANT**

Even if you plan to attend the meeting, please submit a proxy to have your shares voted as promptly as possible by using the internet or kindly sign, date, and return the enclosed proxy card in the envelope provided so that your vote will be counted if you later decide not to attend the meeting. No postage is required if the proxy card is mailed in the United States.

By order of the Board of Directors,

/s/ Steven A. Shallcross

Chief Executive Officer,  
Chief Financial Officer and Director  
Rockville, Maryland  
August 4, 2020

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9605 Medical Center Drive, Suite 270  
Rockville, MD 20850  
(301) 417-4364

#### PROXY STATEMENT

#### For the Annual Meeting of Stockholders to be held on September 17, 2020

This Proxy Statement is being furnished to holders of shares of common stock, \$0.001 par value per share, of Synthetic Biologics, Inc., a Nevada corporation (“we,” “us,” or the “Company”), in connection with the solicitation of proxies on behalf of our Board of Directors (the “Board of Directors”) for use at our 2020 Annual Meeting of Stockholders to be held on September 17, 2020 at 9:30 a.m. (Eastern Time), at the offices of the Company, 9605 Medical Center Drive, Suite 270, Rockville, Maryland 20850, and at any adjournment or postponement of our 2020 Annual Meeting of Stockholders. The purpose of the 2020 Annual Meeting of Stockholders and the matters to be acted on are stated in the accompanying Notice of 2020 Annual Meeting of Stockholders. The Board of Directors knows of no other business that will come before the 2020 Annual Meeting of Stockholders.

The Notice of our 2020 Annual Meeting of Stockholders, this Proxy Statement, and a proxy card, together with our Annual Report on Form 10-K for the year ended December 31, 2019, are being mailed to our stockholders on or about August 10, 2020. Such annual report, which includes our audited financial statements, is not to be regarded as proxy solicitation material. We will bear the cost of our solicitation of proxies. The original solicitation of proxies by mail may be supplemented by personal interview, telephone, or facsimile by our directors, officers, or employees, who will receive no additional compensation for such services. Arrangements will be made with brokerage houses and other custodians, nominees, and fiduciaries for the forwarding of solicitation material to the beneficial owners of stock held by any such persons, and we will reimburse those custodians, nominees, and fiduciaries for the reasonable out-of-pocket expenses incurred by them in doing so.

The Board of Directors is soliciting votes (i) **FOR** each of the four (4) nominees named herein for election to the Board of Directors; (ii) **FOR** the ratification of the appointment of BDO USA, LLP as our independent registered public accounting firm for the year ending December 31, 2020; and (iii) **FOR** approval of the 2020 Stock Incentive (the “Plan”).

#### ANNUAL MEETING ADMISSION

All stockholders as of the record date are welcome to attend the 2020 Annual Meeting. If you attend, please note that you will be asked to present government-issued identification (such as a driver’s license or passport) and evidence of your share ownership of our common stock on the record date. This can be your proxy card if you are a stockholder of record. If your shares are held beneficially in the name of a bank, broker or other holder of record and you plan to attend the 2020 Annual Meeting, you will be required to present proof of your ownership of our common stock on the record date, such as a bank or brokerage account statement or voting instruction card, to be admitted to the 2020 Annual Meeting.

**No cameras, recording equipment or electronic devices will be permitted in the 2020 Annual Meeting.**

Information on how to obtain directions to attend the 2020 Annual Meeting is available at: [www.syntheticbiologics.com](http://www.syntheticbiologics.com).

## INFORMATION ABOUT VOTING

**Q: *Why am I receiving these materials?***

A: Our Board of Directors is providing these proxy materials to you in connection with our 2020 Annual Meeting of Stockholders, which is scheduled to take place on September 17, 2020. As a stockholder of record as of July 30, 2020, you are invited to attend the 2020 Annual Meeting of Stockholders and to vote on the items of business described in this Proxy Statement.

**Q: *What information is contained in these materials?***

A: The information included in this Proxy Statement relates to the proposals to be voted on at the 2020 Annual Meeting of Stockholders, the voting process, the compensation of our directors and executive officers, and other required information.

**Q: *What items of business will be voted on at the 2020 Annual Meeting of Stockholders?***

A: The three (3) items of business scheduled to be voted on at the 2020 Annual Meeting of Stockholders are: (1) the election of our directors named herein; (2) the ratification of BDO USA, LLP as our independent registered public accounting firm for the year ending December 31, 2020; and (3) the approval of the 2020 Plan.

**Q: *How does the Board of Directors recommend that I vote?***

A: The Board of Directors recommends that you vote your shares: (1) **FOR** each of the nominees named herein for election to the Board of Directors; (2) **FOR** the ratification of the appointment of BDO USA, LLP as our independent registered public accounting firm for the year ending December 31, 2020; and (3) **FOR** approval of the 2020 Plan.

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

A: You may vote or cause to be voted all shares owned by you as of the close of business on July 30, 2020, the record date. These shares include: (1) shares held directly in your name as a stockholder of record; and (2) shares held for you, as the beneficial owner, through a broker or other nominee, such as a bank.

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

A: Most of our stockholders hold their shares through a broker or other nominee rather than directly in their own name. As summarized below, there are some distinctions between shares held of record and those owned beneficially. If your shares are registered directly in your name with our transfer agent, Equinity Group plc (formerly Corporate Stock Transfer, Inc.), you are considered, with respect to those shares, the stockholder of record and these proxy materials are being sent directly to you by us. As the stockholder of record, you have the right to grant your voting proxy directly to Mr. Steven Shallcross, our Chief Executive Officer, Chief Financial Officer and a Director, or to vote in person at the meeting. The Board of Directors has enclosed a proxy card for stockholders of record to use to grant a voting proxy.

If your shares are held in a brokerage account or by another nominee, you are considered the beneficial owner of shares held in "street name," and these proxy materials are being forwarded to you by your broker or nominee together with a voting instruction card. As the beneficial owner, you have the right to direct your broker or nominee how to vote and are also invited to attend the 2020 Annual Meeting of Stockholders. Since you are not the stockholder of record, however, you may not vote these shares in person at the meeting unless you obtain from the broker or nominee that holds your shares a valid proxy giving you the right to vote the shares. Your broker or nominee should have enclosed or provided voting instructions for you to use in directing the broker or nominee how to vote your shares. If you hold your shares through a broker and you do not give instructions to the record holder on how to vote, the record holder will be entitled to vote your shares in its discretion on certain matters considered routine, such as the ratification of the appointment of our independent registered public accounting firm. Neither Proposal 1 nor 3 are considered a routine matter. If you hold your shares in street name and you do not instruct your broker how to vote for Proposals 1 or 3, no votes will be cast on your behalf for these non-routine matters for which you have not provided voting instructions. These "broker non-votes" will be treated as shares that are present and entitled to vote for purposes of determining the presence of a quorum, but not as shares entitled to vote on a particular proposal.

**Q: *May I attend the 2020 Annual Meeting of Stockholders?***

A: You are entitled to attend the 2020 Annual Meeting of Stockholders only if you were a stockholder as of the close of business on the record date, July 30, 2020, or you hold a valid proxy for the 2020 Annual Meeting of Stockholders. You should be prepared to present photo identification for admittance. If you are not a record holder but hold shares beneficially through a broker or nominee (that is, in “street name”), you should provide proof of beneficial ownership on the record date, such as your most recent account statement, a copy of the voting instruction card provided by your broker or nominee, or other similar evidence of ownership. If you do not provide photo identification or comply with the other procedures outlined above upon request, you may not be admitted to the 2020 Annual Meeting of Stockholders. The 2020 Annual Meeting of Stockholders will begin promptly at 9:30 a.m. (Eastern Time). Check-in will begin at 9:00 a.m., and you should allow ample time for the check-in procedures.

**Q: *How can I vote my shares in person at the 2020 Annual Meeting of Stockholders?***

A: You may vote by ballot in person at the 2020 Annual Meeting of Stockholders any shares that you hold as the stockholder of record. You may only vote in person shares held in street name if you obtain from the broker or nominee that holds your shares a valid proxy giving you the right to vote the shares.

**Q: *How can I vote my shares without attending the 2020 Annual Meeting of Stockholders?***

A: Whether you hold shares directly as the stockholder of record or beneficially in street name, you may, without attending the meeting, direct how your shares are to be voted.

*Stockholder of Record — Shares Registered in Your Name:* If you are a stockholder of record, in addition to voting in person at the 2020 Annual Meeting of Stockholders, you may vote by submitting a proxy through the internet, or vote by proxy using a proxy card. Whether or not you plan to attend the 2020 Annual Meeting of Stockholders, 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.

- **Vote by Internet**, by going to the web address [www.proxypush.com/syn](http://www.proxypush.com/syn) and following the instructions for internet voting shown on your proxy card. Your Internet vote must be received by 11:59 p.m., Eastern Time, on September 16, 2020 to be counted.
- **Vote by Proxy Card**, by completing, signing, dating and mailing the enclosed proxy card in the envelope provided. If you return your signed proxy card to us before the 2020 Annual Meeting of Stockholders, we will vote your shares as you direct.

*Beneficial Owner — Shares Registered in the Name of a 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 an instruction card containing voting instructions from that organization rather than from us. You will be provided with instructions to vote by internet or to vote by mailing in your instruction card. Simply follow the voting instructions in the voting instruction card to ensure that your vote is counted.

**We provide internet proxy voting to allow record holders to vote your shares online, with procedures designed to ensure authenticity and correctness of your proxy vote instructions. Please be aware, however, that you must bear any costs associated with your internet access, such as usage charges from internet access providers and telephone companies.**

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

A: You may change your vote at any time prior to the final vote at the 2020 Annual Meeting of Stockholders. For shares held directly in your name, you may accomplish this by: (1) sending a written notice of revocation to our Corporate Secretary at Synthetic Biologics, Inc., 9605 Medical Center Drive, Suite 270, Rockville, Maryland 20850; (2) submitting a new proxy bearing a later date (which automatically revokes the earlier proxy) subject to the voting deadlines that are described on the proxy card or voting instruction form, as applicable; (3) granting a subsequent proxy through the internet; subject to the voting deadlines that are described on the proxy card or voting instruction form, as applicable or (4) by attending the 2020 Annual Meeting of Stockholders and voting in person. Attendance at the meeting will not cause your previously granted proxy to be revoked unless you specifically so request. *Even if you plan to attend the 2020 Annual Meeting of Stockholders, we recommend that you also submit your proxy or voting instructions or vote through the internet so that your vote will be counted if you later decide not to attend the 2020 Annual Meeting of Stockholders.*

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

**Q: *Can I revoke my proxy?***

A: You may revoke your proxy before it is voted at the 2020 Annual Meeting of Stockholders. To revoke your proxy if you are a holder of record, notify our Corporate Secretary in writing at Synthetic Biologics, Inc., 9605 Medical Center Drive, Suite 270, Rockville, Maryland 20850, or deliver to our Corporate Secretary a duly executed proxy bearing a later date subject to the voting deadlines that are described on the proxy card or voting instruction form, as applicable. You may also revoke your proxy by appearing at the 2020 Annual Meeting of Stockholders in person and voting your shares. If you vote by internet as a holder of record, you may also revoke your proxy by granting a subsequent proxy by internet subject to the voting deadlines that are described on the proxy card or voting instruction form, as applicable. Attendance at the 2020 Annual Meeting of Stockholders will not, by itself, revoke a proxy. If your shares are held by your broker or bank as nominee or agent, you should follow the instructions provided by your broker or bank.

**Q: *Who can help answer my questions?***

A: If you have any questions about the 2020 Annual Meeting of Stockholders or how to vote or revoke your proxy, or you need additional copies of this Proxy Statement or voting materials, you should contact our Corporate Secretary at Synthetic Biologics, Inc., 9605 Medical Center Drive, Suite 270, Rockville, Maryland 20850 or by phone at (301) 417-4364.

**Q: *How are votes counted?***

A: In the election of directors, you may vote FOR all of the four (4) nominees named herein or you may direct your vote to be WITHHELD with respect to any one or more of the four (4) nominees named herein.

With respect to Proposals 2 and 3, you may vote FOR, AGAINST, or ABSTAIN.

If you provide specific instructions, your shares will be voted as you instruct. If you are a record holder and submit your proxy card with no further instructions, your shares will be voted in accordance with the recommendations of the Board of Directors, namely (1) **FOR** each of the four (4) nominees named herein for election to our Board of Directors; (2) **FOR** the ratification of the appointment of BDO USA, LLP as our independent registered public accounting firm for the year ending December 31, 2020; and (3) **FOR** approval of the 2020 Plan.

**Q: *What is a quorum and why is it necessary?***

A: Conducting business at the 2020 Annual Meeting of Stockholders requires a quorum. The presence, either in person or by proxy, of the holders of a majority of our shares of common stock outstanding on July 30, 2020 are necessary to constitute a quorum. On the record date, there were 19,440,346 shares of common stock outstanding and entitled to vote. Your shares will be counted towards the quorum only if you submit a valid proxy (or, in the case of a beneficial owner, one is submitted on your behalf by your broker, bank or other nominee) or if you vote in person at the 2020 Annual Meeting of Stockholders. Abstentions and broker non-votes (which result when your shares are held in "street name," your broker does not have discretion to vote such shares or declines to exercise discretion on a particular matter and you do not tell the nominee how to vote your shares, as described in detail below) are treated as present for purposes of determining whether a quorum exists. Broker non-votes are relevant in determining whether a quorum is present at the meeting. 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.

**Q: *What are Broker Non-Votes?***

A: Under the rules of the NYSE American Exchange, member brokers who hold shares in street name for their customers that are the beneficial owners of those shares have the authority to only vote on certain "routine" items in the event that they have not received instructions from beneficial owners. Under New York Stock Exchange rules, when a proposal is not a "routine" matter and a member broker has not received voting instructions from the beneficial owner of the shares with respect to that proposal, the brokerage firm may not vote the shares on that proposal since it does not have discretionary authority to vote those shares on that matter. A "broker non-vote" is submitted when a broker returns a proxy card and indicates that, with respect to particular matters, it is not voting a specified number of shares on that matter, as it has not received voting instructions with respect to those shares from the beneficial owner and does not have discretionary authority to vote those shares on such matters. "Broker non-votes" are not entitled to vote at the 2020 Annual Meeting of Stockholders with respect to the matters to which they apply; however, "broker non-votes" will be included for purposes of determining whether a quorum is present at the 2020 Annual Meeting of Stockholders.

Proposals 1 and 3 are considered "non-routine" matters. As a result, brokers that do not receive instructions with respect to Proposals 1 and 3 from their customers will not be entitled to vote on such proposal for which instructions were not received.

Proposal 2 is typically considered a “routine” matter. As a result, brokers that do not receive instructions with respect to Proposal 2 from their customers should be entitled to vote on such proposal.

**Q: *What is the voting requirement to approve each of the proposals?***

- A:
- For Proposal 1, which relates to the election of directors, the four (4) nominees receiving the highest number of “FOR” votes (from the holders of votes of shares present in person or represented by proxy at the 2020 Annual Meeting of Stockholders and entitled to vote on the election of directors) will be elected. Only votes FOR or WITHHELD will affect the outcome. Abstentions and broker non-votes will have no effect on the outcome of the vote as long as each nominee receives at least one FOR vote. You do not have the right to cumulate your votes.
  - To be approved, Proposal 2, which relates to the ratification of the appointment of BDO USA, LLP, as our independent registered public accounting firm for the year ending December 31, 2020, must receive FOR votes from the holders of a majority of shares present in person or represented by proxy and entitled to vote on this matter at the 2020 Annual Meeting of Stockholders. Abstentions will have the same effect as an AGAINST vote. Although none are expected to exist in connection with Proposal 2, broker non-votes, if any, will have no effect. This vote is advisory, and therefore is not binding on us, the Audit Committee or our Board of Directors. If our stockholders fail to ratify the appointment, the Audit Committee will reconsider whether or not to retain that firm. Even if the appointment is ratified, the Audit Committee in its discretion may direct the appointment of different independent auditors at any time during the year if it determines that such a change would be in the best interests of our company and its stockholders.
  - To be approved, Proposal 3, which relates to approval of the 2020 Plan, must receive FOR votes from the holders of a majority of the votes present in person or represented by proxy and entitled to vote on this matter at the 2020 Annual Meeting of Stockholders. Abstentions will have the same effect as an AGAINST vote. Broker non-votes will have no effect.

We recommend that you vote FOR each of the nominees for director and FOR each of the other two (2) proposals.

If your shares are held in “street name” and you do not indicate how you wish to vote, your broker is permitted to exercise its discretion to vote your shares on certain “routine” matters. The only matter expected to be a routine matter to be submitted to our stockholders at the 2020 Annual Meeting of Stockholders is Proposal 2. Proposals 1 and 3 are not routine matters. Accordingly, if you do not direct your broker how to vote for a director in Proposal 1 or how to vote for Proposals 3, your broker may not exercise discretion and may not vote your shares on that proposal.

For purposes of Proposals 1 and 3, broker non-votes are not considered to be “votes cast” at the meeting and the shares represented by broker non-votes are not “entitled to vote” at the meeting. As such, a broker non-vote will not be counted as a vote FOR or WITHHELD with respect to a director in Proposal 1 or a vote FOR or AGAINST Proposal 3 and, therefore, will have no effect on the outcome of the vote on any such proposal. Abstentions will be counted in determining the total number of shares present in person or represented by proxy and entitled to vote on each of the proposals and will therefore have the effect of a vote AGAINST on each proposal, except for Proposal 1, where the abstention will have no effect on the outcome of the vote.

**Q: *What should I do if I receive more than one set of voting materials?***

- A:
- You may receive more than one set of voting materials, including multiple copies of this Proxy Statement and multiple proxy cards or voting instruction cards. For example, if you hold your shares in more than one brokerage account, you will receive a separate voting instruction card for each brokerage account in which you hold shares. If you are a stockholder of record and your shares are registered in more than one name, you will receive more than one proxy card. Please complete, sign, date, and return each proxy card and voting instruction card that you receive.

**Q: *Where can I find the voting results of the 2020 Annual Meeting of Stockholders?***

- A:
- We intend to announce preliminary voting results at the 2020 Annual Meeting of Stockholders and publish final results in a Current Report on Form 8-K that will be filed with the U.S. Securities and Exchange Commission (the “SEC”) within four (4) business days after the meeting. If final voting results are not available to us in time to file a Current Report on Form 8-K within four (4) business days after the meeting, we intend to file a Current Report on Form 8-K to publish preliminary results and, within four (4) business days after the final results are known to us, file an additional Current Report on Form 8-K to publish the final results.

**Q: *What happens if additional matters are presented at the 2020 Annual Meeting of Stockholders?***

- A:
- Other than the three (3) items of business described in this Proxy Statement, we are not aware of any other business to be acted upon at the 2020 Annual Meeting of Stockholders. If you grant a proxy, the persons named as proxy holder, Mr. Steven Shallcross, our Chief Executive Officer, Chief Financial Officer and Director, will have the discretion to vote your shares on any additional matters properly presented for a vote at the meeting. If for any unforeseen reason any of our nominees are not available as a candidate for director, the persons named as proxy holders will vote your proxy for any one or more other candidates nominated by the Board of Directors.

**Q: *How many shares are outstanding and how many votes is each share entitled?***

A: Each share of our common stock that is issued and outstanding as of the close of business on July 30, 2020, the record date, is entitled to be voted on all items being voted on at the 2020 Annual Meeting of Stockholders, with each share being entitled to one vote on each matter. On the record date, 19,440,346 shares of common stock were issued and outstanding.

**Q: *Who will count the votes?***

A: One or more inspectors of election will tabulate the votes.

**Q: *Is my vote confidential?***

A: Proxy instructions, ballots, and voting tabulations that identify individual stockholders are handled in a manner that protects your voting privacy. Your vote will not be disclosed, either within our business or to anyone else, except: (1) as necessary to meet applicable legal requirements; (2) to allow for the tabulation of votes and certification of the vote; or (3) to facilitate a successful proxy solicitation.

**Q: *Who will bear the cost of soliciting votes for the 2020 Annual Meeting of Stockholders?***

A: The Board of Directors is making this solicitation on our behalf, and we will pay the entire cost of preparing, assembling, printing, mailing, and distributing these proxy materials. Certain of our directors, officers, and employees, without any additional compensation, may also solicit your vote in person, by telephone, or by electronic communication. On request, we will reimburse brokerage houses and other custodians, nominees, and fiduciaries for their reasonable out-of-pocket expenses for forwarding proxy and solicitation materials to stockholders. In addition to the use of the mail, proxies may be solicited by personal interview, telephone, telegram, facsimile and advertisement in periodicals and postings, in each case by our directors, officers and employees without additional compensation. In addition, we have retained D.F. King & Co., Inc. to aid in the solicitation of proxies for this year. We will pay D.F. King & Co., Inc. fees of not more than \$7,500 plus expense reimbursement for its services. We may request by telephone, facsimile, mail, electronic mail or other means of communication the return of the proxy cards. Please contact D.F. King & Co., Inc. at (866) 796-7186 with any questions you may have regarding our proposals.

**Q: *When are stockholder proposals and director nominations due for next year's Annual Meeting of Stockholders?***

A: To be considered for inclusion in next year's proxy materials, your proposal must be submitted in writing by April 6, 2021, to the attention of our Corporate Secretary at Synthetic Biologics, Inc., 9605 Medical Center Drive, Suite 270, Rockville, Maryland 20850, and you must comply with all applicable requirements of Rule 14a-8 promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"); *provided, however*, that if our 2021 Annual Meeting of Stockholders is not held between September 17, 2021 and October 16, 2021, to be timely, then the deadline is a reasonable amount of time prior to the date we begin to print and mail our Proxy Statement for the 2020 Annual Meeting of Stockholders.

If you wish to submit a proposal or nominate a director at the 2020 Annual Meeting of Stockholders that is not to be included in next year's proxy materials, you must currently do so in accordance with the charter of the Nominations Committee, which is available on our website at [www.syntheticbiologics.com](http://www.syntheticbiologics.com) in the Investors section and which contains additional requirements about advance notice required of stockholder proposals and director nominations. In addition, you must comply with all applicable requirements of our Amended and Restated Bylaws and Rule 14a-8 promulgated under the Exchange Act.

## PROPOSAL 1

### ELECTION OF DIRECTORS

Our Board of Directors, based on the recommendation of the Nominations Committee of the Board of Directors, has nominated for annual election as director each of the individuals identified below, all of whom are incumbent directors.

#### THE NOMINEES

Name	Age	Position	Director Since
Jeffrey J. Kraws <sup>(1)(2)(3)</sup>	56	Chairman	2006
Steven A. Shallcross	58	Chief Executive Officer, Chief Financial Officer and Director	2018
Scott L. Tarriff <sup>(1)(2)(3)</sup>	61	Director	2012
Jeffrey Wolf, JD <sup>(1)(2)(3)</sup>	57	Director	2006

- (1) Member of the Audit Committee.
- (2) Member of the Compensation Committee.
- (3) Member of the Nominations Committee.

#### OUR BOARD OF DIRECTORS RECOMMENDS THAT YOU VOTE YOUR SHARES FOR THE ELECTION OF EACH OF THESE NOMINEES.

It is the intention of the persons named in the accompanying proxy card to vote all shares of common stock for which they have been granted a proxy for the election of each of the nominees, each to serve as a director until the next annual meeting of stockholders and until his successor shall have been duly elected and qualified. All of the nominees have consented to being named in this Proxy Statement and to serve as a director if elected. At the time of the 2020 Annual Meeting of Stockholders, if any of the nominees named above is not available to serve as director (an event that the Board of Directors does not currently have any reason to anticipate), all proxies will be voted for any one or more other persons that the Board of Directors designates. The Board of Directors believes that it is in the best interests of the Company to elect the above-described nominees. Mr. Tarriff has announced his intention to resign as a director prior to year end in order to avoid being considered overboarded by Institutional Shareholder Services.

#### DIRECTOR INDEPENDENCE

No director or executive officer of the Company is related by blood, marriage or adoption to any other director or executive officer. A majority of our members of our Board of Directors are independent in compliance with the applicable listing standards of the NYSE American, LLC ("NYSE American"). The Board of Directors has affirmatively determined that the independent directors and nominees are Jeffrey J. Kraws, Scott L. Tarriff and Jeffrey Wolf.

#### INFORMATION ABOUT THE NOMINEES

Below is certain information regarding our directors and executive officers.

**Steven A. Shallcross.** Mr. Shallcross has been a member of our Board of Directors since December 6, 2018 and currently serves as our Chief Executive Officer, a position he was appointed to on December 6, 2018, and our Chief Financial Officer. Mr. Shallcross was appointed as our Interim Chief Executive Officer on December 5, 2017 and has served as our Chief Financial Officer, Treasurer and Secretary since joining us in June 2015. Mr. Shallcross brings to our company operational, financial and international biotech industry experience, as well as an established track record at leading the financial development and strategy for several publicly traded biotech companies. From May 2013 through May 2015, Mr. Shallcross served as Executive Vice President and Chief Financial Officer of Nuo Therapeutics, Inc. (formerly Cytomedix, Inc.). In January 2016, Nuo Therapeutics, Inc. filed a voluntary petition for relief under Chapter 11 of the U.S. Bankruptcy Code in the United States Bankruptcy Court for the District of Delaware and on April 25, 2016, the Bankruptcy Court entered an order granting approval of Nuo's plan of reorganization. From July 2012 to May 2013, Mr. Shallcross held the offices of Executive Vice President, Chief Financial Officer and Treasurer of Empire Petroleum Partners, LLC, a motor fuel distribution company. From July 2011 to March 2012, Mr. Shallcross was Acting Chief Financial Officer of Senseonics, a privately-held medical device company located in Germantown, MD. From January 2009 to March 2011, he served as Executive Vice President and Chief Financial Officer of Innocoll AG (formerly privately held Innocoll Holdings, Inc.), a global, commercial-stage biopharmaceutical company specializing in the development and commercialization of collagen-based products. He also served for four years as the Chief Financial Officer and Treasurer of Vanda Pharmaceuticals, Inc., leading the company through its successful IPO and follow-on offering and previously served as the Senior Vice President and Chief Financial Officer of Middlebrook Pharmaceuticals, Inc. (formerly Advancis Pharmaceutical Corporation). In addition, Mr. Shallcross also served as the Chief Financial Officer of Bering Truck Corporation. Since June 2019, Mr. Shallcross has served on the board of directors of Newgioco Group, Inc. (Nasdaq: NWGI), an international, vertically integrated commercial-stage company engaged in various aspects of the leisure gaming industry. He holds an MBA from the University of Chicago's Booth School of Business, a Bachelor of Science degree in Accounting from the University of Illinois, Chicago, and is a Certified Public Accountant in the State of Illinois.

Mr. Shallcross brings to the Board significant strategic, business and financial experience related to the business and financial issues facing biotechnology companies. Mr. Shallcross has a broad understanding of the financial markets, financial statements as well as generally accepted accounting principles. Through his services as our Chief Executive Officer and Chief Financial Officer, he developed extensive knowledge of our business.

**Jeffrey J. Kraws.** Mr. Kraws has been a member of the Company's Board of Directors since January of 2006, and was appointed independent, non-executive Chairman of the Board in May 2012. Since 2003, Mr. Kraws has served as Chief Executive Officer and co-founder of Crystal Research Associates and CRA Advisors, and since February 2012, he has served as partner and co-founder of TopHat Capital, LLC. Mr. Kraws has served as the Co-President of Ra Medical Systems Inc. (NYSE RMED), a medical device company, since May 2018 and as President from August 2016 until May 2018. Mr. Kraws is a partner at Grannus Securities Pty Ltd. (an Australian based private equity fund) since November 2015. Well-known and respected on Wall Street, Mr. Kraws has received some of the most prestigious awards in the industry. Among other awards, he was given a "5-Star Rating" in 2001 by Zacks and was ranked the number one analyst among all pharmaceutical analysts for stock performance in 2001 by Starmine.com. Prior to founding Crystal Research Associates, Mr. Kraws served as co-president of The Investor Relations Group (IRG), a firm representing primarily under-followed, small-capitalization companies. Previously, Mr. Kraws served as a managing director of healthcare research for Ryan Beck & Co. and as director of research/senior pharmaceutical analyst and managing director at Gruntal & Co., LLC (prior to its merger with Ryan Beck & Company). Mr. Kraws served as managing director of the healthcare research group and senior pharmaceutical analyst at First Union Securities (formerly EVEREN Securities); as senior U.S. pharmaceutical analyst for the Swedish-Swiss conglomerate Asea Brown Boveri; and as managing director and president of the Brokerage/Investment Banking operation of ABB Aros Securities, Inc. He also served as senior pharmaceutical analyst at Nations Banc Montgomery Securities, BT Alex Brown & Sons, and Buckingham Research. Mr. Kraws also has industry experience, having been responsible for competitive analysis within the treasury group at Bristol-Myers-Squibb Company. During 2006 through February of 2007, Mr. Kraws served as our Vice President of Business Development, on a part-time basis. Since December 2013, Mr. Kraws serves on the board of directors of Avivagen Inc. (TSX:VIV) and Saleen Automotive, Inc. (OTC Pink: SLNN). He holds an M.B.A. from Cornell University and a B.S. degree from State University of New York — Buffalo. Mr. Kraws brings a strong business background to us, having worked as a pharmaceutical analyst for over 22 years.

Mr. Kraws brings to the Board significant strategic, business and financial experience related to the business and financial issues facing pharmaceutical companies. Mr. Kraws has a broad understanding of the operational, financial and strategic issues facing pharmaceutical companies. His healthcare experience, executive and leadership experience further qualify him as a member of the Board.

**Scott L. Tarriff.** Mr. Tarriff has been a member of the Company's Board of Directors since February 3, 2012. Since January 2007 he has served as a director and Chief Executive Officer of Eagle Pharmaceuticals, Inc., a publicly traded, hospital specialty company. Eagle Pharmaceuticals, Inc. (NASDAQ: EGRX) is focused on developing branded parenteral products through the application of various in-licensed drug delivery technologies. Prior to joining Eagle, Mr. Tarriff held various executive positions at Par Pharmaceutical Companies, Inc., a publicly-traded developer, manufacturer and marketer of specialty pharmaceuticals, including as president and chief executive officer from September 2003 to September 2006, after joining Par in 1998. Mr. Tarriff also served on Par's board of directors from 2002 to September 2006. Prior to that, Mr. Tarriff held various positions with Bristol-Meyers Squibb, a publicly-traded biopharmaceutical company, including senior director marketing. Mr. Tarriff has served as a director of ZIOPHARM Oncology, Inc., a publicly traded biopharmaceutical company, since 2013 and previously served on the board of directors of Clinical Data, Inc., a publicly-traded pharmaceutical company, from September 2009 to April 2011 when Clinical Data was acquired by Forest Laboratories, Inc. Mr. Tarriff holds a B.S. in marketing from Pennsylvania State University and an M.B.A. from Rider College.

Mr. Tarriff brings to our Board of Directors significant knowledge of and experience in the pharmaceutical and medical industries. He has extensive business, managerial, executive and leadership experience that further qualify him to serve as a member of the Board and a valuable understanding of the role played by the Board of Directors acquired through service on the boards of many companies. He has had a long and successful career in top executive leadership positions with leading, publicly traded pharmaceutical companies including Eagle Pharmaceuticals, Inc., Par Pharmaceuticals Companies, Inc. and Bristol-Myers Squibb.

**Jeffrey Wolf, J.D.** Mr. Wolf, who has been a member of the Company's Board of Directors since 2006, has substantial experience in creating, financing, nurturing and growing new ventures based upon breakthrough research and technology. In September 2008, Mr. Wolf founded Heat Biologics, Inc. (NASDAQ: HTBX), a publicly traded company engaged in research and development of drugs focused on combating cancer and other diseases. Since April 2010, Mr. Wolf has served as the Chief Executive Officer and Chairman of the Board of Heat Biologics, Inc. Prior to founding Heat Biologics, Inc., from June 1997 to March 2011, Mr. Wolf has served as managing director at Seed-One Ventures, LLC a venture firm focused on launching and growing exceptional healthcare companies from the ground up. Since founding Seed-One, Mr. Wolf has founded and run several medical companies. Mr. Wolf's start-ups include Avigen, a San Francisco-based gene therapy company where he was a co-founder and director; TyRx Pharma, a Princeton-based company focused on the development of bio-compatible polymers where he was a co-founder and Chairman; EluSys Therapeutics, a New Jersey company focused on the development of novel technology to remove blood-borne pathogens where he was a cofounder, Chairman and Chief Executive Officer; and GenerationOne, a Miami-based company focused on mobile-based collaborative care, where he was the founder, Chairman and Chief Executive Officer. Mr. Wolf received his M.B.A. from Stanford Business School, his J.D. from New York University School of Law and his B.A. from the University of Chicago, where he graduated with honors in Economics. Mr. Wolf serves as a director of several Seed-One portfolio companies.

Mr. Wolf has extensive knowledge of the industry and in particular research and development. His legal and business background provide him with a broad understanding of the legal, operational, financial and strategic issues facing our company. Having served as a board member on other public company boards, Mr. Wolf has an extensive understanding of the operational, financial and strategic issues facing public companies.

## INFORMATION REGARDING THE COMMITTEES OF THE BOARD OF DIRECTORS

We formed an Audit Committee, Compensation Committee and Nominations Committee of our Board of Directors in 2007.

### *Audit Committee*

The members of the Audit Committee are Mr. Wolf (Chairman), Mr. Kraws and Mr. Tarriff. The Audit Committee met four (4) times during the year ended December 31, 2019. The primary purpose of the Audit Committee is to act on behalf of the Board of Directors in its oversight of all material aspects of our accounting and financial reporting processes, internal controls and audit functions, including our compliance with Section 404 of the Sarbanes-Oxley Act of 2002.

The duties of the Audit Committee include the hiring and retaining of our independent registered public accounting firm, which reports to the Audit Committee. The Audit Committee reviews with our independent registered public accounting firm the scope and results of the audit engagement and the system of internal controls and procedures. The Audit Committee also reviews the effectiveness of procedures intended to prevent violations of laws. The Audit Committee also reviews, prior to publication, our quarterly earnings releases and our reports to the Securities and Exchange Commission (the "SEC") on Forms 10-K and 10-Q. The formal report of the Audit Committee for 2019 is set forth under the caption "Report of the Audit Committee of the Board of Directors" in Proposal 2.

Our Board of Directors has determined that the members of the Audit Committee are "independent" under the applicable rules of the NYSE American and that Mr. Wolf, Mr. Kraws and Mr. Tarriff are each an "audit committee financial expert" within the meaning of the regulations of the SEC.

Audit Committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Exchange Act. In order to be considered to be independent for purposes of Rule 10A-3, a member of an Audit Committee of a listed company may not, other than in his or her capacity as a member of the Audit Committee, the Board of Directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries or (2) be an affiliated person of the listed company or any of its subsidiaries. Each member of our Audit Committee is "independent" under Rule 10A-3 of the Exchange Act.

The Audit Committee has adopted a formal written charter, a copy of which is available on our website at [www.syntheticbiologics.com](http://www.syntheticbiologics.com) in the Investors section.

### *Compensation Committee*

The members of the Compensation Committee are Mr. Kraws (Chairman), Mr. Tarriff and Mr. Wolf. The Compensation Committee met one time during the year ended December 31, 2019. The Compensation Committee reviews and reports to the Board of Directors on all elements of compensation of our executive officers. The Board of Directors has determined that the members of the Compensation Committee are "independent" under the applicable rules of the NYSE American.

The Compensation Committee annually reviews the compensation program for our Chief Executive Officer and other members of senior management and then makes recommendations to the full Board of Directors for determination. In each case, the Compensation Committee takes into account the results achieved by the executive, his future potential, and his scope of responsibilities and experience. Our Chief Executive Officer makes recommendations to the Compensation Committee regarding the compensation of our other executive officers and other members of management but does not participate in any discussions or processes concerning his own compensation, and does not vote on the compensation of our Chief Financial Officer and other members of management.

During the year ended December 31, 2019, the Compensation Committee evaluated the performance of our executives and other members of senior management and considered the compensation levels and equity programs at comparable companies and related industries before it made its compensation recommendations to the full Board of Directors, including recommendations regarding salary increases, awards of cash bonuses and awards of stock options.

The Compensation Committee administers our stock plan, including review and recommendation of long-term incentive compensation for each executive, director and employee, including grants of stock options. The Compensation Committee believes that this long-term incentive compensation aligns the interests of our executives with those of our stockholders and furthers executive retention.

The Compensation Committee also reviews and recommends to the Board of Directors appropriate director compensation programs for service as directors, Committee chairs and Committee members.

The Compensation Committee operates under a formal charter that governs its duties and standards of performance. A copy of the charter is available on our website at [www.syntheticbiologics.com](http://www.syntheticbiologics.com) in the Investors section.

#### ***Nominations Committee***

The members of the Nominations Committee are Mr. Tarriff (Chairman), Mr. Kraws and Mr. Wolf. The Board of Directors has determined that the members of the Nominations Committee are “independent” under the applicable rules of the NYSE American. The Nominations Committee met one (1) time during the year ended December 31, 2019. The Nominations Committee performs the following functions:

- It considers and recommends to the Board of Directors individuals for appointment or election as directors;
- It makes recommendations to the Board of Directors regarding any changes to the size of the Board of Directors or any Committee;
- It reports to the Board of Directors on a regular basis; and
- It performs any other duties or responsibilities expressly delegated to it by the Board of Directors relating to Board or Committee members.

Candidates for director should have certain minimum qualifications, including the ability to understand basic financial statements, being over 21 years of age, having relevant business experience (taking into account the business experience of the other directors), and having high moral character. The Nominations Committee retains the right to modify these minimum qualifications from time to time.

In evaluating an incumbent director whose term of office is set to expire, the Nominations Committee reviews such director’s overall service to the Company during such director’s term, including the number of meetings attended, level of participation, quality of performance, and any transactions with the Company engaged in by such director during his term.

When selecting a new director nominee, the Nominations Committee first determines whether the nominee must be independent for NYSE American purposes or whether the candidate must qualify as an “audit committee financial expert.” The Nominations Committee then uses its network of contacts to compile a list of potential candidates, but may also engage, if it deems appropriate, a professional search firm to assist in the identification of qualified director candidates. The Nominations Committee also will consider nominees recommended by our stockholders. The Nominations Committee does not distinguish between nominees recommended by our stockholders and those recommended by other parties. The Nominations Committee evaluates the suitability of potential nominees, taking into account the current composition of the Board of Directors, including expertise, diversity and the balance of inside and independent directors. The Nominations Committee endeavors to establish a diversity of background and experience in a number of areas of core competency, including business judgment, management, accounting, finance, knowledge of our industry, strategic vision, research and development and other areas relevant to our business.

Under our current governing documents, stockholders wishing to directly recommend candidates for election to the Board of Directors at our next annual meeting to be included in our Proxy Statement must do so by giving written notice to: Chairman of the Nominations Committee, Synthetic Biologics, Inc., 9605 Medical Center Drive, Suite 270, Rockville, Maryland 20850. Any such notice must be delivered to the Chairman not less than 120 days prior to the anniversary of the preceding year’s annual meeting. The notice must state: (1) the name and address of the stockholder making the recommendations; (2) the name, age, business address, and residential address of each person recommended; (3) the principal occupation or employment of each person recommended; (4) the class and number of shares of the Company’s stock that are beneficially owned by each person recommended and by the recommending stockholder; (5) any other information concerning the persons recommended that must be disclosed in nominee and proxy solicitations in accordance with Regulation 14A of the Exchange Act; and (6) a signed consent of each person recommended stating that he or she consents to serve as a director of the Company if elected.

In considering any person recommended by one of our stockholders, the Nominations Committee will look for the same qualifications that it looks for in any other person that it is considering for a position on the Board of Directors. Any stockholder nominee recommended by the Committee and proposed by the Board of Directors for election at the next annual meeting of stockholders will be included in the Company's Proxy Statement for that annual meeting.

The Nominations Committee operates under a formal charter that governs its duties and standards of performance. A copy of the charter is available on our website at [www.syntheticbiologics.com](http://www.syntheticbiologics.com) in the Investors section.

#### **Board Leadership Structure**

We currently have two separate people serving as our Chairman of the Board of Directors and as our Chief Executive Officer, and we do not have a formal policy on whether the same person should (or should not) serve as both the Chief Executive Officer and Chairman of the Board of Directors. Due to the size of our company, we believe that this structure is appropriate in recognition of the time commitment and activities required to function effectively as a Chairman and as a Chief Executive Officer. Mr. Kraws has served as the Chairman of the Board of Directors since May 2012. Mr. Shallcross has served as our interim Chief Executive Officer since December 2017 and as our Chief Executive Officer since December 2018. In serving as Chairman of the Board of Directors, Mr. Kraws serves as a significant resource for our Chief Executive Officer, other members of management and the Board of Directors. We believe that the division of duties and additional avenues of communication between the Board of Directors and management with Mr. Kraws serving as Chairman of the Board of Directors provides a basis for the proper functioning of our Board of Directors and oversight of management.

We do not have a separate lead independent director. We believe the combination of Mr. Kraws as our Chairman of the Board and Mr. Shallcross as our Chief Executive Officer and Chief Financial Officer is an effective structure for us. Our current structure is operating effectively to foster productive, timely and efficient communication among the independent directors and management. We do have active participation in our Committees by our independent directors, who comprise all of the members of all of our Committees. Each Committee performs an active role in overseeing our management and there are complete and open lines of communication with the management and independent directors.

#### **Oversight of Risk Management**

The Board of Directors has an active role, as a whole and also at the Committee level, in overseeing management of our risks. The Board of Directors regularly reviews information regarding our strategy, finances and operations, as well as the risks associated with each. The Audit Committee is responsible for oversight of our risks relating to accounting matters, financial reporting and legal and regulatory compliance. The Audit Committee undertakes, at least annually, a review to evaluate these risks. Individual members of the Audit Committee are each assigned an area of risk to oversee. The members then meet separately with management responsible for such area, including our Chief Financial Officer, internal auditor and counsel, and report to the Audit Committee on any matters identified during such discussions with management. Our Compensation Committee is responsible for overseeing the management of risks relating to our executive compensation plans and arrangements. While each Committee is responsible for evaluating certain risks and overseeing the management of such risks, the entire Board of Directors is regularly informed through Committee reports about such risks.

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

Section 16(a) of the Exchange Act requires our executive officers, directors and persons who beneficially own more than ten percent (10%) 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 our common stock. Such officers, directors and persons are required by SEC regulation to furnish us with copies of all Section 16(a) forms that they file with the SEC.

Based solely on a review of the copies of such forms that were received by us, or written representations from certain reporting persons that no Forms 5 were required for those persons, we are not aware of any failures to file reports or report transactions in a timely manner during the year ended December 31, 2019.

## STOCKHOLDER COMMUNICATIONS WITH THE BOARD OF DIRECTORS

Stockholders may direct any communications intended for the Board of Directors to our Corporate Secretary by telephone at (301) 417-4364, by facsimile at (301) 417-4367, or by mail to Synthetic Biologics, Inc., 9605 Medical Center Drive, Suite 270, Rockville, Maryland 20850.

This centralized process assists the Board of Directors in reviewing and responding to stockholder communications in an appropriate manner. If a stockholder wishes to direct any communication to a specific member of the Board of Directors, the name of that member of the Board of Directors should be noted in the communication. The Board of Directors has instructed the Corporate Secretary to forward stockholder correspondence only to the intended recipients, and has also instructed the Corporate Secretary to review all stockholder correspondence and, in the Corporate Secretary's discretion, refrain from forwarding any items deemed to be of a commercial or frivolous nature or otherwise inappropriate for the Board of Directors' consideration. Any such items may be forwarded elsewhere in the Company for review and possible response.

## BOARD AND COMMITTEE MEETINGS

During the year ended December 31, 2019, the Board of Directors held eight (8) meetings. During the year ended December 31, 2019, our Audit, Compensation and Nominations Committees met four (4) times, one (1) time, and one (1) time, respectively. Each director attended at least seventy five percent (75%) of the aggregate of all meetings of the Board of Directors and all of the Committee meetings, for the Committees on which he serves.

## DIRECTOR ATTENDANCE AT ANNUAL MEETINGS

Our directors are encouraged, but not required, to attend our Annual Meetings of Stockholders. All of our directors attended the 2019 Annual Meeting of Stockholders, three in person and one by telephone. Due to COVID-19 concerns, one or more of our directors may not attend the 2020 Annual Meeting of Stockholders in person.

## CORPORATE GOVERNANCE

We operate according to a comprehensive plan of corporate governance for the purpose of defining responsibilities, setting high standards of professional and personal conduct, and assuring compliance with those responsibilities and standards. We regularly monitor developments in the area of corporate governance and will continue to monitor developments and make adjustments from time to time to ensure compliance in this area. Information regarding our corporate governance that is not provided below is described elsewhere in this Proxy Statement.

### *Code of Conduct*

We adopted a Code of Conduct that applies to all of our directors, officers and employees. The Code of Conduct is intended to promote honest and ethical conduct, full, accurate and timely disclosure, and compliance with all applicable laws and government regulations. A copy of the Code of Conduct is available on our website at [www.syntheticbiologics.com](http://www.syntheticbiologics.com) in the Investors section. If we make any substantive amendments to the Code of Conduct or grant any waiver from a provision of the Code of Conduct to any director or officer, we will promptly disclose the nature of the amendment or waiver on our website.

### *Code of Ethics for Financial Management*

We adopted a Code of Ethics for Financial Management that applies to all persons responsible for our financial management. The Code of Ethics for Financial Management is intended to promote professional conduct in our financial management. A copy of our Code of Ethics for Financial Management is available on our website at [www.syntheticbiologics.com](http://www.syntheticbiologics.com) in the Investors section. Violations of the Code of Ethics for Financial Management may result in disciplinary action. If we make any substantive amendments to the Code of Ethics for Financial Management or grant any waiver from a provision of the Code of Ethics for Financial Management to any director or officer, we will promptly disclose the nature of the amendment or waiver on our website.

## DIRECTOR COMPENSATION

The following table sets forth information for the fiscal year ended December 31, 2019 regarding the compensation of our directors who at December 31, 2019 were not also our Named Executive Officers.

Name	Fees Earned or Paid in Cash	Option Awards <sup>(1)(3)</sup>	Other Compensation	Total
Jeffrey J. Kraws <sup>(2)</sup>	\$ 176,000	\$ 66,000	\$ -	\$ 242,000
Scott Tarriff	\$ 66,000	\$ 66,000	\$ -	\$ 132,000
Jeffrey Wolf	\$ 74,000	\$ 66,000	\$ -	\$ 140,000

- (1) The amounts in the “Option Awards” column reflect the dollar amounts of the grant date fair value for the financial statement reporting purposes for stock options for the fiscal year ended December 31, 2019 in accordance with ASC 718. The fair value of the options was determined using the Black-Scholes model. For a discussion of the assumptions used in computing this valuation, see “Management’s Discussion and Analysis of Financial Conditions and Results of Operations” and Note 5 of the Notes to Consolidated Financial Statements in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.
- (2) Mr. Kraws was appointed as our independent, non-executive Chairman of the Board of Directors in May 2012. Pursuant to his agreement Mr. Kraws receives an annual retainer of \$150,000 for serving as our Chairman.
- (3) As of December 31, 2019, the following are the outstanding aggregate number of option awards held by each of our directors who were not also Named Executive Officers:

Name	Option Awards (#)
Jeffrey J. Kraws	347,563
Scott Tarriff	348,039
Jeffrey Wolf	347,563

During 2019, each non-employee member of the Board of Directors received an annual cash retainer of \$43,000, our independent, non-executive Chairman of the Board of Directors receives an annual cash retainer of \$150,000, all non-employee directors receive an annual cash fee of \$7,500, \$5,000 and \$3,750 for service on the Audit, Compensation and Nominations Committees, respectively, and the Chairman of the Audit, Compensation and Nominations Committees receive an additional annual cash fee of \$15,000, \$10,000 and \$7,500, respectively. In addition, each non-employee member of the Board of Directors was issued an option exercisable for 250,000 shares of our common stock, for a term of seven years, vesting one third on each of one year, two year and three year anniversary of the date of grant. In setting 2019 compensation for directors, the Compensation Committee relied upon the report that was provided by Korn Ferry Hay Group in November 2017 to provide an assessment of our director compensation. Based on an analysis of director compensation set forth in the report, our financial performance, general market conditions and the interests of shareholders, it was determined that the annual cash retainer for serving on the board and the committee retainers would remain for 2020 the same as they were in 2019.

### **LIMITS ON LIABILITY AND INDEMNIFICATION**

Our Articles of Incorporation and Amended and Restated By-Laws provide that we will indemnify and hold harmless each person who serves at any time as a director or officer from and against any and all claims, judgments and liabilities to which such person shall become subject by reason of the fact that he or she is or was a director or officer of the Company, and shall reimburse such person for all legal and other expenses reasonably incurred by him or her in connection with any such claim or liability. We believe that this indemnification covers at least negligence and gross negligence on the part of the indemnified parties. Insofar as indemnification for liabilities under the Securities Act of 1933, as amended (the "Securities Act") may be permitted to directors, officers, and controlling persons of the Company under the foregoing provisions or otherwise, we have been advised that in the opinion of the SEC that indemnification is against public policy as expressed in the Securities Act, and is therefore unenforceable. We entered into an indemnification agreement with our directors and officers. The agreement confirms our obligation to indemnify the directors and officers to the fullest extent authorized by our Articles of Incorporation and Amended and Restated By-Laws and supplements the indemnification otherwise available to the covered person under our Articles of Incorporation and Amended and Restated By-Laws. The form of indemnification agreement was described and filed as an exhibit to the Form 8-K we filed with the SEC on January 6, 2009.

### **COMPENSATION COMMITTEE INTERLOCKS**

During the last fiscal year ended December 31, 2019, none of our executive officers served on the Board of Directors or Compensation Committee of any other entity whose officers served either on our Board of Directors or Compensation Committee.

**PROPOSAL 2**

**RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Audit Committee of the Board of Directors has appointed BDO USA, LLP as our independent registered public accounting firm for the year ending December 31, 2020.

Ratification of the appointment of BDO USA, LLP by our stockholders is not required by law, our bylaws or other governing documents. As a matter of policy, however, the appointment is being submitted to our stockholders for ratification at the 2020 Annual Meeting of Stockholders. If our stockholders fail to ratify the appointment, the Audit Committee will reconsider whether or not to retain that firm. Even if the appointment is ratified, the Audit Committee 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.

At the 2020 Annual Meeting of Stockholders, the representatives of BDO USA, LLP are expected to be available in person or via teleconference (in light of the global COVID-19 pandemic) to respond to appropriate questions and will be afforded an opportunity to make a statement if they so desire.

## REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS<sup>1</sup>

The Audit Committee reviews our financial reporting process on behalf of the Board of Directors. In January 2007, the Board of Directors adopted a written charter for the Audit Committee, which it re-evaluates annually. In fulfilling its responsibilities, the Audit Committee has reviewed and discussed the audited financial statements contained in the Annual Report on Form 10-K for the year ended December 31, 2019 with our management and our independent registered public accounting firm for such year, BDO USA, LLP. Our management is responsible for the financial statements and the reporting process, including the system of internal controls. The independent registered public accounting firm is responsible for expressing an opinion on the conformity of those audited financial statements with accounting principles generally accepted in the United States.

The Audit Committee (1) discussed with BDO USA, LLP the matters required by the applicable requirements of the Public Company Accounting Oversight Board (“PCAOB”) and the SEC; (2) received and reviewed the written disclosures and the letter from BDO USA, LLP required by PCAOB Ethics and Independence Rule 3526, *Communication with Audit Committees Concerning Independence*; and (3) discussed with BDO USA, LLP its independence. The Audit Committee also considered whether, and determined that, the independent registered public accounting firm’s provision of other non-audit services to us was compatible with maintaining BDO USA, LLP’s independence.

During 2019, management evaluated our system of internal control over financial reporting in accordance with the requirements set forth in Section 404 of the Sarbanes-Oxley Act of 2002 and related regulations. The Audit Committee was kept apprised of the progress of the evaluation and provided oversight and advice to management during the process. In connection with this oversight, the Audit Committee received periodic updates provided by management and the independent registered public accounting firm at each regularly scheduled Audit Committee meeting. At the conclusion of the process, management provided the Audit Committee with a report on the effectiveness of our internal control over financial reporting. The Audit Committee also reviewed the report of management contained in our 2019 Annual Report on Form 10-K, as well as the Report of Independent Registered Public Accounting Firm and the Consolidated Financial Statements (included in the 2019 Annual Report on Form 10-K). These reports related to its audit of the consolidated financial statements. The Audit Committee continues to oversee our efforts related to our internal control over financial reporting and management’s preparations for the evaluations in 2019.

It should be noted that the members of our Audit Committee are not our employees and are not performing the functions of auditors or accountants. Accordingly, it is not the duty or responsibility of the Audit Committee or its members to conduct “field work” or other types of auditing or accounting reviews or procedures or to set auditor independence standards. Members of the Audit Committee necessarily rely on the information provided to them by management and the independent auditors. Accordingly, the Audit Committee’s considerations and discussions referred to above do not constitute assurance that the audit of our financial statements has been carried out in accordance with generally accepted auditing standards or that our auditors are in fact independent.

Based on the review and discussions referred to above, the Audit Committee recommended to the Board of Directors (and the Board of Directors approved) that the audited financial statements be included in our Annual Report on Form 10-K for the year ended December 31, 2019, for filing with the SEC. In addition, the Audit Committee recommended to the Board of Directors and the Board of Directors approved that BDO USA, LLP be appointed as our independent registered public accounting firm for the year ended December 31, 2019 and that this appointment be presented to stockholders for ratification.

Members of the Audit Committee:

Jeffrey Wolf (Chairman)  
Jeffrey J. Kraws  
Scott L. Tarriff

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<sup>1</sup>The material in this report is not “soliciting material,” is not deemed “filed” with the SEC and is not incorporated by reference in any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

## AUDIT FEES AND ALL OTHER FEES

### Independent Registered Public Accounting Firm Fees and Services

The following table sets forth the aggregate fees including expenses billed to us for the years ended December 31, 2019 and 2018 by BDO USA, LLP.

	December 31,	
	2019	2018
Audit Fees and Expenses (1)	\$ 295,000	\$ 346,000
	<u>\$ 295,000</u>	<u>\$ 346,000</u>

- (1) Audit fees and expenses were for professional services rendered for the audit and reviews of the consolidated financial statements of the Company, professional services rendered for issuance of consents and assistance with review of documents filed with the SEC.

### Audit Committee Pre-Approval Policy

The Audit Committee has adopted procedures for pre-approving all audit and non-audit services provided by the independent registered public accounting firm, including the fees and terms of such services. These procedures include reviewing detailed back-up documentation for audit and permitted non-audit services. The documentation includes a description of, and a budgeted amount for, particular categories of non-audit services that are recurring in nature and therefore anticipated at the time that the budget is submitted. Audit Committee approval is required to exceed the pre-approved amount for a particular category of non-audit services and to engage the independent registered public accounting firm for any non-audit services not included in those pre-approved amounts. For both types of pre-approval, the Audit Committee considers whether such services are consistent with the rules on auditor independence promulgated by the SEC and the Public Company Accounting Oversight Board (PCAOB). The Audit Committee also considers whether the independent registered public accounting firm is best positioned to provide the most effective and efficient service, based on such reasons as the auditor's familiarity with our business, people, culture, accounting systems, risk profile, and whether the services enhance our ability to manage or control risks and improve audit quality. The Audit Committee may form and delegate pre-approval authority to subcommittees consisting of one or more members of the Audit Committee, and such subcommittees must report any pre-approval decisions to the Audit Committee at its next scheduled meeting. All of the services provided by the independent registered public accounting firm were pre-approved by the Audit Committee.

### Required Vote

Approval of this proposal requires the affirmative vote of the holders of a majority of shares present in person or represented by proxy and entitled to vote on this matter at the 2020 Annual Meeting of Stockholders.

**OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR  
RATIFICATION OF THE SELECTION OF BDO USA, LLP AS OUR INDEPENDENT REGISTERED PUBLIC  
ACCOUNTING FIRM FOR THE YEAR ENDING DECEMBER 31, 2020.**

### PROPOSAL 3

#### APPROVAL OF THE SYNTHETIC BIOLOGICS, INC. 2020 STOCK INCENTIVE PLAN

Our 2010 Stock Incentive Plan (the “2010 Plan”) expires on September 27, 2020, and no grants of awards under the 2010 Plan may be made after that date. Our Board believes that it is in the best interests of the Company and its shareholders to have a new equity compensation plan adopted by the Board and approved by the shareholders so that the Company can continue to provide a means whereby eligible employees, officers, non-employee directors and other individual service providers develop a sense of proprietorship and personal involvement in the development and financial success of the Company and to encourage them to devote their best efforts to the business of the Company, thereby advancing the interests of the Company and its stockholders. Accordingly, on July 30, 2020, our Board adopted the 2020 Stock Incentive Plan (the “2020 Plan”), subject to the approval of our shareholders.

Approval of the 2020 Plan by the Company’s shareholders is required, among other things, in order to: (i) comply with NYSE American rules requiring stockholder approval of equity compensation plans and (ii) allow the grant to eligible employees of options that qualify as “incentive stock options” (or ISOs) under Section 422 of the Code.

In the event that the shareholders do not approve this proposal, the 2020 Plan will not become effective. Approval of the 2020 Plan by our shareholders will allow us to grant stock options, restricted stock unit awards and other awards at levels determined appropriate by our Board and/or compensation committee. The 2020 Plan will also allow us to utilize a broad array of equity incentives and performance cash incentives in order to secure and retain the services of our employees, directors and consultants, and to provide long-term incentives that align the interests of our employees, directors and consultants with the interests of our stockholders

#### *Purpose of the 2020 Plan*

The Board of Directors believes that the 2020 Plan is necessary for us to attract, retain and motivate our employees, directors and consultants through the grant of stock options, stock appreciation rights, restricted stock, restricted stock units and other equity-based or equity-related awards. We believe the 2020 Plan is best designed to provide the proper incentives for our employees, directors and consultants, ensures our ability to make performance-based awards, and meets the requirements of applicable law. There are currently sixteen individuals that would be eligible to participate in the 2020 Plan, of which four are directors or executive officers, nine are employees and three are consultants.

We manage our long-term stockholder dilution by limiting the number of equity incentive awards granted annually. Our Board of Directors monitors our annual stock award Burn Rate, Dilution and Overhang (each as defined below), among other factors, in its efforts to maximize stockholders’ value by granting what, in the Board of Directors’ judgment, are the appropriate number of equity incentive awards necessary to attract, reward, and retain employees, consultants and directors. The table below illustrates our Burn Rate, Dilution, and Overhang for the past three fiscal years with details of each calculation noted below the table.

	<u>2019</u>	<u>2018</u>
Burn Rate <sup>(1)</sup>	10.49%	10.77%
Dilution <sup>(2)</sup>	19.22%	6.06%
Overhang <sup>(3)</sup>	11.99%	5.58%

(1) Burn Rate is the number of shares subject to equity awards granted during a fiscal year/weighted average common shares outstanding for that fiscal year.

(2) Dilution is (the number of shares subject to equity awards + the number of shares available for future awards at the end of a fiscal year)/(number of shares outstanding at the end of the fiscal year + number of share subject to equity awards + number of shares available for future awards).

(3) Overhang is (the number of shares subject to equity awards at the end of a fiscal year)/(number of shares outstanding at the end of the fiscal year + number of shares subject to equity awards + number of shares available for future awards).

## Summary of the 2020 Stock Incentive Plan

The following is a summary of the principal features of the 2020 Plan. This summary does not purport to be a complete description of all of the provisions of the 2020 Plan and it is qualified in its entirety by reference to the full text of the 2020 Plan, a copy of which is attached to this proxy statement/prospectus as Annex A hereto.

**Available Shares.** An aggregate of 4,000,000 shares of the Company's common stock may be issued under the 2020 Plan, subject to equitable adjustment in the event of stock splits and other capital changes, all of which may be issued in respect of Incentive Stock Options (or ISOs) that meet the requirements of Section 422 of the Code.

In applying the aggregate share limitation under the 2020 Plan, shares of common stock (i) subject to awards that are forfeited, cancelled, returned to the Company for failure to satisfy vesting requirements or otherwise forfeited, or terminated without payment being made thereunder and (ii) that are surrendered in payment or partial payment of the exercise price of an option or taxes required to be withheld with respect to the exercise of stock options or in payment with respect to any other form of award are not counted and, therefore, may be made subject to new awards under the 2020 Plan.

### **Non-Employee Director Compensation Limit**

Under the 2020 Plan, no more than 100,000 shares of our common stock may be subject to stock awards granted under the 2020 Plan during any one calendar year to any non-employee director.

**Administration.** The 2020 Plan will be administered by the Compensation Committee of our Board (the "Compensation Committee"). The Compensation Committee has discretion to determine the individuals to whom awards may be granted under the 2020 Plan, the number of shares of common stock, units or other rights subject to each award, the type of award, the manner in which such awards will vest, and the other conditions applicable to awards. The Compensation Committee is authorized to interpret the 2020 Plan, to prescribe, amend and rescind any rules and regulations relating to the 2020 Plan and to make any other determinations necessary or desirable for the administration of the 2020 Plan. All interpretations, determinations and actions by the Compensation Committee are final, conclusive and binding on all parties.

**Eligibility.** Any employee, officer, director, consultant, advisor or other individual service provider of the Company or any of its subsidiaries, or any person who is determined by our Compensation Committee to be a prospective employee, officer, director, consultant, advisor or other individual service provider of the Company or any of its subsidiaries is eligible to participate in the 2020 Plan. As of July 30, 2020, the Company had approximately 10 full-time employees, including 1 executive officers, 3 non-employee directors, and 3 consultants, advisors and/or other individual service providers. As of July 30, 2020, no person is eligible to participate as a result of a determination by the Compensation Committee that that person is a prospective employee, director or consultant of our Company or any of our subsidiaries. As awards under the 2020 Plan are within the discretion of the Compensation Committee, we cannot determine how many individuals in each of the categories described above will receive awards.

**Types of Awards.** Under the 2020 Plan, the Compensation Committee may grant nonqualified stock options (or NSOs), incentive stock options (or ISOs), stock appreciation rights (or SARs), restricted stock, stock units, performance shares, performance units, other cash-based awards and other stock-based awards. The terms of each award will be set forth in a written agreement with the recipient.

**Stock Options.** The Compensation Committee will determine the exercise price and other terms for each option and whether the options will be NSOs or ISOs. The exercise price per share of each option will not be less than 100% of the fair market value of the Company's common stock on the date of grant or, if there are no trades on such date, then the closing price of a share of our common stock on the most recent date preceding the date of grant on which shares of common stock were publicly traded (or 110% of the fair market value per share in the case of ISOs granted to a ten-percent or more shareholder). However, if permissible under law and the rules of the exchange on which the Company is listed, options to participants who are not residents of the U.S. may be granted at a price below fair market value on the date of grant. On July 30, 2020, the closing sale price of a share of our common stock on the NYSE American was \$0.71.

ISOs may be granted only to employees and are subject to certain other restrictions. To the extent an option intended to be an ISO does not qualify as an ISO, it will be treated as a nonqualified option.

A participant may exercise an option by written notice and payment of the exercise price in cash, or, as determined by the Compensation Committee, through delivery of previously owned shares, the withholding of shares deliverable upon exercise, a cashless exercise program implemented by the Compensation Committee in connection with the 2020 Plan, and/or such other method as approved by the Compensation Committee and set forth in an award agreement. The maximum term of any option granted under the 2020 Plan is ten years from the date of grant (five years in the case of an ISO granted to a ten-percent or more shareholder). The Compensation Committee may, in its discretion, permit a holder of an NSO to exercise the option before it has otherwise become exercisable, in which case the shares of the Company's common stock issued to the recipient will be restricted stock having analogous vesting restrictions to the unvested NSO before exercise.

No option may be exercisable for more than ten years (five years in the case of an ISO granted to a ten-percent or more shareholder) from the date of grant. Options granted under the 2020 Plan will be exercisable at such time or times as the Compensation Committee prescribes at the time of grant. No employee may receive ISOs that first become exercisable in any calendar year in an amount exceeding \$100,000.

Unless an award agreement provides otherwise, if a participant's Service (as defined in the 2020 Plan) terminates (i) by reason of his or her death or Disability (as defined in the 2020 Plan), any option held by such participant may be exercised, to the extent otherwise exercisable, by the participant or his or her estate or personal representative, as applicable, at any time in accordance with its terms for up to one year after the date of such participant's death or termination of Service, as applicable, (ii) for Cause (as defined in the 2020 Plan), any option held by such participant will be forfeited and cancelled as of the date of termination of Service and (iii) for any reason other than death, Disability or Cause, any option held by such participant may be exercised, to the extent otherwise exercisable, up until ninety (90) days following termination of Service.

*Stock Appreciation Rights.* The Compensation Committee may grant SARs independent of or in connection with an option. The Compensation Committee will determine the other terms applicable to SARs. The base price per share of each SAR will not be less than 100% of the closing price of a share of the Company's common stock on the date of grant or, if there are no trades on such date, then the closing price of a share of the Company's common stock on the most recent date preceding the date of grant on which shares of common stock were publicly traded. The maximum term of any SAR granted under the 2020 Plan will be ten years from the date of grant. Generally, each SAR will entitle a participant upon exercise to an amount equal to the excess of the fair market value on the exercise date of one share of our common stock over the base price, multiplied by the number of shares of common stock as to which the SAR is exercised. Payment may be made in shares of Company common stock, in cash, or partly in shares of Company common stock and partly in cash, all as determined by the Compensation Committee.

*Restricted Stock and Stock Units.* The Compensation Committee may award restricted common stock and/or stock units under the 2020 Plan. Restricted stock awards consist of shares of stock that are transferred to a participant subject to restrictions that may result in forfeiture if specified conditions are not satisfied. Stock units confer the right to receive shares of the Company's common stock, cash, or a combination of shares and cash, at a future date upon or following the attainment of certain conditions specified by the Compensation Committee, subject to applicable tax withholding requirements. The Compensation Committee will determine the restrictions and conditions applicable to each award of restricted stock or stock units, which may include performance-based conditions. Unless the Compensation Committee determines otherwise at the time of grant, holders of restricted stock will have the right to vote the shares and receive all dividends and other distributions.

*Performance Shares and Performance Units.* The Compensation Committee may award performance shares and/or performance units under the 2020 Plan. Performance shares and performance units are awards, payable in shares of the Company's common stock, cash or a combination thereof, which are earned during a specified time period subject to the attainment of performance goals, as established by the Compensation Committee. The Compensation Committee will determine the restrictions and conditions applicable to each award of performance shares and performance units.

*Incentive Bonus Awards.* The Compensation Committee may award incentive bonus awards payable in cash or shares of common stock, as set forth in an award agreement. Incentive bonus awards may be based upon the attainment of specified levels of Company or subsidiary performance. The amount of an incentive bonus award to be paid upon the attainment of each targeted level of performance will equal a percentage of a participant's base salary for the fiscal year, a fixed dollar amount or such other formula, as determined by the Compensation Committee. The Compensation Committee will determine the terms and conditions applicable to each incentive bonus award.

*Other Stock-Based and Cash-Based Awards.* The Compensation Committee may award other types of stock-based or cash-based awards under the 2020 Plan, including the grant or offer for sale of unrestricted shares of the Company's common stock, in such amounts and subject to such terms and conditions as the Compensation Committee determines.

*Transferability.* Awards granted under the 2020 Plan will not be transferable other than by will or by the laws of descent and distribution, except that the Compensation Committee may permit NSOs, share-settled SARs, restricted stock, performance share or share-settled other stock-based awards to be transferred to family members and/or for estate planning or charitable purposes.

*Change in Control.* The Compensation Committee may, at the time of the grant of an award, provide for the effect of a change in control (as defined in the 2020 Plan) on any award, including (i) accelerating or extending the time periods for exercising, vesting in, or realizing gain from any award, (ii) eliminating or modifying the performance or other conditions of an award, (iii) providing for the cash settlement of an award for an equivalent cash value, as determined by the Compensation Committee, or (iv) such other modification or adjustment to an award as the Compensation Committee deems appropriate to maintain and protect the rights and interests of participants upon or following a change in control. Unless otherwise provided by an award agreement, the Compensation Committee may, in its discretion and without the need for the consent of any recipient of an award, also take one or more of the following actions contingent upon the occurrence of a change in control: (a) cause any or all outstanding options and SARs to become immediately exercisable, in whole or in part; (b) cause any other awards to become non-forfeitable, in whole or in part; (c) cancel any option or SAR in exchange for a substitute option and/or SAR; (d) cancel any award of restricted stock, stock units, performance shares or performance units in exchange for a similar award of the capital stock of any successor corporation; (e) redeem any restricted stock for cash and/or other substitute consideration with a value equal to the fair market value of an unrestricted share of the Company's common stock on the date of the change in control; or (f) terminate any award in exchange for an amount of cash and/or property equal to the amount, if any, that would have been attained upon the exercise of such award or realization of the participant's rights as of the date of the occurrence of the Change in Control (the "Change in Control Consideration"); provided, however that if the Change in Control Consideration with respect to any option or SAR does not exceed the exercise price of such option or SAR, the Compensation Committee may cancel the option or SAR without payment of any consideration therefor. Any such Change in Control Consideration may be subject to any escrow, indemnification and similar obligations, contingencies and encumbrances applicable in connection with the change in control to holders of the Company's common stock. Without limitation of the foregoing, if as of the date of the occurrence of the change in control the Compensation Committee determines that no amount would have been attained upon the realization of the participant's rights, then such award may be terminated by the Company without payment. The Compensation Committee may cause the Change in Control Consideration to be subject to vesting conditions (whether or not the same as the vesting conditions applicable to the award prior to the change in control) and/or make such other modifications, adjustments or amendments to outstanding Awards or the 2020 Plan as the Compensation Committee deems necessary or appropriate.

*Term; Amendment and Termination.* No award may be granted under the 2020 Plan on or after September 18, 2030. The board of directors may suspend, terminate, or amend the 2020 Plan in any respect at any time, provided, however, that (i) no amendment, suspension or termination may materially impair the rights of a participant under any awards previously granted, without his or her consent, (ii) the Company shall obtain stockholder approval of any 2020 Plan amendment as required to comply with any applicable law, regulation or stock exchange rule and (iii) stockholder approval is required for any amendment to the 2020 Plan that (x) increases the number of shares of common stock available for issuance thereunder or (y) changes the persons or class of persons eligible to receive awards.

#### **New Plan Benefits; Existing Plan Benefits**

No awards will be granted under the 2020 Plan prior to its approval by our shareholders. The grant of options and other awards under the 2020 Plan is discretionary, and we cannot determine now the number or type of options or other awards to be granted in the future to any particular person or group. The awards granted in 2019 under the 2010 Plan, which would not have changed if the 2020 Plan had been in place instead of the 2010 Plan, are set forth in the table below.

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**2010 Stock Incentive Plan**

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<b>Name and position</b>	<b>Number of shares subject to grant</b>
Steven A. Shallcross, Chief Executive Officer, Chief Financial Officer and Director	450,000
Joseph Sliman, Former Chief Medical Officer	-
Jeffrey J. Krawns, Chairman of the Board of Directors	250,000
Scott L. Tarriff, Director	250,000
Jeffrey Wolf, Director	250,000
All Current Executive Officers as a Group (one (1) persons)	450,000
All Current Non-Executive Directors as a Group (three (3) persons)	750,000
All Employees, including our current officers who are not Executive Officers as a group	410,000

**Material United States Federal Income Tax Consequences**

Following is a summary of the principal federal income tax consequences of option grants and other awards under the 2020 Plan. Optionees and recipients of other rights and awards granted under the 2020 Plan are advised to consult their personal tax advisors before exercising an option or stock appreciation right or disposing of any stock received pursuant to the exercise of an option or stock appreciation right or following vesting of a restricted stock award or restricted stock unit or upon grant of an unrestricted stock award. In addition, the following summary is based upon an analysis of the Code as currently in effect, existing laws, judicial decisions, administrative rulings, regulations and proposed regulations, all of which are subject to change and does not address state, local or other tax laws.

*Nonqualified Stock Options.* There will be no federal income tax consequences to a participant or to the Company upon the grant of a nonqualified stock option. When the participant exercises a nonqualified option, he or she will recognize ordinary income in an amount equal to the excess of the fair market value of the option shares on the date of exercise over the exercise price, and the Company will be allowed a corresponding tax deduction, subject to any applicable limitations under Code Section 162(m). Any gain that a participant realizes when the participant later sells or disposes of the option shares will be short-term or long-term capital gain, depending on how long the participant held the shares.

*Incentive Stock Options.* There will be no federal income tax consequences to a participant or to the Company upon the grant of an ISO. If the participant holds the option shares for the required holding period of at least two years after the date the option was granted and one year after exercise of the option, the difference between the exercise price and the amount realized upon sale or disposition of the option shares will be long-term capital gain or loss, and the Company will not be entitled to a federal income tax deduction. If the participant disposes of the option shares in a sale, exchange, or other disqualifying disposition before the required holding period ends, the participant will recognize taxable ordinary income in an amount equal to the difference between the exercise price and the lesser of the fair market value of the shares on the date of exercise or the disposition price, and the Company will be allowed a federal income tax deduction equal to such amount, subject to any applicable limitations under Code Section 162(m). Any amount received by the participant in excess of the fair market value on the exercise date will be taxed to the participant as capital gain, and the Company will receive no corresponding deduction. While the exercise of an ISO does not result in current taxable income, the excess of the fair market value of the option shares at the time of exercise over the exercise price will be a tax preference item that could subject a participant to alternative minimum tax in the year of exercise.

*Stock Appreciation Rights.* A participant will not recognize income, and the Company will not be allowed a tax deduction, at the time a SAR is granted. When a participant exercises a SAR, the cash or fair market value of any common stock received will be taxable to the participant as ordinary income, and the Company will be allowed a federal income tax deduction equal to such amount, subject to any applicable limitations under Code Section 162(m).

*Restricted Stock.* Unless a participant makes an election to accelerate recognition of income to the grant date as described below, the participant will not recognize income, and the Company will not be allowed a compensation tax deduction, at the time restricted stock is granted. When the restrictions lapse, the participant will recognize ordinary income equal to the fair market value of the common stock as of that date, less any amount paid for the stock, and the Company will be allowed a corresponding tax deduction, subject to any applicable limitations under Code Section 162(m). If the participant files an election under Code Section 83(b) within 30 days after the grant date, the participant will recognize ordinary income as of the grant date equal to the fair market value of the stock as of that date, less any amount paid for the stock, and the Company will be allowed a corresponding compensation tax deduction at that time, subject to any applicable limitations under Code Section 162(m). Any future appreciation in the stock will be taxable to the participant at capital gains rates. However, if the stock is later forfeited, such participant will not be able to recover the tax previously paid pursuant to the Code Section 83(b) election.

*Stock Units, Performance Awards, and Incentive Bonus Awards.* A participant will not recognize income, and the Company will not be allowed a compensation tax deduction, at the time a stock unit, performance award or incentive bonus award is granted. When a participant receives payment under a stock unit, performance award or incentive bonus award, the amount of cash received and the fair market value of any shares of stock received will be ordinary income to the participant, and the Company will be allowed a corresponding compensation tax deduction at that time, subject to any applicable limitations under Code Section 162(m).

*Section 409A.* If an award is subject to Section 409A of the Code, but does not comply with the requirements of Section 409A of the Code, the taxable events as described above could apply earlier than described, and could result in the imposition of additional taxes and penalties. Participants are urged to consult with their tax advisors regarding the applicability of Section 409A of the Code to their awards.

*Potential Limitation on Company Deductions.* Section 162(m) of the Code generally disallows a tax deduction for compensation in excess of \$1 million paid in a taxable year by a publicly held corporation to its chief executive officer and certain other “covered employees”. The Company’s board of directors and the Compensation Committee intend to consider the potential impact of Section 162(m) on grants made under the 2020 Plan, but reserve the right to approve grants of options and other awards for an executive officer that exceeds the deduction limit of Section 162(m).

*Tax Withholding.* As and when appropriate, each optionee purchasing shares of the Company’s common stock and each grantee receiving an award of shares of the Company’s common stock under the 2020 Plan will be required to pay any federal, state or local taxes required by law to be withheld.

**Required Vote**

Approval of this proposal requires the affirmative vote of the holders of a majority of shares present in person or represented by proxy and entitled to vote on this matter at the 2020 Annual Meeting of Stockholders.

**OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR THE APPROVAL  
OF OUR 2020 STOCK INCENTIVE PLAN.**

## EXECUTIVE COMPENSATION

### Summary Compensation Table

We are a “smaller reporting company” and the following compensation disclosure is intended to comply with the requirements applicable to smaller reporting companies. Although the rules allow us to provide less detail about its executive compensation program, the Compensation Committee is committed to providing the information necessary to help stockholders understand its executive compensation-related decisions. Accordingly, this section includes supplemental narratives that describe the 2019 executive compensation program for our Named Executive Officers.

The following table summarizes all compensation awarded to, earned by or paid to Steven A. Shallcross and Joseph Sliman, our Named Executive Officers, during the fiscal years presented below.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Options Awards (\$) <sup>(1)</sup>	All Other Compensation (\$) <sup>(2)</sup>	Total (\$)
Steven Shallcross	2019	550,000 <sup>(3)</sup>	412,500 <sup>(4)</sup>	118,801	\$ 27,308	1,108,609
Chief Executive Officer and Chief Financial Officer	2018	489,421	357,863	89,789	\$ 26,338	963,411
Joseph Sliman <sup>(5)</sup>	2019	18,716	-	-	\$ 16,166	34,882
Chief Medical Officer	2018	385,000	-	-	\$ 17,068	402,068

- (1) Amount reflects the grant date fair value of the Named Executive Officer’s stock options, calculated in accordance with FASB ASC Topic 718. For a discussion of the assumptions used in calculating these values, see Note 5 to our consolidated financial statements. In December 2018, Mr. Shallcross was issued an option to purchase 200,000 shares of common stock; the awards vest monthly over 36 months.
- (2) The all other compensation column is comprised of vacation accrual paid, and the portion of medical, dental and vision premiums paid by us on behalf of our Named Executive Officers. These benefits are offered to all Synthetic Biologics’ employees who work at least 17.5 hours per week.
- (3) Mr. Shallcross was appointed as our Chief Executive Officer on December 6, 2018. Mr. Shallcross’ annual salary is \$550,000 commencing December 6, 2018 and increased to \$565,000 on December 5, 2019.
- (4) These bonuses were earned in 2019 and paid in 2020.
- (5) Dr. Sliman was appointed our Chief Medical Officer effective January 17, 2017. His agreement expired January 16, 2019 and was not renewed.

## Outstanding Equity Awards at Fiscal Year End

The table below reflects all outstanding equity awards made to each of the Named Executive Officers that are outstanding at December 31, 2019. We currently grant stock-based awards pursuant to our 2010 Stock Incentive Plan (the “2010 Stock Plan”) and have outstanding awards under our 2001 Stock Incentive Plan (the “2001 Stock Plan”) and 2007 Stock Incentive Plan (the “2007 Stock Plan”).

Name	Grant Date <sup>(1)</sup>	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options Unexercisable	Option Exercise Price (\$)	Option Expiration Date
Steven Shallcross	12/06/19	-	450,000	\$ 0.42	12/04/26
	12/20/18	66,666	133,334	\$ 0.69	12/06/25
	12/20/17	10,477	5,239	\$ 18.20	12/20/24
	11/30/16	14,286	-	\$ 28.00	11/30/23
	12/04/15	2,858	-	\$ 96.60	12/04/22
	06/01/15	25,715	-	\$ 75.60	06/01/25

(1) Shallcross Options will vest pro rata, on a monthly basis, over 36 months.

## COMPENSATION DISCUSSION AND ANALYSIS

### Overview of Our Compensation Program

#### A. Philosophy and Objectives

The Compensation Committee seeks to attract and retain executive talent by offering competitive base salaries, bonuses and long-term incentives. The Compensation Committee’s philosophy is to provide a compensation package that attracts and retains superior executive talent and delivers higher rewards for superior performance and consequences for underperformance. It is also the Compensation Committee’s practice to provide a balanced mix of cash and equity-based compensation that aligns both the short and long-term interests of our executives with that of our stockholders. Our executive compensation program is based on the following philosophies and objectives:

*Compensation Should Align with Stockholders’ Interests* — The Compensation Committee believes that executives’ interests should be aligned with those of the stockholders. Executives are granted stock options so that their total compensation is tied directly to the same value realized by our stockholders. Executive bonuses are tied directly to the value that we gain from an executive’s contribution to our success as a whole.

*Compensation is Competitive* — The Compensation Committee seeks to provide a total compensation package that attracts, motivates and retains the executive talent that we need in order to maximize the company’s return to stockholders. To accomplish this objective, executive compensation is reviewed annually to ensure that compensation levels are competitive and reasonable given our level of performance and other comparable companies with which we compete for talent.

*Compensation Motivates and Rewards the Achievement of Goals* — Our executive compensation program is designed to appropriately reward both individual and collective performance that meets and exceeds our annual, long-term and strategic goals. To accomplish this objective, a substantial percentage of total compensation is variable and “at risk”, both through annual incentive compensation and the granting of long-term incentive awards.

#### B. Oversight of Executive Compensation

##### *Role of the Compensation Committee*

Pursuant to the terms of its charter, the Compensation Committee is responsible for the review of all aspects of our executive compensation program and makes decisions regarding the compensation of the Named Executive Officers. Our Named Executive Officers for the year ended December 31, 2019 were as follows: Steven Shallcross, our Chief Executive Officer and Joseph Sliman, our former Chief Medical Officer.

The Compensation Committee's responsibilities include but are not limited to the following:

- Establishing on an annual basis the performance goals and objectives for purposes of determining the compensation of our Chief Executive Officer and other senior executive officers.
- Evaluating the Chief Executive Officer's and other Named Executive Officer's performance at least annually in light of those goals and objectives, and based upon these evaluations setting the compensation level for those officers.
- Reviewing the competitive position of, and making recommendations to, the Board of Directors with respect to the cash-based and equity-based compensation plans and our programs relating to compensation and benefits.
- Overseeing administration of our stock option plan and incentive compensation plans, making recommendations to the Board of Directors regarding the granting of options and incentives and otherwise assisting the Board of Directors in administering awards under these plans.
- Reviewing the financial performance and operations of our major benefit plans.

Additional information regarding the Compensation Committee's responsibilities is set forth in its charter, which is posted on our website at [www.syntheticbiologics.com](http://www.syntheticbiologics.com).

#### ***Role of the Chief Executive Officer***

Our Chief Executive Officer makes recommendations to the Compensation Committee regarding the compensation of our other Named Executive Officers, if any. The Chief Executive Officer does not participate in any discussions or processes concerning his own compensation and participates in a non-voting capacity in discussions or processes concerning the compensation of our other members of management. In addition to our Chief Executive Officer, our other Named Executive Officers, as well as members of our management and consultants also attend Compensation Committee meetings from time to time and may take part in discussions of executive compensation.

#### **C. Program Design**

The Compensation Committee uses a simple and straightforward approach in compensating our Named Executive Officers in which base salary, annual incentives and stock options are the principal components. In addition, executive officers generally participate in the same benefit programs as other full-time employees.

Our executive compensation program is designed to provide executives with a reasonable level of fixed compensation through base salary and benefits, and an opportunity to earn incentive compensation through the annual and long-term incentive programs based on a mix of individual and corporate performance, individual performance and the value of our stock. We do not currently have formal policies for allocating compensation among base salary, performance-based bonus and equity awards. Instead our Compensation Committee uses its judgment to establish a total direct compensation opportunity for each Named Executive Officer that is a mix of current, short-term and long-term incentive compensation and cash and non-cash compensation that it believes appropriate to achieve the goals of our executive compensation program and corporate objectives. Our target pay mix places a significant emphasis on performance based variable compensation. The incentive plans are designed to pay well when performance meets or exceeds expectations and pay little or no incentive if performance is below expectations.

In designing and implementing our executive compensation program, our Compensation Committee considers our company's operating and financial objectives, including our risk profile, and the effect that its executive compensation decisions will have on encouraging our executive officers to take an appropriate level of business risk consistent with our overall goal of enhancing long-term stockholder value. In particular, the Compensation Committee considers those business risks identified in our risk factors and the known trends and uncertainties identified in our management discussion and analysis and considers how our executive compensation program serves to achieve our operating and financial objectives while at the same time mitigating any incentives for our executive officers to engage in excessive risk-taking to achieve short-term results that may not be sustainable in the long-term.

As an executive's level of responsibility increases, the Compensation Committee generally targets a greater portion of the executive's compensation to be contingent upon performance. For example, historically our Named Executive Officers have a higher percentage of compensation at risk (and thus greater upside and downside potential) relative to our other employees. The Compensation Committee believes this is appropriate because our Named Executive Officers have the greatest influence on our performance. During 2019, the salary for our Chief Executive Officer who also serves as our Chief Financial Officer was 49.6% of his compensation package and performance based variable compensation comprised 48% of the compensation packages. Of the performance based variable compensation, 22% was equity incentive performance-based compensation and 78% was cash compensation.

## **D. Compensation Review Process**

The Compensation Committee annually reviews compensation for our Named Executive Officers. The Compensation Committee considers the executive's role and responsibilities, corporate and individual performance, and industry-wide compensation practices and trends for other companies of similar size. This approach is used to set base salaries, bonuses, stock option award levels and the mix of compensation elements.

We strive to attract and retain the most highly qualified executive officers in an extremely competitive market. Our Compensation Committee believes that it is important when making its compensation decisions to be informed as to the competitive market for executive talent, including the current practices of comparable public companies with which we compete for such talent. Consequently, our Compensation Committee primarily reviewed survey data which it had used in the prior year to aid in assessment of our Named Executive Officers pay program, a review of the KornFerry November 2017 report that had been provided to the Compensation Committee and their own analysis of companies that they considered to be similarly situated in terms of industry, number of employees and financial position. With respect to its analysis of the compensation of the Chief Executive Officer, although the Compensation Committee took into account the data from the survey and report which included compensation for chief executive officers and chief financial officers separately, due to the fact that our Chief Executive Officer also serves as our Chief Financial Officer, which is not typical for most companies, the Compensation Committee analysis included a blended analysis of the compensation for the two roles.

While the Compensation Committee does take into consideration the data it reviewed, the Committee does not attempt to benchmark our executive compensation against any specific level, range, or percentile of compensation paid at any other companies, does not apply any specific measures of internal or external pay equity in reaching its conclusions, and does not employ tally sheets, wealth accumulation, or similar tools in its analysis. Rather, the Compensation Committee reviews compensation data from the survey and report mentioned above, as reference points in making executive compensation decisions especially in light of the fact that our Chief Executive Officer is also performing the role of Chief Financial Officer. The Compensation Committee's general aim is for our compensation to remain competitive with the market, falling above or below the median of the market data as appropriate based on corporate and individual executive performance, and other factors deemed to be appropriate. Competitive market positioning is only one of several factors, as described below, that the Compensation Committee considers in making compensation decisions, and therefore individual Named Executive Officer compensation may fall at varying levels as compared to the market data.

Our Compensation Committee values the opinion of our stockholders. At our 2019 Annual Meeting of Stockholders approximately 59% of the votes that were cast (excluding broker non-votes) were cast in favor of our say-on-pay proposal adopting a resolution approving the compensation paid to our Named Executive Officers as disclosed in our proxy statement for our 2019 Annual Meeting of Stockholders. In addition, at our 2019 Annual Meeting of Stockholders the greatest number of votes were cast in favor of a three (3) year frequency for holding an advisory vote on executive compensation. Accordingly, our Compensation Committee decided not to make any significant changes to the executive compensation policies; however, our Compensation Committee continues to monitor and evaluate our compensation program in light of our stockholders' views and our transforming business needs.

## **E. Components of Compensation**

We provide four compensation components to Named Executive Officers:

- base salary;
- bonuses based on the achievement of specified goals and objectives;
- long-term incentives; and benefits

### **1. Base Salaries**

We provide our Named Executive Officers a base salary commensurate with their position, responsibilities and experience. In setting the base salary, the Compensation Committee considers the scope and accountability associated with each Named Executive Officer's position and such factors as performance and experience of each Named Executive Officer. We design base pay to provide the essential reward for an employee's work and are required to be competitive in attracting talent. Once base pay levels are initially determined, increases in base pay may be provided to recognize an employee's specific performance achievements. The base salaries are targeted to be competitive with other similar biotechnology companies. Base salaries for the Named Executive Officers are set by their respective employment contracts and are reviewed annually by the Compensation Committee. Our Chief Executive Officer typically makes performance assessments of our other employees throughout the year, and provides ongoing feedback to employees, provides resources and maximizes individual and team performance levels. Upon the appointment of Mr. Shallcross to serve as our Chief Executive Officer in December 2018 and in light of the fact that he also serves as our Chief Financial Officer, it was determined that his overall compensation levels were not competitive with the peer group and therefore his annual base salary was increased to \$550,000, which was the same annual base salary as that of our prior Chief Executive Officer. Prior to his appointment as Chief Executive Officer, from December 2017 until December 2018 Mr. Shallcross served as the Interim Chief Executive Officer in addition to serving as our Chief Financial Officer and his annual base salary for serving as Chief Financial Officer was \$381,150 and he received an additional \$8,000 per month for his service as Interim Chief Executive Officer. Mr. Shallcross' current employment agreement, dated December 6, 2018, was amended (the "Amended Employment Agreement") on December 5, 2019 to reflect a 3% cost of living adjustment to Mr. Shallcross' base salary, increasing his annual base salary to \$565,000.

Our former Chief Medical Officer, Dr. Sliman, received an annual base salary of \$385,000 for the two years that he served as our Chief Medical Officer.

The 2019 and current base salary for our Chief Executive Officer who also serves as our Chief Financial Officer is:

<b>Named Executive Officer</b>	<b>2019</b>	<b>2020</b>
	<b>Base Salary</b>	<b>Base Salary</b>
Steven A. Shallcross, Chief Executive Officer and Chief Financial Officer	\$ 550,000	\$ 565,000

## 2. Bonuses

The Compensation Committee also makes recommendations to the full Board of Directors for determining bonuses. The Compensation Committee also used information from the report and analysis discussed above in determining bonuses as well as its own research of peer company compensation. For the year ended December 31, 2019, the Compensation Committee approved a \$412,500 cash bonus and an option grant exercisable for 450,000 shares of our common stock for Mr. Shallcross.

The employment agreement with Mr. Shallcross that was in effect during 2019 provided that he was eligible for a bonus of up to seventy five percent (75%) of his base salary (a “Target Bonus”) in cash or equity and Mr. Shallcross received a cash bonuses with a value equal to approximately seventy five percent (75%) of his Target Bonus. The bonuses are to be rewarded based on whether, in the discretion of the Compensation Committee and the Board of Directors, our company and the Named Executive Officer met certain objectives established by the Compensation Committee or the Board of Directors. The Compensation Committee believes that the granting of a bonus is appropriate to motivate the Named Executive Officers. The Compensation Committee focuses on individual performance, which enables the Compensation Committee to differentiate among executives and emphasize the link between personal performance and compensation. Although the Compensation Committee does not use any fixed formula in determining bonuses, it does link them to financial objectives of importance to it. The following factors, in addition to the market data from the survey, were among those reviewed in determining the bonus for Mr. Shallcross: successful filings of all SEC reports in a timely manner; commencement of enrollment in the Phase 2b investigator sponsored study for SYN-010, engagement of AutoCruitment to aid with study enrollment, completion of toxicology studies, manufacturing and assay development work for SYN-020, successful pre-IND meeting with FDA for SYN-020, entering into the clinical trial agreement with Washington University for an investigator initiated study of SYN-004(ribaxamase) in allogeneic hematopoietic cell transplant (HCT) patients, completion of Phase 1/2 study protocol and successful Type C meeting with FDA and successful management of our cash position during a challenging environment.

## 3. Long-Term Incentives

The Compensation Committee believes that a substantial portion of the Named Executive Officer’s compensation should be awarded in equity-based compensation since equity-based compensation is directly linked to the interests of stockholders. The Compensation Committee has elected to grant stock options to the Named Executive Officers and other key employees as the primary long-term incentive vehicle. In making this determination, the Compensation Committee considered a number of factors including: the accounting impact, potential value of stock option grants versus other equity instruments and cash incentives, and the alignment of equity participants with stockholders. The Compensation Committee determined to grant stock options to:

- enhance the link between the creation of stockholder value and executive compensation;
- provide an opportunity for equity ownership;
- act as a retention tool; and
- provide competitive levels of total compensation.

Mr. Shallcross’ 2018 and 2019 bonus included a grant of options exercisable for 200,000, and 450,000 shares of common stock, respectively. The stock options granted vest in equal monthly installments over a three-year term and are subject to the recipient’s continued employment, therefore acting as a significant retention incentive.

The Compensation Committee reviews the performance, potential burn rates and dilution levels to create an option pool that may be awarded to employee participants. Grants to the Named Executive Officers were determined by the Compensation Committee after reviewing market data, including the reports and analysis discussed above and after considering each executive’s performance, role and responsibilities.

The Compensation Committee does not seek to time equity grants to take advantage of information, either positive or negative, about our company that has not been publicly disclosed. Option grants are effective on the date the award determination is made by the Compensation Committee and the exercise price of options is the closing market price of our common stock on the business day of the grant or, if the grant is made on a weekend or holiday, on the prior business day.

#### **4. Benefits**

Executive Officers are eligible to participate in our standard medical, dental, vision, disability insurance, life insurance plans and other health and welfare plans provided to other full-time employees.

##### *Pension Benefits*

We do not currently provide pension arrangements or post-retirement health coverage for our employees, although we may consider such benefits in the future.

##### *Retirement Benefits*

Executive Officers are eligible to participate in our 401(k) contributory defined contribution plan. Pursuant to our 401(k) plan, all eligible employees, including our Named Executive Officer, are provided with a means of saving for their retirement. We currently match all participating employee contributions up to maximum of 4 percent of compensation which vest immediately.

##### *Nonqualified Deferred Compensation*

We do not provide any nonqualified deferred compensation plans to our employees, although we may consider such benefits in the future.

#### **Conclusion**

Attracting and retaining talented and motivated management and key employees is essential to creating long-term stockholder value. Offering a competitive, performance-based compensation program with a substantial equity component helps to achieve this objective by aligning the interests of the executive officers and other key employees with those of stockholders. We believe that our compensation program met these objectives and that our 2019 compensation program was appropriate in light of the challenges we and our employees face.

#### **Risk Analysis of Our Compensation Program**

Our Compensation Committee has reviewed our compensation policies as generally applicable to our employees and believes that our policies do not encourage excessive or inappropriate risk taking and that the level of risk that they do encourage is not reasonably likely to have a material adverse effect on us. As part of its assessment, the Compensation Committee considered, among other factors, the allocation of compensation among base salary and short- and long-term compensation, our approach to establishing company-wide and individual financial, operational and other performance goals.

#### **Employment Agreements**

*Steven A. Shallcross, Chief Executive Officer, Chief Financial Officer*

On December 6, 2018, we entered into a three-year employment agreement with Mr. Shallcross (the "Shallcross Employment Agreement"), to serve as the Chief Executive Officer and to continue to serve as our Chief Financial Officer. Mr. Shallcross has served as our Chief Financial Officer since June 1, 2015, initially pursuant to the terms of a two year employment agreement that we entered into with him on April 28, 2015 (the "Initial Shallcross Employment Agreement") that provided for an annual base salary of \$315,000, which was increased to \$346,500 in 2016 and \$381,150 in 2017. Mr. Shallcross also served as our Interim Chief Executive Officer from December 5, 2017 until his appointment as Chief Executive Officer in December 2018. Effective December 20, 2017, we entered into an amendment to the Initial Shallcross Employment Agreement dated April 28, 2015, as amended on December 1, 2016 and May 31, 2017, that increased Mr. Shallcross' annual base salary to \$381,150 and for the period that Mr. Shallcross served as Interim Chief Executive Officer, it provided that he receive a cash payment of \$8,000 per calendar month; pro-rated for any partial months that Mr. Shallcross serves as Interim Chief Executive Officer. The Shallcross Employment Agreement replaced the Initial Shallcross Employment Agreement. In addition, Mr. Shallcross was appointed as a director of the Company. Mr. Shallcross does not receive additional compensation for service as our director. The material terms of the Shallcross Employment Agreement are set forth below.

Pursuant to the Shallcross Employment Agreement, as amended, Mr. Shallcross is entitled to an annual base salary of \$565,000 and an annual performance bonus of up to seventy five percent (75%) of his annual base salary. The annual bonus will be based upon the assessment of the Board of Mr. Shallcross's performance. The Shallcross Employment Agreement also includes confidentiality obligations and inventions assignments by Mr. Shallcross and non-solicitation and non-competition provisions.

The Shallcross Employment Agreement has a stated term of three years but may be terminated earlier pursuant to its terms. If Mr. Shallcross's employment is terminated for any reason, he or his estate as the case may be, will be entitled to receive the accrued base salary, vacation pay, expense reimbursement and any other entitlements accrued by him to the extent not previously paid (the "Accrued Obligations"); provided, however, that if his employment is terminated (i) by us without Cause or by Mr. Shallcross for Good Reason (as each is defined in the Shallcross Employment Agreement) then in addition to paying the Accrued Obligations, (a) we will continue to pay his then current base salary and continue to provide benefits at least equal to those that were provided at the time of termination for a period of twelve (12) months and (b) he shall have the right to exercise any vested equity awards until the earlier of six (6) months after termination or the remaining term of the awards; or (ii) by reason of his death or Disability (as defined in the Shallcross Employment Agreement), then in addition to paying the Accrued Obligations, Mr. Shallcross would have the right to exercise any vested options until the earlier of six (6) months after termination or the remaining term of the awards. In such event, if Mr. Shallcross commenced employment with another employer and becomes eligible to receive medical or other welfare benefits under another employer-provided plan, the medical and other welfare benefits to be provided by us as described herein would terminate.

The Shallcross Employment Agreement provides that upon the closing of a "Change in Control" (as defined in the Shallcross Employment Agreement), all unvested options shall immediately vest and the time period that Mr. Shallcross will have to exercise all vested stock options and other awards that Mr. Shallcross may have will be equal to the shorter of: (i) six (6) months after termination, or (ii) the remaining term of the award(s). If within one (1) year after the occurrence of a Change in Control, Mr. Shallcross terminates his employment for "Good Reason" or we terminate Mr. Shallcross's employment for any reason other than death, disability or Cause, Mr. Shallcross will be entitled to receive: (i) the portion of his base salary for periods prior to the effective date of termination accrued but unpaid (if any); (ii) all unreimbursed expenses (if any); (iii) an aggregate amount (the "Change in Control Severance Amount") equal to two (2) times the sum of his base salary plus an amount equal to the bonus that would be payable if the "target" level performance were achieved under the Company's annual bonus plan (if any) in respect of the fiscal year during which the termination occurs (or the prior fiscal year if bonus levels have not yet been established for the year of termination); and (iv) the payment or provision of any other benefits. If within two (2) years after the occurrence of a Change in Control, Mr. Shallcross terminates his employment for "Good Reason" or we terminate Mr. Shallcross's employment for any reason other than death, disability or Cause, Mr. Shallcross will be entitled to also receive for the period of two (2) consecutive years commencing on the date of such termination of his employment, medical, dental, life and disability insurance coverage for him and the members of his family that are not less favorable to him than the group medical, dental, life and disability insurance coverage carried by us for him.

The Change in Control Severance Amount is to be paid in a lump sum if the Change in Control event constitutes a "change in the ownership" or a "change in the effective control" of the Company or a "change in the ownership of a substantial portion of a corporation's assets" (each within the meaning of Section 409A of the Internal Revenue Code ("Rule 409A")), or in 48 substantially equal payments, if the Change in Control event does not so comply with Section 409A.

On December 4, 2019, the Board awarded Steven A. Shallcross, the Company's Chief Executive Officer and Chief Financial Officer, (i) a cash bonus equal to his full target bonus of 75% of his prior base salary and (ii) an option to purchase 450,000 shares of our common stock. The stock option granted to Mr. Shallcross has an exercise price of \$0.418 per share, which is the closing price of the Common Stock on the date of the grant (December 4, 2019), vests pro rata, on a monthly basis, over 36 consecutive months and expires in seven (7) years from the date of the grant, unless terminated earlier. The stock option was granted pursuant to our 2010 Stock Incentive Plan, as amended, and our effective registration statement on Form S-8 for the 2010 Stock Incentive Plan. In addition, the Shallcross Employment Agreement was amended on December 5, 2019 to reflect a 3% cost of living adjustment to Mr. Shallcross' base salary, increasing his annual base salary to \$565,000.

*Dr. Joseph Sliman, Former Chief Medical Officer*

On January 17, 2017, we entered into a two-year employment agreement with Dr. Joseph Sliman (the "Sliman Employment Agreement"), who was promoted from the position of Senior Vice President—Clinical & Regulatory Affairs to the position of Chief Medical Officer, which agreement expired in January 2019 and was not renewed. On October 9, 2018, we received a letter from Dr. Sliman, purporting to provide notice of a right to terminate the Sliman Employment Agreement for "good reason", alleging a material reduction in his duties, authorities, and responsibilities as an executive of the Company. The matter has since been resolved.

Pursuant to the terms of the Sliman Employment Agreement, Dr. Sliman was entitled to an annual base salary of \$385,000 and an annual performance bonus of up to seventy five percent (75%) of his annual base salary. The annual bonus was to be based upon the assessment of the Board of Dr. Sliman's performance. Dr. Sliman was also granted a seven year incentive stock option to purchase 188,927 shares of our common stock, vesting pro rata on a monthly basis over a three year period. Dr. Sliman also signed a standard agreement that also includes confidentiality obligations and inventions assignments by Dr. Sliman and non-solicitation and non-competition provisions.

The Sliman Employment Agreement had a stated term of two years but provided that it could be terminated earlier pursuant to its term. The Sliman Agreement provided that if Dr. Sliman's employment was terminated for any reason, he or his estate as the case may be, would be entitled to receive the accrued base salary, vacation pay, expense reimbursement and any other entitlements accrued by him to the extent not previously paid (the "Accrued Obligations"); provided, however, that if his employment were terminated (1) by us without Cause or by the Executive for Good Reason (as each is defined below) then in addition to paying the Accrued Obligations, (x) we would be obligated to continue to pay his then current base salary and continue to provide benefits at least equal to those which were provided at the time of termination for a period of 12 months and (y) he would have the right to exercise any vested equity awards until the earlier of six months after termination or the remaining term of the awards, or (2) by reason of his death or Disability (as defined in each of the Sliman Employment Agreement), then in addition to paying the Accrued Obligations, he would have the right to exercise any vested options until the earlier of six months after termination or the remaining term of the awards. In such event, if Dr. Sliman commenced employment with another employer and became eligible to receive medical or other welfare benefits under another employer-provided plan, the medical and other welfare benefits to be provided by us as described herein terminates.

The Sliman Employment Agreement provided for similar provisions upon a "Change in Control" (as defined in the Sliman Employment Agreement, as in the Shallcross Employment Agreement

For purpose of the Sliman Employment Agreement, "Good Reason" was defined as the occurrence of any of the following events without Dr. Sliman's consent: (i) a material reduction in Dr. Sliman's base salary (other than an across-the-board decrease in base salary applicable to all of our executive officers); (ii) a material breach of the employment agreement by us; (iii) a material reduction in Dr. Sliman's duties, authority and responsibilities relative to Dr. Sliman's duties, authority, and responsibilities in effect immediately prior to such reduction; or (iv) the relocation of Dr. Sliman's principal place of employment, without Dr. Sliman's consent, in a manner that lengthens his one-way commute distance by fifty (50) or more miles from his then-current principal place of employment immediately prior to such relocation.

For purposes of the Sliman Employment Agreement, "Cause" was defined as that Dr. Sliman shall have engaged in any of the following acts or that any of the following events shall have occurred, all as determined by the Board of Directors in its sole and absolute discretion: (i) gross insubordination, acts of embezzlement or misappropriation of funds, fraud, dereliction of fiduciary obligations; (ii) conviction of a felony or other crime involving moral turpitude, dishonesty or theft (including entry of a *nolo contendere* plea); (iii) willful unauthorized disclosure of confidential information belonging to the us or entrusted to us by a client; (iv) material violation of any provision of the employment agreement, of any of our policies, and/or of a confidentiality agreement, which, to the extent it is curable by Dr. Sliman, is not cured by Dr. Sliman within 30 days of receiving written notice of such violation by us; (v) being under the influence of drugs (other than prescription medicine or other medically related drugs to the extent that they are taken in accordance with their directions) during the performance of Dr. Sliman's duties; (vi) engaging in certain behavior; or (vii) willful failure to perform his written assigned tasks, where such failure is attributable to the fault of Dr. Sliman which, to the extent it is curable by Dr. Sliman, is not cured by Dr. Sliman within 30 days of receiving written notice of such violation by us.

## SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information, as of July 30, 2020, or as otherwise set forth below, with respect to the beneficial ownership of our common stock (i) all persons known to us to be the beneficial owners of more than 5% of the outstanding shares of our common stock; (ii) each of our directors and our named executive officers named in the Summary Compensation Table; and (iii) all of our directors and our executive officer as a group.

<b>Name and Address of Beneficial Ownership (2)</b>	<b>Shares Owned (1)</b>	
	<b>Number of Shares Owned</b>	<b>Percentages of Shares (3)</b>
Jeffrey J. Kraws <sup>(4)</sup>	68,765	*
Steven Shallcross <sup>(5)</sup>	317,940	*
Scott L. Tarriff <sup>(6)</sup>	79,848	*
Jeffrey Wolf <sup>(7)</sup>	62,229	*
Joseph Sliman <sup>(8)</sup>		
All current officers and directors as a group (5 persons)	528,782	2.69%
Hudson Bay Capital Management LP and affiliates <sup>(9)</sup>	1,882,002	9.99%
Iroquois Capital Management, L.L.C. and affiliates <sup>(10)</sup>	1,880,308	9.99%

\* represents less than 1% of our common stock

- (1) The address for each officer and directors is 9605 Medical Center, Suite 270, Rockville, Maryland 20850.
- (2) Beneficial ownership is determined in accordance with SEC rules and generally includes voting or investment power with respect to securities. Except as indicated in the footnotes to the table, to the knowledge of the Company, the persons named in the table have sole voting and investment power with respect to all shares of common stock, options and/or warrants shown as beneficially owned by them, subject to community property laws, where applicable. Pursuant to the rules of the SEC, the number of shares of our common stock deemed outstanding includes shares issuable pursuant to options held by the respective person or group that are currently exercisable or may be exercised within 60 days of July 30, 2020.
- (3) As of July 30, 2020, the Company had 19,440,346 shares of common stock outstanding.
- (4) Includes 62,229 shares issuable upon exercise of options held by Mr. Kraws that are exercisable within the 60-day period following July 30, 2020. Does not include an additional 285,334 shares issuable upon exercise of options held by Mr. Kraws that are not exercisable within the 60-day period following July 30, 2020.
- (5) Includes 267,940 shares issuable upon exercise of options held by Mr. Shallcross that are exercisable within the 60-day period following July 30, 2020. Does not include an additional 440,635 shares issuable upon exercise of options held by Mr. Shallcross that are not exercisable within the 60-day period following July 30, 2020.
- (6) Includes (i) 8,572 shares purchased from us in our November 2016 offering, (ii) 62,705 shares issuable upon exercise of options held by Mr. Tarriff that are exercisable within the 60-day period following July 30, 2020, and (iii) warrants to purchase 8,572 shares of our common stock, which warrants were acquired in our November 2016 offering. Does not include an additional 285,334 shares issuable upon exercise of options held by Mr. Tarriff that are not exercisable within the 60-day period following July 30, 2020.
- (7) Includes 62,229 shares issuable upon exercise of options held by Mr. Wolf that are exercisable within the 60-day period following July 30, 2020. Does not include an additional 285,334 shares issuable upon exercise of options held by Mr. Wolf that are not exercisable within the 60-day period following July 30, 2020.
- (8) Dr. Sliman's agreement expired in January 2019 and was not renewed.
- (9) Includes warrants to purchase 1,882,002 shares of our common stock owned by Hudson Bay Master Fund Ltd. Share ownership information is based on information contained in a Schedule 13G filed by Hudson Bay Master Fund Ltd and Sander Gerber with the SEC on February 5, 2019 by Hudson Bay Capital Management LP, as the investment manager to Hudson Bay Master Fund Ltd, in whose name the securities are held and Sander Gerber, the managing member of Hudson Bay Capital GP LLC, which is the general partner of Hudson Bay Capital Management LP. Mr. Gerber disclaims beneficial ownership of the warrants. The business address of each of such entities and Mr. Gerber is 777 Third Avenue, 30th floor, New York, New York 10017. Pursuant to the terms of the warrant, the holder cannot exercise the warrant if the holder would beneficially own, after such exercise, in excess of 9.99% of the outstanding shares of our common stock.
- (10) Information obtained from a Schedule 13G filed by Iroquois Capital Management L.L.C. ("Iroquois Capital"), Mr. Abbe and Ms. Page with the SEC on February 14, 2020. Pursuant to the Schedule 13G, Iroquois Master Fund held 6,198 shares of our common stock, 841 shares of our Series B Preferred Stock convertible into 731,304 shares of our common stock and warrants to purchase 1,130,195 shares of our common stock and Iroquois Capital Investment Group LLC ("ICIG") held 9,073 shares of our common stock, 1,099 shares of our Series B Preferred Stock convertible into 955,625 shares of our common stock and warrants to purchase 1,478,501 shares of our common stock, a Delaware limited liability company ("Iroquois") Mr. Abbe and Ms. Page share authority and responsibility for the investments made on behalf of Iroquois Master Fund with Ms. Kimberly Page, each of whom is a director of the Iroquois Master Fund, and as such, each of Richard Abbe and Kimberly Page may be deemed to beneficially own the securities held by Iroquois Master Fund ("Mr. Abbe" and "Ms. Page," together with Iroquois, the "Reporting Persons"). Iroquois Capital is the investment advisor for Iroquois Master Fund and Mr. Abbe is the President of Iroquois Capital. Mr. Abbe has the sole authority and responsibility for the investments made on behalf of ICIG. As such, Mr. Abbe may be deemed to be the beneficial owner of all shares of common stock held by, and underlying the Series B Preferred Stock and warrants (each subject to the blockers) held by, Iroquois Master Fund and ICIG. The business address of each of such entities and Mr. Abbe and Ms. Page is 205 East 42nd Street, 20th Floor, New York, NY 10017. Pursuant to the terms of the warrant and the Series B Preferred Stock, the holder cannot exercise the warrant or Series B Preferred Stock if the holder would beneficially own, after such exercise, in excess of 9.99% of the outstanding shares of our common stock.

## Equity Compensation Plan Information

The following table sets forth information about the securities authorized for issuance under our equity compensation plans for the fiscal year ended December 31, 2019.

<u>Plan Category</u>	<u>Number of Securities to be Issued Upon Exercise of Outstanding Options</u>	<u>Weighted-Average Exercise Price of Outstanding Options</u>	<u>Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans</u>
Equity compensation plans approved by stockholders:			
2001 Stock Incentive Plan	-	\$ -	-
2007 Stock Incentive Plan	7,052	\$ 58.15	-
2010 Stock Incentive Plan	2,494,960	\$ 3.46	1,503,079
Equity compensation plans not approved by stockholders	N/A	N/A	N/A
Total	<u>2,502,012</u>	<u>\$ 3.62</u>	<u>1,503,079</u>

## CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Pursuant to our Audit Committee Charter, our Audit Committee reviews on an on-going basis for potential conflicts of interest, and approves, if appropriate, all our “Related Party Transactions” as required by Section 120 of the NYSE American Company Guide. For purposes of our Audit Committee Charter, “Related Party Transactions” means those transactions required to be disclosed pursuant to SEC Regulation S-K, Item 404. 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 defined as any executive officer, director or a holder of more than 5% of our common stock, including any of their immediate family members and any entity owned or controlled by such persons.

Except as disclosed under Compensation Discussion and Analysis and Director Compensation, there have been no reportable “Related Party Transactions” since January 1, 2018.

The Board of Directors has determined that Mr. Kraws, Mr. Tarriff and Mr. Wolf are independent directors.

Except as disclosed under “Executive Compensation,” there were no related party transactions during the two years ended December 31, 2019 or the current year.

## AVAILABILITY OF REPORT ON FORM 10-K

Our audited consolidated financial statements are included in our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC at the Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Upon your written request, we will provide to you a complimentary copy of our 2019 Annual Report on Form 10-K as filed with the SEC. Your request should be mailed to the Corporate Secretary, Synthetic Biologics, Inc., 9605 Medical Center Drive, Suite 270, Rockville, Maryland 20850. A complimentary copy may also be obtained at the internet website maintained by the SEC at [www.sec.gov](http://www.sec.gov), and by visiting our website at [www.syntheticbiologics.com](http://www.syntheticbiologics.com) and clicking on “Investors,” then on “Annual Meeting Materials.”

## NOTICE REGARDING DELIVERY OF STOCKHOLDER DOCUMENTS (“HOUSEHOLDING” INFORMATION)

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for proxy statements or other annual meeting materials with respect to two or more stockholders sharing the same address by delivering a single proxy statement 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 and intermediaries. A number of brokers and other intermediaries with account holders who are our stockholders may be householding our proxy materials, including this Proxy Statement. In that event, a single proxy statement 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 or other intermediary that it will be householding communications to your address, householding will continue until you are notified otherwise or until you revoke your consent, which is deemed to be given unless you inform the broker or other intermediary otherwise when you receive or received the original notice of householding. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement and other annual meeting materials, please notify your broker or other intermediary to discontinue householding and direct your written request to receive a separate proxy statement and other annual meeting materials to the Corporate Secretary, Synthetic Biologics, Inc., 9605 Medical Center Drive, Suite 270, Rockville, Maryland 20850 or by calling us at (301) 417-4364. Stockholders who currently receive multiple copies of the Proxy Statement at their addresses and would like to request householding of their communications should contact their broker or other intermediary.

## STOCKHOLDER PROPOSALS FOR THE 2021 ANNUAL MEETING

Stockholder proposals which are intended to be presented at the 2021 Annual Meeting of Stockholders pursuant to SEC Rule 14a-8 must be received by the Company by April 6, 2021.

A stockholder who intends to present business, including the nomination of a director, at the 2021 Annual Meeting of Stockholders other than pursuant to Rule 14a-8, must currently comply with the requirements set forth in our Nominations Committee’s charter. Stockholders should consult our Nominations Committee’s charter to ensure that all of the specific requirements of such notice are met.

## AVAILABLE INFORMATION ON CORPORATE GOVERNANCE AND SEC FILINGS

Through our website (*www.syntheticbiologics.com*), we make available, free of charge, our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, all amendments to those reports, and other filings with the SEC, as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. We also make the following documents available on our website: the Audit Committee Charter; the Compensation Committee Charter; the Nominations Committee Charter; our Code of Conduct; and our Code of Ethics for Financial Management. You may also obtain a copy of any of the foregoing documents, free of charge, if you submit a written request to the Corporate Secretary, Synthetic Biologics, Inc., 9605 Medical Center Drive, Suite 270, Rockville, Maryland 20850.

No person is authorized to give any information or make any representation other than that contained in this Proxy Statement, and if given or made, such information may not be relied upon as having been authorized.

## MISCELLANEOUS

The Board of Directors knows of no other business to be presented at the 2020 Annual Meeting. If, however, other matters properly do come before the 2020 Annual Meeting, it is intended that the proxies in the accompanying form will be voted thereon in accordance with the judgment of the person or persons holding such proxies.

**YOU ARE URGED TO CAST YOUR VOTE AS INDICATED IN THE PROXY MATERIALS.  
PROMPT RESPONSE WILL GREATLY FACILITATE ARRANGEMENTS FOR THE 2020 ANNUAL  
MEETING, AND YOUR COOPERATION WILL BE APPRECIATED.**

/s/ Steven A. Shallcross  
Chief Executive Officer, Chief Financial Officer and Director  
August 4, 2020

## SYNTHETIC BIOLOGICS, INC.

## 2020 STOCK INCENTIVE PLAN

## Section 1. Establishment and Purpose

The purpose of the Synthetic Biologics, Inc. 2020 Stock Incentive Plan (the "Plan") is to provide a means whereby eligible employees, officers, non-employee directors and other individual service providers of Synthetic Biologics, Inc. (the "Company") and its subsidiaries may develop a sense of proprietorship and personal involvement in the development and financial success of the Company and to encourage them to devote their best efforts to the business of the Company, thereby advancing the interests of the Company and its stockholders. The Company, by means of the Plan, seeks to retain the services of such eligible persons and to provide incentives for such persons to exert maximum efforts for the success of the Company and its subsidiaries.

The Plan permits the grant of Nonqualified Stock Options, Incentive Stock Options, Stock Appreciation Rights, Restricted Stock, Stock Units, Performance Shares, Performance Units, Incentive Bonus Awards, Other Cash-Based Awards and Other Stock-Based Awards. This Plan, as amended and restated, shall become effective upon the date set forth in Section 17.1 hereof.

## Section 2. Definitions

Wherever the following capitalized terms are used in the Plan, they shall have the meanings specified below:

2.1 "Affiliate" means, with respect to a Person, a Person that directly or indirectly Controls, or is Controlled by, or is under common Control with, such Person.

2.2 "Applicable Law" means the requirements relating to the administration of equity-based awards or equity compensation plans under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Awards are, or will be, granted under the Plan.

2.3 "Award" means an award of a Stock Option, Stock Appreciation Right, Restricted Stock, Stock Unit, Performance Share, Performance Unit, Incentive Bonus Award, Other Cash-Based Award and/or Other Stock-Based Award granted under the Plan.

2.4 "Award Agreement" means either (i) a written or electronic agreement entered into between the Company and a Participant setting forth the terms and conditions of an Award including any amendment or modification thereof, or (ii) a written or electronic statement issued by the Company to a Participant describing the terms and provisions of such Award, including any amendment or modification thereof. The Committee may provide for the use of electronic, internet or other non-paper Award Agreements, and the use of electronic, internet or other non-paper means for the acceptance thereof and actions thereunder by a Participant. Each Award Agreement shall be subject to the terms and conditions of the Plan and need not be identical.

2.5 "Board" means the Board of Directors of the Company.

2.6 "Cause" means: (a) conviction of any crime (whether or not involving the Company) constituting a felony in the jurisdiction involved; (b) engaging in any substantiated act involving moral turpitude; (c) engaging in any act which, in each case, subjects, or if generally known would subject, the Company to public ridicule or embarrassment; (d) material violation of the Company's policies, including, without limitation, those relating to sexual harassment or the disclosure or misuse of confidential information; (e) serious neglect or misconduct in the performance of the grantee's duties for the Company or a subsidiary or willful or repeated failure or refusal to perform such duties; in each case as determined by the Committee, which determination shall be final, binding and conclusive. Notwithstanding the foregoing, if a Participant and the Company (or any of its Affiliates) have entered into an employment agreement, consulting agreement or other similar agreement that specifically defines "cause," then with respect to such Participant, "Cause" shall have the meaning defined in that employment agreement, consulting agreement or other agreement.

2.7 "Change in Control" shall be deemed to have occurred if any one of the following events shall occur:

(i) Any Person becomes the beneficial owner (as defined in Rule 13(d)-3 under the Exchange Act) of shares of Common Stock representing more than 50% of the total number of votes that may be cast for the election of directors of the Company;

(ii) The consummation of any merger or other business combination of the Company, sale of all or substantially all of the Company's assets or combination of the foregoing transactions (a "Transaction"), other than a Transaction involving only the Company and one or more of its subsidiaries, or a Transaction immediately following which the shareholders of the Company immediately prior to the Transaction continue to have a majority of the voting power in the resulting entity;

(iii) Within any 12-month period beginning on or after the Effective Date, the persons who were directors of the Company immediately before the beginning of such period (the "Incumbent Directors") shall cease (for any reason other than death) to constitute at least a majority of the Board (or the board of directors of any successor to the Company); provided that any director who was not a director as of the date hereof shall be deemed to be an Incumbent Director if such director was elected to the Board by, or on the recommendation of or with the approval of, at least two-thirds of the directors who then qualified as Incumbent Directors either actually or by prior operation of the foregoing unless such election, recommendation or approval was the result of an actual or threatened election contest of the type contemplated by Rule 14a-11 promulgated under the Exchange Act or any successor provision; or

(iv) the shareholders of the Company approve a plan of complete liquidation or dissolution of the Company.

Notwithstanding the foregoing, no event or condition shall constitute a Change in Control to the extent that, if it were, a penalty tax would be imposed under Section 409A of the Code; provided that, in such a case, the event or condition shall continue to constitute a Change in Control to the maximum extent possible (e.g., if applicable, in respect of vesting without an acceleration of distribution) without causing the imposition of such penalty tax.

2.8 "Code" means the Internal Revenue Code of 1986, as amended. For purposes of this Plan, references to sections of the Code shall be deemed to include references to any applicable regulations thereunder and any successor or similar provision.

2.9 "Committee" means the committee of the Board delegated with the authority to administer the Plan, or the full Board, as provided in Section 3 of the Plan. With respect to any decision relating to a Reporting Person, the Committee shall consist solely of two or more directors who are disinterested within the meaning of Rule 16b-3 promulgated under the Exchange Act, as amended from time to time, or any successor provision. The fact that a Committee member shall fail to qualify under any of these requirements shall not invalidate an Award if the Award is otherwise validly made under the Plan. The Board may at any time appoint additional members to the Committee, remove and replace members of the Committee with or without Cause, and fill vacancies on the Committee however caused.

2.10 "Common Stock" means the Company's Common Stock, par value \$.001 per share.

2.11 "Company" means Synthetic Biologics, Inc., a Nevada corporation, and any successor thereto as provided in Section 15.8.

2.12 "Control" means, as to any Person, the power to direct or cause the direction of the management and policies of such Person, or the power to appoint directors of the Company, whether through the ownership of voting securities, by contract or otherwise (the terms "Controlled by" and "under common Control with" shall have correlative meanings).

2.13 "Date of Grant" means the date on which an Award under the Plan is granted by the Committee, or such later date as the Committee may specify to be the effective date of an Award.

2.14 "Disability" means a Participant being considered "disabled" within the meaning of Section 409A of the Code and Treasury Regulation 1.409A-3(i)(4), as well as any successor regulation or interpretation.

2.15 "Effective Date" means the date set forth in Section 17.1 hereof.

2.16 "Eligible Person" means any person who is an employee, officer, director, consultant, advisor or other individual service provider of the Company or any Subsidiary, or any person who is determined by the Committee to be a prospective employee, officer, director, consultant, advisor or other individual service provider of the Company or any Subsidiary; provided that the Award Agreement for any grant of an Award to a prospective employee, officer, director, consultant, advisor or other individual service provider will contain appropriate forfeiture provisions in the event such individual does not become employed or engaged by the Company or applicable Subsidiary .

2.17 "Exchange Act" means the Securities Exchange Act of 1934, as amended.

2.18 “Fair Market Value” of a share of Common Stock shall be, as applied to a specific date (i) the closing price of a share of Common Stock as of such date on the principal established stock exchange or national market system on which the Common Stock is then traded (or, if there is no trading in the Common Stock as of such date, the closing price of a share of Common Stock on the most recent date preceding such date on which trades of the Common Stock were recorded), or (ii) if the shares of Common Stock are not then traded on an established stock exchange or national market system but are then traded in an over-the-counter market, the average of the closing bid and asked prices for the shares of Common Stock in such over-the-counter market as of such date (or, if there are no closing bid and asked prices for the shares of Common Stock as of such date, the average of the closing bid and the asked prices for the shares of Common Stock on the most recent date preceding such date on which such closing bid and asked prices are available on such over-the-counter market), or (iii) if the shares of Common Stock are not then listed on a national securities exchange or national market system or traded in an over-the-counter market, the price of a share of Common Stock as determined by the Committee in its discretion in a manner consistent with Section 409A of the Code and Treasury Regulation 1.409A-1(b)(5)(iv), as well as any successor regulation or interpretation.

2.19 “Incentive Bonus Award” means an Award granted under Section 12 of the Plan.

2.20 “Incentive Stock Option” means a Stock Option granted under Section 6 hereof that is intended to meet the requirements of Section 422 of the Code and the regulations promulgated thereunder.

2.21 “Nonqualified Stock Option” means a Stock Option granted under Section 6 hereof that is not an Incentive Stock Option.

2.22 “Other Cash-Based Award” means a contractual right granted to an Eligible Person under Section 13 hereof entitling such Eligible Person to receive a cash payment at such times, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.

2.23 “Other Stock-Based Award” means a contractual right granted to an Eligible Person under Section 13 representing a notional unit interest equal in value to a share of Common Stock to be paid and distributed at such times, and subject to such conditions as are set forth in the Plan and the applicable Award Agreement.

2.24 “Participant” means any Eligible Person who holds an outstanding Award under the Plan.

2.25 “Performance Shares” means a contractual right granted to an Eligible Person under Section 10 hereof representing a notional unit interest equal in value to a share of Common Stock to be paid and distributed at such times, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.

2.26 “Performance Unit” means a contractual right granted to an Eligible Person under Section 11 hereof representing a notional dollar interest as determined by the Committee to be paid and distributed at such times, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.

2.27 “Person” shall mean any individual, partnership, firm, trust, corporation, limited liability company or other similar entity. When two or more Persons act as a partnership, limited partnership, syndicate or other group for the purpose of acquiring, holding or disposing of Common Stock, such partnership, limited partnership, syndicate or group shall be deemed a “Person”.

2.28 “Plan” means the Synthetic Biologics, Inc. 2020 Stock Incentive Plan, as set forth herein and as may be amended from time to time.

2.29 “Reporting Person” means an officer, director or greater than ten percent stockholder of the Company within the meaning of Rule 16a-2 under the Exchange Act, who is required to file reports pursuant to Rule 16a-3 under the Exchange Act.

2.30 “Restricted Stock Award” means a grant of shares of Common Stock to an Eligible Person under Section 8 hereof that are issued subject to such vesting and transfer restrictions and such other conditions as are set forth in the Plan and the applicable Award Agreement.

2.31 “Securities Act” means the Securities Act of 1933, as amended.

2.32 “Service” means a Participant’s employment or other service relationship with the Company or any Subsidiary. A change in the capacity in which a Participant renders service to the Company or a Subsidiary as an employee, director or consultant or a change in the entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant’s Service with the Company or a Subsidiary, will not terminate a Participant’s Service; provided, however, that if the entity for which a Participant is rendering services ceases to qualify as a Subsidiary, as determined by the Committee in its sole discretion, such Participant’s Service will be considered to have terminated on the date such entity ceases to qualify as a Subsidiary. For example, a change in status from an employee of the Company to a consultant to or director of the Company will not constitute an interruption of Service. To the extent permitted by Applicable Law, the Committee or the chief executive officer of the Company, in that party’s sole discretion, may determine whether a Participant’s Service will be considered interrupted in the case of (i) any leave of absence approved by the Company or chief executive officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, a Subsidiary, or their successors. Notwithstanding the foregoing, a leave of absence will be treated as Service for purposes of vesting in an Award only to such extent as may be provided in the Company’s (or a Subsidiary’s) leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by Applicable Law. Unless the Committee provides otherwise, in its discretion, or as otherwise required by Applicable Law, vesting of Options shall be tolled during any unpaid leave of absence by a Participant.

2.33 “Stock Appreciation Right” means a contractual right granted to an Eligible Person under Section 7 hereof entitling such Eligible Person to receive a payment, upon the exercise of such right, in such amount and at such time, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.

2.34 “Stock Option” means a contractual right granted to an Eligible Person under Section 6 hereof to purchase shares of Common Stock at such time and price, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.

2.35 “Stock Unit Award” means a contractual right granted to an Eligible Person under Section 9 hereof representing notional unit interests equal in value to a share of Common Stock to be paid and distributed at such times, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.

2.36 “Subsidiary” means an entity (whether or not a corporation) that is wholly or majority owned or Controlled, directly or indirectly, by the Company; provided, however, that with respect to Incentive Stock Options, the term “Subsidiary” shall include only an entity that qualifies under Section 424(f) of the Code as a “subsidiary corporation” with respect to the Company.

### **Section 3. Administration**

3.1 Committee Members. The Plan shall be administered by the Committee; provided that the entire Board may act in lieu of the Committee on any matter, subject to the requirements of Section 2.9 of the Plan with respect to an Award to a Reporting Person. If and to the extent permitted by Applicable Law, the Committee may authorize one or more Reporting Persons (or other officers) to make Awards to Eligible Persons who are not Reporting Persons (or other officers whom the Committee has specifically authorized to make Awards). Subject to Applicable Law and the restrictions set forth in the Plan, the Committee may delegate administrative functions to individuals who are Reporting Persons, officers, or employees of the Company or its Subsidiaries.

3.2 Committee Authority. The Committee shall have such powers and authority as may be necessary or appropriate for the Committee to carry out its functions as described in the Plan. Subject to the express limitations of the Plan, the Committee shall have authority in its discretion to determine the Eligible Persons to whom, and the time or times at which, Awards may be granted, the number of shares, units or other rights subject to each Award, the exercise, base or purchase price of an Award (if any), the time or times at which an Award will become vested, exercisable or payable, the performance criteria, performance goals and other conditions of an Award, the duration of the Award, and all other terms of the Award. Subject to the terms of the Plan, the Committee shall have the authority to amend the terms of an Award in any manner that is not inconsistent with the Plan (including to extend the post-termination exercisability period of Stock Options and Stock Appreciation Rights), provided that no such action (except an action relating to a Change in Control) shall materially impair the rights of a Participant with respect to an outstanding Award without the Participant’s consent. For purposes of the foregoing, any action of the Committee that alters or affects the tax treatment of any Award shall not be considered to materially impair any rights of any Participant. The Committee shall also have discretionary authority to interpret the Plan, to make all factual determinations under the Plan, and to make all other determinations necessary or advisable for Plan administration, including, without limitation, to correct any defect, to supply any omission or to reconcile any inconsistency in the Plan or any Award Agreement hereunder. The Committee may prescribe, amend, and rescind rules and regulations relating to the Plan. The Committee’s determinations under the Plan need not be uniform and may be made by the Committee selectively among Participants and Eligible Persons, whether or not such persons are similarly situated. The Committee shall, in its discretion, consider such factors as it deems relevant in making its interpretations, determinations and actions under the Plan including, without limitation, the recommendations or advice of any officer or employee of the Company or such attorneys, consultants, accountants or other advisors as it may select. All interpretations, determinations, and actions by the Committee shall be final, conclusive, and binding upon all parties.

3.3 No Liability; Indemnification. Neither the Board nor any Committee member, nor any Person acting at the direction of the Board or the Committee, shall be liable for any act, omission, interpretation, construction or determination made in good faith with respect to the Plan, any Award or any Award Agreement. The Company and its Subsidiaries shall pay or reimburse any member of the Committee, as well as any other Person who takes action on behalf of the Plan, for all reasonable expenses incurred with respect to the Plan, and to the full extent allowable under Applicable Law shall indemnify each and every one of them for any claims, liabilities, and costs (including reasonable attorney’s fees) arising out of their good faith performance of duties on behalf of the Company with respect to the Plan. The Company and its Subsidiaries may, but shall not be required to, obtain liability insurance for this purpose.

### **Section 4. Shares Subject to the Plan**

#### 4.1 Share Limitation.

(a) Subject to adjustment pursuant to Section 4.3 hereof, the maximum aggregate number of shares of Common Stock which may be issued under all Awards granted to Participants under the Plan shall be 4,000,000 shares (the “Initial Limit”), all of which may, but need not, be issued in respect of Incentive Stock Options.

(b) Shares of Common Stock issued under the Plan may be either authorized but unissued shares or shares held in the Company's treasury. Any shares of Common Stock subject to Awards that are settled in Common Stock shall be counted against the maximum share limitations of this Section 4.1(a) as one share of Common Stock for every share of Common Stock subject thereto. To the extent that any Award under the Plan payable in shares of Common Stock is forfeited, cancelled, returned to or repurchased by the Company for failure to satisfy vesting requirements or upon the occurrence of other forfeiture events, or otherwise terminates without payment being made thereunder, the shares of Common Stock covered thereby will no longer be counted against the foregoing maximum share limitations and may again be made subject to Awards under the Plan pursuant to such limitations. Shares of Common Stock that otherwise would have been issued upon the exercise of a Stock Option or Stock Appreciation Right or in payment with respect to any other form of Award, that are surrendered in payment or partial payment of the exercise price thereof and/or taxes withheld with respect to the exercise thereof or the making of such payment, will no longer be counted against the foregoing maximum share limitations and may again be made subject to Awards under the Plan pursuant to such limitations.

4.2 Individual Participant Limitations. Subject to adjustment as provided in Section 4.3, the number of shares of Common Stock with respect to which Awards may be granted during any calendar year to any one Eligible Person who is a non-employee director of the Board shall not exceed 1,000,000.

4.3 Adjustments. If there shall occur any change with respect to the outstanding shares of Common Stock by reason of any recapitalization, reclassification, stock dividend, extraordinary dividend, stock split, reverse stock split, or other distribution with respect to the shares of Common Stock, or any merger, reorganization, consolidation, combination, spin-off or other similar corporate change, or any other change affecting the Common Stock, the Committee shall, in the manner and to the extent that it deems appropriate and equitable to the Participants and consistent with the terms of the Plan, cause an adjustment to be made in (i) the maximum numbers and kind of shares provided in Sections 4.1 and 4.2 hereof, (ii) the numbers and kind of shares of Common Stock, units, or other rights subject to then outstanding Awards, (iii) the price for each share or unit or other right subject to then outstanding Awards, (iv) the performance measures or goals relating to the vesting of an Award, and (v) any other terms of an Award that are affected by the event to prevent dilution or enlargement of a Participant's rights under an Award. Notwithstanding the foregoing, in the case of Incentive Stock Options, any such adjustments shall, to the extent practicable, be made in a manner consistent with the requirements of Section 424(a) of the Code.

## **Section 5. Participation and Awards**

5.1 Designation of Participants. All Eligible Persons are eligible to be designated by the Committee to receive Awards and become Participants under the Plan. The Committee has the authority, in its discretion, to determine and designate from time to time those Eligible Persons who are to be granted Awards, the types of Awards to be granted and the number of shares of Common Stock, units or other amounts subject to such Awards. In selecting Eligible Persons to be Participants and in determining the type and amount of Awards to be granted under the Plan, the Committee shall consider any and all factors that it deems relevant or appropriate.

5.2 Determination of Awards. The Committee shall determine the terms and conditions of all Awards granted to Participants in accordance with its authority under Section 3.2 hereof. An Award may consist of one type of right or benefit hereunder or of two or more such rights or benefits granted in tandem or in the alternative. To the extent deemed appropriate by the Committee, an Award shall be evidenced by an Award Agreement as described in Section 15.1 hereof.

## **Section 6. Stock Options**

6.1 Grants of Stock Options. A Stock Option may be granted to any Eligible Person selected by the Committee. Subject to the provisions of Section 6.7 hereof and Section 422 of the Code, each Stock Option shall be designated, in the discretion of the Committee, as an Incentive Stock Option or as a Nonqualified Stock Option.

6.2 Exercise Price. The exercise price per share of a Stock Option shall not be less than 100 percent of the Fair Market Value of a share of Common Stock on the Date of Grant, subject to adjustments as provided for under Section 4.2, provided that the Committee may in its discretion specify for any Stock Option an exercise price per share that is higher than the Fair Market Value on the Date of Grant and may establish an exercise price that is below Fair Market Value on the Date of Grant for Stock Options granted to Participants who are not residents of the U.S if permitted by applicable law and any applicable rules of the principal established stock exchange or national market system on which the Common Stock is traded.

6.3 Vesting of Stock Options. The Committee shall in its discretion prescribe the time or times at which, or the conditions upon which, a Stock Option or portion thereof shall become vested and/or exercisable. The requirements for vesting and exercisability of a Stock Option may be based on the continued Service of the Participant for a specified time period (or periods) and/or on the attainment of a specified performance goal (or goals) established by the Committee in its discretion. The Committee may, in its discretion, accelerate the vesting or exercisability of any Stock Option at any time. The Committee in its sole discretion may allow a Participant to exercise unvested Nonqualified Stock Options, in which case the shares of Common Stock then issued shall be Restricted Stock having analogous vesting restrictions to the unvested Nonqualified Stock Options.

6.4 Term of Stock Options. The Committee shall in its discretion prescribe in an Award Agreement the period during which a vested Stock Option may be exercised, provided that the maximum term of a Stock Option shall be ten (10) years from the Date of Grant. A Stock Option may be earlier terminated as specified by the Committee and set forth in an Award Agreement upon or following the termination of a Participant's Service, including by reason of voluntary resignation, death, Disability, termination for Cause or any other reason. Except as otherwise provided in this Section 6 or in an Award Agreement as such agreement may be amended from time to time upon authorization of the Committee, no Stock Option may be exercised at any time during the term thereof unless the Participant is then in Service. Notwithstanding the foregoing, unless an Award Agreement provides otherwise:

(a) If a Participant's Service terminates by reason of his or her death, any Stock Option held by such Participant may, to the extent then exercisable, be exercised by such Participant's estate or any person who acquires the right to exercise such Stock Option by bequest or inheritance at any time in accordance with its terms for up to one year after the date of such Participant's death (but in no event after the earlier of the expiration of the term of such Stock Option or such time as the Stock Option is otherwise canceled or terminated in accordance with its terms). Upon expiration of such one-year period, no portion of the Stock Option held by such Participant shall be exercisable and the Stock Option shall be deemed to be canceled, forfeited and of no further force or effect.

(b) If a Participant's Service terminates by reason of his or her Disability, any Stock Option held by such Participant may, to the extent then exercisable, be exercised by the Participant or his or her personal representative at any time in accordance with its terms for up to one year after the date of such Participant's termination of Service (but in no event after the earlier of the expiration of the term of such Stock Option or such time as the Stock Option is otherwise canceled or terminated in accordance with its terms). Upon expiration of such one-year period, no portion of the Stock Option held by such Participant shall be exercisable and the Stock Option shall be deemed to be canceled, forfeited and of no further force or effect.

(c) If a Participant's Service terminates for any reason other than death, Disability or Cause, any Stock Option held by such Participant may, to the extent then exercisable, be exercised by the Participant up until ninety (90) days following such termination of Service (but in no event after the earlier of the expiration of the term of such Stock Option or such time as the Stock Option is otherwise canceled or terminated in accordance with its terms). Upon expiration of such 90-day period, no portion of the Stock Option held by such Participant shall be exercisable and the Stock Option shall be deemed to be canceled, forfeited and of no further force or effect.

(d) If a Participant's Service terminates for Cause, any Stock Option held by such Participant, whether vested or unvested, shall be deemed forfeited and canceled on the date of such termination of Service.

(e) To the extent that a Stock Option of a Participant whose Service terminates is not exercisable, such Stock Option shall be deemed forfeited and canceled on the ninetieth (90th) day after such termination of Service or at such earlier time as the Committee may determine.

6.5 Stock Option Exercise. Subject to such terms and conditions as shall be specified in an Award Agreement, a Stock Option may be exercised in whole or in part at any time during the term thereof by notice in the form required by the Company, and payment of the aggregate exercise price by certified or bank check, or such other means as the Committee may accept. As set forth in an Award Agreement or otherwise determined by the Committee, in its sole discretion, at or after grant, payment in full or in part of the exercise price of an Option may be made: (i) in the form of shares of Common Stock that have been held by the Participant for such period as the Committee may deem appropriate for accounting purposes or otherwise, valued at the Fair Market Value of such shares on the date of exercise; (ii) by surrendering to the Company shares of Common Stock otherwise receivable on exercise of the Option; (iii) by a cashless exercise program implemented by the Committee in connection with the Plan; and/or (iv) by such other method as may be approved by the Committee and set forth in an Award Agreement. Subject to any governing rules or regulations, as soon as practicable after receipt of written notification of exercise and full payment of the exercise price and satisfaction of any applicable tax withholding pursuant to Section 16.5, the Company shall deliver to the Participant evidence of book entry shares of Common Stock, or upon the Participant's request, Common Stock certificates in an appropriate amount based upon the number of shares of Common Stock purchased under the Option. Unless otherwise determined by the Committee, all payments under all of the methods indicated above shall be paid in United States dollars or shares of Common Stock, as applicable.

6.6 Reload Options. The Committee may in its discretion include in any Award Agreement with respect to an option (the "original option") a provision that an additional option (the "additional option") shall be granted to any Participant who, pursuant to Section 6.5, delivers shares of the Common Stock in partial or full payment of the exercise price of the original option. The additional option shall be for a number of shares of the Common Stock equal to the number thus delivered, shall have an exercise price equal to the Fair Market Value of a share of Common Stock on the date of exercise of the original option, and shall have an expiration date no later than the expiration date of the original option. In the event that an Award Agreement provides for the grant of an additional option, such Award Agreement shall also provide that the exercise price of the original option be no less than the Fair Market Value of a share of Stock on its date of grant, and that any shares that are delivered pursuant to Section 6.5 in payment of such exercise price shall have been held for at least six months.

#### 6.7 Additional Rules for Incentive Stock Options.

(a) Eligibility. An Incentive Stock Option may only be granted to an Eligible Person who is considered an employee under Treasury Regulation §1.421-7(h) of the Company or any Subsidiary.

(b) Annual Limits. No Incentive Stock Option shall be granted to an Eligible Person as a result of which the aggregate Fair Market Value (determined as of the Date of Grant) of the stock with respect to which Incentive Stock Options are exercisable for the first time in any calendar year under the Plan and any other stock option plans of the Company or any Subsidiary would exceed \$100,000, determined in accordance with Section 422(d) of the Code. This limitation shall be applied by taking Incentive Stock Options into account in the order in which granted.

(c) Ten Percent Stockholders. If a Stock Option granted under the Plan is intended to be an Incentive Stock Option, and if the Participant, at the time of grant, owns stock possessing ten percent or more of the total combined voting power of all classes of Common Stock of the Company or any Subsidiary, then (A) the Stock Option exercise price per share shall in no event be less than 110 percent of the Fair Market Value of the Common Stock on the date of such grant and (B) such Stock Option shall not be exercisable after the expiration of five (5) years following the date such Stock Option is granted.

(d) Disqualifying Dispositions. If shares of Common Stock acquired by exercise of an Incentive Stock Option are disposed of within two (2) years following the Date of Grant or one (1) year following the transfer of such shares to the Participant upon exercise, the Participant shall, promptly following such disposition, notify the Company in writing of the date and terms of such disposition and provide such other information regarding the disposition as the Company may reasonably require.

## **Section 7. Stock Appreciation Rights**

7.1 Grant of Stock Appreciation Rights. A Stock Appreciation Right may be granted to any Eligible Person selected by the Committee. Stock Appreciation Rights may be granted on a basis that allows for the exercise of the right by the Participant or that provides for the automatic payment of the right upon a specified date or event.

7.2 Base Price. The base price of a Stock Appreciation Right shall be determined by the Committee in its sole discretion; provided, however, that the base price for any grant of a Stock Appreciation Right shall not be less than 100 percent of the Fair Market Value of a share of Common Stock on the Date of Grant, subject to adjustments as provided for under Section 4.2.

7.3 Vesting Stock Appreciation Rights. The Committee shall in its discretion prescribe the time or times at which, or the conditions upon which, a Stock Appreciation Right or portion thereof shall become vested and/or exercisable. The requirements for vesting and exercisability of a Stock Appreciation Right may be based on the continued Service of a Participant for a specified time period (or periods) or on the attainment of a specified performance goal (or goals) established by the Committee in its discretion. The Committee may, in its discretion, accelerate the vesting or exercisability of any Stock Appreciation Right at any time.

7.4 Term of Stock Appreciation Rights. The Committee shall in its discretion prescribe in an Award Agreement the period during which a vested Stock Appreciation Right may be exercised, provided that the maximum term of a Stock Appreciation Right shall be ten (10) years from the Date of Grant. A Stock Appreciation Right may be earlier terminated as specified by the Committee and set forth in an Award Agreement upon or following the termination of a Participant's Service, including by reason of voluntary resignation, death, Disability, termination for Cause or any other reason. Except as otherwise provided in this Section 7 or in an Award Agreement as such agreement may be amended from time to time upon authorization of the Committee, no Stock Appreciation Right may be exercised at any time during the term thereof unless the Participant is then in the Service of the Company or one of its Subsidiaries.

7.5 Payment of Stock Appreciation Rights. Subject to such terms and conditions as shall be specified in an Award Agreement, a vested Stock Appreciation Right may be exercised in whole or in part at any time during the term thereof by notice in the form required by the Company and payment of any exercise price. Upon the exercise of a Stock Appreciation Right and payment of any applicable exercise price, a Participant shall be entitled to receive an amount determined by multiplying: (i) the excess of the Fair Market Value of a share of Common Stock on the date of exercise of the Stock Appreciation Right over the base price of such Stock Appreciation Right, by (ii) the number of shares as to which such Stock Appreciation Right is exercised. Payment of the amount determined under the immediately preceding sentence may be made, as approved by the Committee and set forth in the Award Agreement, in shares of Common Stock valued at their Fair Market Value on the date of exercise, in cash, or in a combination of shares of Common Stock and cash, subject to applicable tax withholding requirements set forth in Section 16.5. If Stock Appreciation Rights are settled in shares of Common Stock, then as soon as practicable following the date of settlement the Company shall deliver to the Participant evidence of book entry shares of Common Stock, or upon the Participant's request, Common Stock certificates in an appropriate amount.

## **Section 8. Restricted Stock Awards**

8.1 Grant of Restricted Stock Awards. A Restricted Stock Award may be granted to any Eligible Person selected by the Committee. The Committee may require the payment by the Participant of a specified purchase price in connection with any Restricted Stock Award. The Committee may provide in an Award Agreement for the payment of dividends and distributions to the Participant at such times as paid to stockholders generally or at the times of vesting or other payment of the Restricted Stock Award. If any dividends or distributions are paid in stock while a Restricted Stock Award is subject to restrictions under Section 8.3 of the Plan, the dividends or other distributions shares shall be subject to the same restrictions on transferability as the shares of Common Stock to which they were paid unless otherwise set forth in the Award Agreement. The Committee may also subject the grant of any Restricted Stock Award to the execution of a voting agreement with the Company or with any Affiliate of the Company.

8.2 Vesting Requirements. The restrictions imposed on shares of Common Stock granted under a Restricted Stock Award shall lapse in accordance with the vesting requirements specified by the Committee in the Award Agreement. Upon vesting of a Restricted Stock Award, such Award shall be subject to the tax withholding requirement set forth in Section 14.5. The requirements for vesting of a Restricted Stock Award may be based on the continued Service of the Participant for a specified time period (or periods) or on the attainment of a specified performance goal (or goals) established by the Committee in its discretion. The Committee may, in its discretion, accelerate the vesting of a Restricted Stock Award at any time. If the vesting requirements of a Restricted Stock Award shall not be satisfied, the Award shall be forfeited and the shares of Common Stock subject to the Award shall be returned to the Company. In the event that the Participant paid any purchase price with respect to such forfeited shares, unless otherwise provided by the Committee in an Award Agreement, the Company will refund to the Participant the lesser of (i) such purchase price and (ii) the Fair Market Value of such shares on the date of forfeiture.

8.3 Restrictions. Shares granted under any Restricted Stock Award may not be transferred, assigned or subject to any encumbrance, pledge, or charge until all applicable restrictions are removed or have expired, unless otherwise allowed by the Committee. The Committee may require in an Award Agreement that certificates representing the shares granted under a Restricted Stock Award bear a legend making appropriate reference to the restrictions imposed, and that certificates representing the shares granted or sold under a Restricted Stock Award will remain in the physical custody of an escrow holder until all restrictions are removed or have expired.

8.4 Rights as Stockholder. Subject to the foregoing provisions of this Section 8 and the applicable Award Agreement, the Participant to whom a Restricted Stock Award is made shall have all rights of a stockholder with respect to the shares granted to the Participant under the Restricted Stock Award, including the right to vote the shares and receive all dividends and other distributions paid or made with respect thereto, unless the Committee determines otherwise at the time the Restricted Stock Award is granted.

8.5 Section 83(b) Election. If a Participant makes an election pursuant to Section 83(b) of the Code with respect to a Restricted Stock Award, the Participant shall file, within 30 days following the Date of Grant, a copy of such election with the Company (directed to the Secretary thereof) and with the Internal Revenue Service, in accordance with the regulations under Section 83 of the Code. The Committee may provide in an Award Agreement that the Restricted Stock Award is conditioned upon the Participant's making or refraining from making an election with respect to the Award under Section 83(b) of the Code.

## **Section 9. Stock Unit Awards**

9.1 Grant of Stock Unit Awards. A Stock Unit Award may be granted to any Eligible Person selected by the Committee. The value of each Stock Unit under a Stock Unit Award is equal to the Fair Market Value of the Common Stock on the applicable date or time period of determination, as specified by the Committee. A Stock Unit Award shall be subject to such restrictions and conditions as the Committee shall determine. A Stock Unit Award may be granted together with a dividend equivalent right with respect to the shares of Common Stock subject to the Award, which may be accumulated and may be deemed reinvested in additional Stock Units, as determined by the Committee in its discretion. If any dividend equivalents are paid while a Stock Unit Award is subject to restrictions under Section 9 of the Plan, the dividend equivalents shall be subject to the same restrictions on transferability as the Stock Units to which they were paid, unless otherwise set forth in the Award Agreement.

9.2 Vesting of Stock Unit Awards. On the Date of Grant, the Committee shall, in its discretion, determine any vesting requirements with respect to a Stock Unit Award, which shall be set forth in the Award Agreement. The requirements for vesting of a Stock Unit Award may be based on the continued Service of the Participant for a specified time period (or periods) or on the attainment of a specified performance goal (or goals) established by the Committee in its discretion. The Committee may, in its discretion, accelerate the vesting of a Stock Unit Award at any time. A Stock Unit Award may also be granted on a fully vested basis, with a deferred payment date as may be determined by the Committee or elected by the Participant in accordance with rules established by the Committee.

9.3 Payment of Stock Unit Awards. A Stock Unit Award shall become payable to a Participant at the time or times determined by the Committee and set forth in the Award Agreement, which may be upon or following the vesting of the Award. Payment of a Stock Unit Award may be made, at the discretion of the Committee, in cash or in shares of Common Stock, or in a combination thereof as described in the Award Agreement, subject to applicable tax withholding requirements set forth in Section 16.5. Any cash payment of a Stock Unit Award shall be made based upon the Fair Market Value of the Common Stock, determined on such date or over such time period as determined by the Committee. Notwithstanding the foregoing, unless specified otherwise in the Award Agreement, any Stock Unit, whether settled in Common Stock or cash, shall be paid no later than two and one-half months after the later of the calendar year or fiscal year in which the Stock Units vest. If Stock Unit Awards are settled in shares of Common Stock, then as soon as practicable following the date of settlement the Company shall deliver to the Participant evidence of book entry shares of Common Stock, or upon the Participant's request, Common Stock certificates in an appropriate amount.

## **Section 10. Performance Shares**

10.1 Grant of Performance Shares. Performance Shares may be granted to any Eligible Person selected by the Committee. A Performance Share Award shall be subject to such restrictions and condition as the Committee shall specify. A Performance Share Award may be granted with a dividend equivalent right with respect to the shares of Common Stock subject to the Award, which may be accumulated and may be deemed reinvested in additional Stock Units, as determined by the Committee in its discretion.

10.2 Value of Performance Shares. Each Performance Share shall have an initial value equal to the Fair Market Value of a Share on the Grant Date. The Committee shall set performance goals in its discretion that, depending on the extent to which they are met over a specified time period, shall determine the number of Performance Shares that shall be paid to a Participant.

10.3 Earning of Performance Shares. After the applicable time period has ended, the number of Performance Shares earned by the Participant over such time period shall be determined as a function of the extent to which the applicable corresponding performance goals have been achieved. This determination shall be made solely by the Committee. The Committee may, in its discretion, waive any performance or vesting conditions relating to a Performance Share Award.

10.4 Form and Timing of Payment of Performance Shares. The Committee shall pay at the close of the applicable Performance Period, or as soon as practicable thereafter, any earned Performance Shares in the form of cash or in shares of Common Stock or in a combination thereof, as specified in a Participant's Award Agreement, subject to applicable tax withholding requirements set forth in Section 16.5. Notwithstanding the foregoing, unless specified otherwise in the Award Agreement, all Performance Shares shall be paid no later than two and one-half months following the later of the calendar year or fiscal year in which such Performance Shares vest. Any shares of Common Stock paid to a Participant under this Section 10.4 may be subject to any restrictions deemed appropriate by the Committee. If Performance Shares are settled in shares of Common Stock, then as soon as practicable following the date of settlement the Company shall deliver to the Participant evidence of book entry shares of Common Stock, or upon the Participant's request, Common Stock certificates in an appropriate amount.

## **Section 11. Performance Units**

11.1 Grant of Performance Units. Performance Units may be granted to any Eligible Person selected by the Committee. A Performance Unit Award shall be subject to such restrictions and conditions as the Committee shall specify in a Participant's Award Agreement.

11.2 Value of Performance Units. Each Performance Unit shall have an initial notional value equal to a dollar amount determined by the Committee, in its sole discretion. The Committee shall set performance goals in its discretion that, depending on the extent to which they are met over a specified time period, will determine the number of Performance Units that shall be settled and paid to the Participant.

11.3 Earning of Performance Units. After the applicable time period has ended, the number of Performance Units earned by the Participant, and the amount payable in cash, in shares or in a combination thereof, over such time period shall be determined as a function of the extent to which the applicable corresponding performance goals have been achieved. This determination shall be made solely by the Committee. The Committee may, in its discretion, waive any performance or vesting conditions relating to a Performance Unit Award.

11.4 Form and Timing of Payment of Performance Units. The Committee shall pay at the close of the applicable Performance Period, or as soon as practicable thereafter, any earned Performance Units in the form of cash or in shares of Common Stock or in a combination thereof, as specified in a Participant's Award Agreement, subject to applicable tax withholding requirements set forth in Section 16.5. Notwithstanding the foregoing, unless specified otherwise in the Award Agreement, all Performance Units shall be paid no later than two and one-half months following the later of the calendar year or fiscal year in which such Performance Units vest. Any shares of Common Stock paid to a Participant under this Section 11.4 may be subject to any restrictions deemed appropriate by the Committee. If Performance Units are settled in shares of Common Stock, then as soon as practicable following the date of settlement the Company shall deliver to the Participant evidence of book entry shares of Common Stock, or upon the Participant's request, Common Stock certificates in an appropriate amount.

## **Section 12. Incentive Bonus Awards**

12.1 Incentive Bonus Awards. The Committee, at its discretion, may grant Incentive Bonus Awards to such Participants as it may designate from time to time. The terms of a Participant's Incentive Bonus Award shall be set forth in the Participant's Award Agreement. Each Award Agreement shall specify such general terms and conditions as the Committee shall determine.

12.2 Incentive Bonus Award Performance Criteria. The determination of Incentive Bonus Awards for a given year or years may be based upon the attainment of specified levels of Company or Subsidiary performance as measured by pre-established, objective performance criteria determined at the discretion of the Committee. The Committee shall (i) select those Participants who shall be eligible to receive an Incentive Bonus Award, (ii) determine the performance period, (iii) determine target levels of performance, and (iv) determine the level of Incentive Bonus Award to be paid to each selected Participant upon the achievement of each performance level. The Committee generally shall make the foregoing determinations prior to the commencement of services to which an Incentive Bonus Award relates, to the extent applicable, and while the outcome of the performance goals and targets is uncertain.

### 12.3 Payment of Incentive Bonus Awards

(a) Incentive Bonus Awards shall be paid in cash or Common Stock, as set forth in a Participant's Award Agreement. Payments shall be made following a determination by the Committee that the performance targets were attained and shall be made within two and one-half months after the later of the end of the fiscal or calendar year in which the Incentive Award is no longer subject to a substantial risk of forfeiture.

(b) The amount of an Incentive Bonus Award to be paid upon the attainment of each targeted level of performance shall equal a percentage of a Participant's base salary for the fiscal year, a fixed dollar amount, or such other formula, as determined by the Committee.

## **Section 13. Other Cash-Based Awards and Other Stock-Based Awards**

13.1 Other Cash-Based and Stock-Based Awards. The Committee may grant other types of equity-based or equity-related Awards not otherwise described by the terms of this Plan (including the grant or offer for sale of unrestricted Shares) in such amounts and subject to such terms and conditions, as the Committee shall determine. Such Awards may involve the transfer of actual shares of Common Stock to a Participant, or payment in cash or otherwise of amounts based on the value of shares of Common Stock. In addition, the Committee, at any time and from time to time, may grant Cash-Based Awards to a Participant in such amounts and upon such terms as the Committee shall determine, in its sole discretion.

13.2 Value of Cash-Based Awards and Other Stock-Based Awards. Each Other Stock-Based Award shall be expressed in terms of shares of Common Stock or units based on shares of Common Stock, as determined by the Committee, in its sole discretion. Each Other Cash-Based Award shall specify a payment amount or payment range as determined by the Committee, in its sole discretion. If the Committee exercises its discretion to establish performance goals, the value of Other Cash-Based Awards that shall be paid to the Participant will depend on the extent to which such performance goals are met.

13.3 Payment of Cash-Based Awards and Other Stock-Based Awards. Payment, if any, with respect to Other Cash-Based Awards and Other Stock-Based Award shall be made in accordance with the terms of the Award, in cash or Shares as the Committee determines.

## **14. Change in Control**

### 14.1 Effect of Change in Control.

(a) The Committee may, at the time of the grant of an Award and as set forth in an Award Agreement, provide for the effect of a "Change in Control" on an Award. Such provisions may include any one or more of the following: (i) the acceleration or extension of time periods for purposes of exercising, vesting in, or realizing gain from any Award, (ii) the elimination or modification of performance or other conditions related to the payment or other rights under an Award, (iii) provision for the cash settlement of an Award for an equivalent cash value, as determined by the Committee, or (iv) such other modification or adjustment to an Award as the Committee deems appropriate to maintain and protect the rights and interests of Participants upon or following a Change in Control. To the extent necessary for compliance with Section 409A of the Code, an Award Agreement shall provide that an Award subject to the requirements of Section 409A that would otherwise become payable upon a Change in Control shall only become payable to the extent that the requirements for a "change in control" for purposes of Section 409A have been satisfied.

(b) Notwithstanding anything to the contrary set forth in the Plan, unless otherwise provided by an Award Agreement, upon or in anticipation of any Change in Control, the Committee may, in its sole and absolute discretion and without the need for the consent of any Participant, take one or more of the following actions contingent upon the occurrence of that Change in Control: (i) cause any or all outstanding Stock Options and Stock Appreciation Rights held by Participants affected by the Change in Control to become vested and immediately exercisable, in whole or in part; (ii) cause any or all outstanding Restricted Stock, Stock Units, Performance Shares, Performance Units, Incentive Bonus Award and any other Award held by Participants affected by the Change in Control to become non-forfeitable, in whole or in part; (iii) cancel any Stock Option or Stock Appreciation Right in exchange for a substitute option in a manner consistent with the requirements of Treasury Regulation §1.424-1(a) or §1.409A-1(b)(5)(v)(D), as applicable (notwithstanding the fact that the original Stock Option may never have been intended to satisfy the requirements for treatment as an Incentive Stock Option); (iv) cancel any Restricted Stock, Stock Units, Performance Shares or Performance Units held by a Participant in exchange for restricted stock or performance shares of or stock or performance units in respect of the capital stock of any successor corporation; (v) redeem any Restricted Stock held by a Participant affected by the Change in Control for cash and/or other substitute consideration with a value equal to the Fair Market Value of an unrestricted share of Common Stock on the date of the Change in Control; (vi) terminate any Award in exchange for an amount of cash and/or property equal to the amount, if any, that would have been attained upon the exercise of such Award or realization of the Participant's rights as of the date of the occurrence of the Change in Control (the "Change in Control Consideration"); provided, however that if the Change in Control Consideration with respect to any Option or Stock Appreciation Right does not exceed the exercise price of such Option or Stock Appreciation Right, the Committee may cancel the Option or Stock Appreciation Right without payment of any consideration therefor. Any such Change in Control Consideration may be subject to any escrow, indemnification and similar obligations, contingencies and encumbrances applicable in connection with the Change in Control to holders of Common Stock. Without limitation of the foregoing, if as of the date of the occurrence of the Change in Control the Committee determines that no amount would have been attained upon the realization of the Participant's rights, then such Award may be terminated by the Company without payment. The Committee may cause the Change in Control Consideration to be subject to vesting conditions (whether or not the same as the vesting conditions applicable to the Award prior to the Change in Control) and/or make such other modifications, adjustments or amendments to outstanding Awards or this Plan as the Committee deems necessary or appropriate.

(c) The Committee may require a Participant to (i) represent and warrant as to the unencumbered title to the Participant's Awards, (ii) bear such Participant's pro rata share of any post-closing indemnity obligations, and be subject to the same or similar post-closing purchase price adjustments, escrow terms, offset rights, holdback terms and similar conditions as the other holders of Common Stock, and (iii) execute and deliver such documents and instruments as the Committee may reasonably require for the Participant to be bound by such obligations. The Committee will endeavor to take action under this Section 14 in a manner that does not cause a violation of Section 409A of the Code with respect to an Award.

## 15. General Provisions

15.1 Award Agreement. To the extent deemed necessary by the Committee, an Award under the Plan shall be evidenced by an Award Agreement in a written or electronic form approved by the Committee setting forth the number of shares of Common Stock or units subject to the Award, the exercise price, base price, or purchase price of the Award, the time or times at which an Award will become vested, exercisable or payable and the term of the Award. The Award Agreement may also set forth the effect on an Award of termination of Service under certain circumstances. The Award Agreement shall be subject to and incorporate, by reference or otherwise, all of the applicable terms and conditions of the Plan, and may also set forth other terms and conditions applicable to the Award as determined by the Committee consistent with the limitations of the Plan. Award Agreements evidencing Incentive Stock Options shall contain such terms and conditions as may be necessary to meet the applicable provisions of Section 422 of the Code. The grant of an Award under the Plan shall not confer any rights upon the Participant holding such Award other than such terms, and subject to such conditions, as are specified in the Plan as being applicable to such type of Award (or to all Awards) or as are expressly set forth in the Award Agreement.

15.2 Forfeiture Events/Representations. The Committee may specify in an Award Agreement at the time of the Award that the Participant's rights, payments and benefits with respect to an Award shall be subject to reduction, cancellation, forfeiture or recoupment upon the occurrence of certain specified events, in addition to any otherwise applicable vesting or performance conditions of an Award. Such events shall include, but shall not be limited to, termination of Service for Cause, violation of material Company policies, breach of noncompetition, confidentiality or other restrictive covenants that may apply to the Participant, or other conduct by the Participant that is detrimental to the business or reputation of the Company. The Committee may also specify in an Award Agreement that the Participant's rights, payments and benefits with respect to an Award shall be conditioned upon the Participant making a representation regarding compliance with noncompetition, confidentiality or other restrictive covenants that may apply to the Participant and providing that the Participant's rights, payments and benefits with respect to an Award shall be subject to reduction, cancellation, forfeiture or recoupment on account of a breach of such representation. Notwithstanding the foregoing, the confidentiality restrictions set forth in an Award Agreement shall not, and shall not be interpreted to, impair a Participant from exercising any legally protected whistleblower rights (including under Rule 21 of the Exchange Act). In addition and without limitation of the foregoing, any amounts paid hereunder shall be subject to recoupment in accordance with The Dodd-Frank Wall Street Reform and Consumer Protection Act and any implementing regulations thereunder, any "clawback" policy adopted by the Company or as is otherwise required by applicable law or stock exchange listing condition.

### 15.3 No Assignment or Transfer: Beneficiaries.

(a) Awards under the Plan shall not be assignable or transferable by the Participant, except by will or by the laws of descent and distribution, and shall not be subject in any manner to assignment, alienation, pledge, encumbrance or charge. Notwithstanding the foregoing, the Committee may provide in an Award Agreement that the Participant shall have the right to designate a beneficiary or beneficiaries who shall be entitled to any rights, payments or other benefits specified under an Award following the Participant's death. During the lifetime of a Participant, an Award shall be exercised only by such Participant or such Participant's guardian or legal representative. In the event of a Participant's death, an Award may, to the extent permitted by the Award Agreement, be exercised by the Participant's beneficiary as designated by the Participant in the manner prescribed by the Committee or, in the absence of an authorized beneficiary designation, by the legatee of such Award under the Participant's will or by the Participant's estate in accordance with the Participant's will or the laws of descent and distribution, in each case in the same manner and to the same extent that such Award was exercisable by the Participant on the date of the Participant's death.

(b) Limited Transferability Rights. Notwithstanding anything else in this Section 15.3 to the contrary, the Committee may in its discretion provide in an Award Agreement that an Award in the form of a Nonqualified Stock Option, share-settled Stock Appreciation Right, Restricted Stock, Performance Share or share-settled Other Stock-Based Award may be transferred, on such terms and conditions as the Committee deems appropriate, either (i) by instrument to the Participant's "Immediate Family" (as defined below), (ii) by instrument to an inter vivos or testamentary trust (or other entity) in which the Award is to be passed to the Participant's designated beneficiaries, or (iii) by gift to charitable institutions. Any transferee of the Participant's rights shall succeed and be subject to all of the terms of the applicable Award Agreement and the Plan. "Immediate Family" means any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, and shall include adoptive relationships.

15.4 Rights as Stockholder. A Participant shall have no rights as a holder of shares of Common Stock with respect to any unissued securities covered by an Award until the date the Participant becomes the holder of record of such securities. Except as provided in Section 4.2 hereof, no adjustment or other provision shall be made for dividends or other stockholder rights, except to the extent that the Award Agreement provides for dividend payments or dividend equivalent rights.

15.5 Employment or Service. Nothing in the Plan, in the grant of any Award or in any Award Agreement shall confer upon any Eligible Person or Participant any right to continue in Service, or interfere in any way with the right of the Company or any of its Subsidiaries to terminate the employment or other service relationship of an Eligible Person or Participant for any reason at any time.

15.6 Fractional Shares. In the case of any fractional share or unit resulting from the grant, vesting, payment or crediting of dividends or dividend equivalents under an Award, the Committee shall have the discretionary authority to (i) disregard such fractional share or unit, (ii) round such fractional share or unit to the nearest lower or higher whole share or unit, or (iii) convert such fractional share or unit into a right to receive a cash payment.

15.7 Other Compensation and Benefit Plans. The amount of any compensation deemed to be received by a Participant pursuant to an Award shall not constitute includable compensation for purposes of determining the amount of benefits to which a Participant is entitled under any other compensation or benefit plan or program of the Company or any Subsidiary, including, without limitation, under any bonus, pension, profit-sharing, life insurance, salary continuation or severance benefits plan, except to the extent specifically provided by the terms of any such plan.

15.8 Plan Binding on Transferees. The Plan shall be binding upon the Company, its transferees and assigns, and the Participant, the Participant's executor, administrator and permitted transferees and beneficiaries. In addition, all obligations of the Company under this Plan with respect to Awards granted hereunder shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.

15.9 Foreign Jurisdictions. The Committee may adopt, amend and terminate such arrangements and grant such Awards, not inconsistent with the intent of the Plan, as it may deem necessary or desirable to comply with any tax, securities, regulatory or other laws of other jurisdictions with respect to Awards that may be subject to such laws. The terms and conditions of such Awards may vary from the terms and conditions that would otherwise be required by the Plan solely to the extent the Committee deems necessary for such purpose. Moreover, the Board may approve such supplements to or amendments, restatements or alternative versions of the Plan, not inconsistent with the intent of the Plan, as it may consider necessary or appropriate for such purposes, without thereby affecting the terms of the Plan as in effect for any other purpose.

15.10 Substitute Awards in Corporate Transactions. Nothing contained in the Plan shall be construed to limit the right of the Committee to grant Awards under the Plan in connection with the acquisition, whether by purchase, merger, consolidation or other corporate transaction, of the business or assets of any corporation or other entity. Without limiting the foregoing, the Committee may grant Awards under the Plan to an employee or director of another corporation who becomes an Eligible Person by reason of any such corporate transaction in substitution for Awards previously granted by such corporation or entity to such person. The terms and conditions of the substitute Awards may vary from the terms and conditions that would otherwise be required by the Plan solely to the extent the Committee deems necessary for such purpose. Any shares of Common Stock subject to these substitute Awards shall not be counted against any of the maximum share limitations set forth in the Plan.

## **Section 16. Legal Compliance**

16.1 Securities Laws. No shares of Common Stock will be issued or transferred pursuant to an Award unless and until all then applicable requirements imposed by Federal and state securities and other laws, rules and regulations and by any regulatory agencies having jurisdiction, and by any exchanges upon which the shares of Common Stock may be listed, have been fully met. As a condition precedent to the issuance of shares pursuant to the grant or exercise of an Award, the Company may require the Participant to take any reasonable action to meet such requirements. The Committee may impose such conditions on any shares of Common Stock issuable under the Plan as it may deem advisable, including, without limitation, restrictions under the Securities Act, as amended, under the requirements of any exchange upon which such shares of the same class are then listed, and under any blue sky or other securities laws applicable to such shares. The Committee may also require the Participant to represent and warrant at the time of issuance or transfer that the shares of Common Stock are being acquired only for investment purposes and without any current intention to sell or distribute such shares. All Common Stock issued pursuant to the terms of this Plan shall constitute "restricted securities," as that term is defined in Rule 144 promulgated pursuant to the Securities Act, and may not be transferred except in compliance herewith and with the registration requirements of the Securities Act or an exemption therefrom. Certificates representing Common Stock acquired pursuant to an Award may bear such legend as the Company may consider appropriate under the circumstances.

16.2 Incentive Arrangement. The Plan is designed to provide an ongoing, pecuniary incentive for Participants to produce their best efforts to increase the value of the Company. The Plan is not intended to provide retirement income or to defer the receipt of payments hereunder to the termination of a Participant's employment or beyond. The Plan is thus intended not to be a pension or welfare benefit plan that is subject to Employee Retirement Income Security Act of 1974 ("ERISA"), and shall be construed accordingly. All interpretations and determinations hereunder shall be made on a basis consistent with the Plan's status as not an employee benefit plan subject to ERISA.

16.3 Unfunded Plan. The adoption of the Plan and any reservation of shares of Common Stock or cash amounts by the Company to discharge its obligations hereunder shall not be deemed to create a trust or other funded arrangement. Except upon the issuance of Common Stock pursuant to an Award, any rights of a Participant under the Plan shall be those of a general unsecured creditor of the Company, and neither a Participant nor the Participant's permitted transferees or estate shall have any other interest in any assets of the Company by virtue of the Plan. Notwithstanding the foregoing, the Company shall have the right to implement or set aside funds in a grantor trust, subject to the claims of the Company's creditors or otherwise, to discharge its obligations under the Plan.

16.4 Section 409A Compliance. To the extent applicable, it is intended that the Plan and all Awards hereunder comply with the requirements of Section 409A of the Code or an exemption thereto, and the Plan and all Award Agreements shall be interpreted and applied by the Committee in a manner consistent with this intent in order to avoid the imposition of any additional tax under Section 409A of the Code. Notwithstanding anything in the Plan to the contrary, in the event that any provision of the Plan or an Award Agreement is determined by the Committee, in its sole discretion, to not comply with the requirements of Section 409A of the Code or an exemption thereto, the Committee shall, in its sole discretion, have the authority to take such actions and to make such interpretations or changes to the Plan or an Award Agreement as the Committee deems necessary, regardless of whether such actions, interpretations or changes shall adversely affect a Participant, subject to the limitations, if any, of applicable law. If an Award is subject to Section 409A of the Code, any payment made to a Participant who is a "specified employee" of the Company or any Subsidiary shall not be made before the date that is six months after the Participant's "separation from service" to the extent required to avoid the adverse consequences of Section 409A of the Code. For purposes of this Section 16.4, the terms "separation from service" and "specified employee" shall have the meanings set forth in Section 409A of the Code. In no event whatsoever shall the Company be liable for any additional tax, interest or penalties that may be imposed on any Participant by Section 409A of the Code or any damages for failing to comply with Section 409A of the Code.

16.5 Tax Withholding.

(a) The Company shall have the power and the right to deduct or withhold, or require a participant to remit to the Company, the minimum statutory amount to satisfy federal, state, and local taxes, domestic or foreign, required by law or regulation to be withheld with respect to any taxable event arising as a result of this Plan, but in no event shall such deduction or withholding or remittance exceed the minimum statutory withholding requirements unless permitted by the Company and such additional withholding amount will not cause adverse accounting consequences and is permitted under Applicable Law. Notwithstanding the foregoing, if a minimum statutory amount of withholding does not apply under the laws of any foreign jurisdiction, the Company may withhold such amount for remittance to the applicable taxing authority of such jurisdiction as the Company determines in its discretion, uniformly applied, to be appropriate.

(b) A Participant may, in order to fulfill the withholding obligation, tender previously-acquired shares of Common Stock or have shares of stock withheld from the exercise, provided that the shares have an aggregate Fair Market Value sufficient to satisfy in whole or in part the applicable withholding taxes. The broker-assisted exercise procedure described in Section 6.5 may also be utilized to satisfy the withholding requirements related to the exercise of a Stock Option.

(c) Notwithstanding the foregoing, a Participant may not use shares of Common Stock to satisfy the withholding requirements to the extent that (i) there is a substantial likelihood that the use of such form of payment or the timing of such form of payment would subject the Participant to a substantial risk of liability under Section 16 of the Exchange Act; (ii) such withholding would constitute a violation of the provisions of any law or regulation (including the Sarbanes-Oxley Act of 2002); or (iii) such withholding would cause adverse accounting consequences for the Company.

16.6 No Guarantee of Tax Consequences. Neither the Company, the Board, the Committee nor any other Person make any commitment or guarantee that any federal, state, local or foreign tax treatment will apply or be available to any Participant or any other person hereunder.

16.7 Severability. If any provision of the Plan or any Award Agreement shall be determined to be illegal or unenforceable by any court of law in any jurisdiction, the remaining provisions hereof and thereof shall be severable and enforceable in accordance with their terms, and all provisions shall remain enforceable in any other jurisdiction.

16.8 Stock Certificates; Book Entry Form. Notwithstanding any provision of the Plan to the contrary, unless otherwise determined by the Committee or required by any applicable law, rule or regulation, any obligation set forth in the Plan pertaining to the delivery or issuance of stock certificates evidencing shares of Common Stock may be satisfied by having issuance and/or ownership of such shares recorded on the books and records of the Company (or, as applicable, its transfer agent or stock plan administrator).

16.9 Governing Law. The Plan and all rights hereunder shall be subject to and interpreted in accordance with the laws of the State of Nevada, without reference to the principles of conflicts of laws, and to applicable Federal securities laws.

#### **Section 17. Effective Date, Amendment and Termination**

17.1 Effective Date. The effective date of the Plan shall be the date on which the Plan is approved by the Board; provided, however, that Awards granted under the Plan subsequent to the approval of the Plan by the Board shall be valid only if the Plan is approved by the requisite percentage of the holders of the Common Stock of the Company within one year of the date on which such Board approval occurs. If such stockholder approval is not obtained within one year after the date of the Board's approval of the Plan, then all Awards previously granted under the Plan shall terminate and cease to be outstanding, and no further Awards shall be granted under the Plan.

17.2 Amendment; Termination. The Board may suspend or terminate the Plan (or any portion thereof) at any time and may amend the Plan at any time and from time to time in such respects as the Board may deem advisable or in the best interests of the Company or any Subsidiary; provided, however, that (a) no such amendment, suspension or termination shall materially impair any rights or materially increase any obligations under any Award theretofore made under the Plan without the consent of the Participant affected thereby (or, after the Participant's death, the person having the right to exercise the Award), (b) to the extent necessary and desirable to comply with any applicable law, regulation, or stock exchange rule, the Company shall obtain stockholder approval of any Plan amendment in such a manner and to such a degree as required, and (c) stockholder approval is required for any amendment to the Plan that (i) increases the number of shares of Common Stock available for issuance under the Plan, or (ii) changes the persons or class of persons eligible to receive Awards. For purposes of the foregoing, any action of the Board or the Committee that alters or affects the tax treatment of any Award shall not be considered to materially impair any rights of any Participant. The Plan will continue in effect until terminated in accordance with this Section 17.2; *provided, however*, that no Award will be granted hereunder on or after the 10th anniversary of the date of the adoption of the Plan by the Board (the "Expiration Date"); but provided further, that Awards granted prior to such Expiration Date may extend beyond that date.

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#### **ADOPTION AND APPROVAL OF PLAN**

Date Plan initially adopted by Board: \_\_\_\_\_, 2020

Date Plan approved by Shareholders: \_\_\_\_\_, 2020

Effective Date of Plan: \_\_\_\_\_, 2020

**SYNTHETIC BIOLOGICS, INC.**  
**THIS PROXY IS SOLICITED BY THE BOARD OF DIRECTORS**  
**IN CONNECTION WITH THE 2020 ANNUAL MEETING OF STOCKHOLDERS**  
**TO BE HELD AT 9:30 A.M. (EASTERN TIME) ON SEPTEMBER 17, 2020**

PROXY: STEVEN A. SHALLCROSS, is hereby appointed by the undersigned as attorney and proxy with full power of substitution, to vote at the 2020 Annual Meeting of Stockholders of Synthetic Biologics, Inc. and at any adjournment(s) or postponement(s) of that meeting.

WITH RESPECT TO ANY MATTER THAT SHOULD PROPERLY COME BEFORE THE 2020 ANNUAL MEETING OF STOCKHOLDERS THAT IS NOT SPECIFIED HEREIN, THIS PROXY, WILL BE VOTED IN THE DISCRETION OF THE PROXY HOLDER.  
PLEASE SIGN AND DATE AND RETURN PROMPTLY

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIAL**  
**FOR THE 2020 ANNUAL MEETING OF STOCKHOLDERS**  
**TO BE HELD AT 9:30 A.M. (EASTERN TIME) ON SEPTEMBER 17, 2020**

**THE NOTICE OF ANNUAL MEETING OF STOCKHOLDERS, THE PROXY STATEMENT AND OUR ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2019 ARE AVAILABLE ON THE INTERNET AT: *WWW.SYNTHETICBIOLOGICS.COM*.**

**VOTE BY INTERNET**

It is fast, convenient, and your vote is immediately confirmed and posted.

**A. THE BOARD OF DIRECTORS OF SYNTHETIC BIOLOGICS, INC.**  
**RECOMMENDS THAT YOU VOTE**  
**FOR ALL NOMINEES LISTED IN PROPOSAL 1**  
**and**  
**FOR PROPOSALS 2 and 3**

**PROPOSAL 1.** Election of the following director nominees to serve for the following year and until his successor is elected: Nominees are: Jeffrey J. Kraws, Steven A. Shallcross, Scott L. Tarriff and Jeffrey Wolf.

<b>FOR ALL NOMINEES</b>	<b>WITHHOLD AUTHORITY FOR ALL NOMINEES</b>	<b>WITHHELD FOR THE FOLLOWING ONLY: (WRITE THE NAME(S) OF THE NOMINEE(S) IN THE SPACE BELOW)</b>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**PROPOSAL 2.** Ratification of the selection of BDO USA, LLP as our independent registered public accounting firm for the year ending December 31, 2020.

<b>FOR</b>	<b>AGAINST</b>	<b>ABSTAIN</b>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**PROPOSAL 3.** Approval of the Synthetic Biologics, Inc. 2020 Stock Incentive Plan.

<b>FOR</b>	<b>AGAINST</b>	<b>ABSTAIN</b>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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**B. NON-VOTING ITEMS**

**Change of Address** — Please print your new address below.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Comments** — Please print your comments below.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Meeting Attendance**

Mark the box to the right if you plan to attend the 2020 Annual Meeting of Stockholders.

**C. AUTHORIZED SIGNATURES**

**This section must be completed for your vote to be counted. — Date and Sign Below**

Dated:

Signature(s) of Stockholder(s):

Title:

Please mark, date and sign exactly as your name appears on this proxy card and return in the enclosed envelope. If acting as executor, administrator, trustee, guardian, etc., you should so indicate when signing. If the signer is a corporation, please sign the full corporate name, by a duly authorized officer. If shares are held jointly, each stockholder named should sign.

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