

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

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Marrone Bio Innovations, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

20-5137161
(I.R.S. Employer
Identification No.)

1540 Drew Avenue
Davis, California 95618
(530) 750-2800
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Pamela G. Marrone, Ph.D.
Chief Executive Officer
Marrone Bio Innovations, Inc.
1540 Drew Avenue
Davis, California 95618
(530) 750-2800
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:
Charles S. Farman
Alfredo B. D. Silva
Morrison & Foerster LLP
425 Market Street
San Francisco, California 94105
(415) 268-7000

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, please check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer
 Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company
 Emerging growth company [X]

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act. [X]

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered (1)	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee (2)
Common Stock, par value \$0.00001 per share	119,007,618	\$ 1.99	\$ 236,825,159.82	\$ 29,484.73
Total	119,007,618	\$ 1.99	\$ 236,825,159.82	\$ 29,484.73

- (1) Includes an aggregate of 48,493,332 shares of the Registrant’s common stock issuable upon exercise of warrants to purchase shares of the Registrant’s common stock. Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the “Securities Act”), this Registration Statement shall also cover an indeterminate amount and number of each identified class of the identified securities as may be issued upon conversion, exchange, exercise or settlement of any other securities that provide for such conversion, exchange, exercise or settlement.
- (2) Estimated in accordance with Rule 457(c) under the Securities Act solely for the purpose of calculating the registration fee on the basis of \$1.99, the average of the high and low prices of the Registrant’s common stock as reported on the Nasdaq Capital Market on March 29, 2018.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and we are not soliciting offers to buy these securities, in any state or other jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED APRIL 6, 2018

119,007,618 Shares



Common Stock

This prospectus relates to the possible resale or other disposition, from time to time, of up to 119,007,618 shares of our common stock previously issued and issuable upon exercise of warrants to purchase shares of our common stock by the selling stockholders named in this prospectus or in supplements to this prospectus. See "Selling Stockholders." We are registering the applicable shares of our common stock to provide the selling stockholders with freely tradable securities. The registration of the shares of our common stock covered by this prospectus does not necessarily mean that any shares of our common stock will be sold by any of the selling stockholders, and we cannot predict when or in what amounts any of the selling stockholders may sell any of our shares of common stock offered by this prospectus. The prices at which the selling stockholders may sell the shares of our common stock will be determined by prevailing market prices or at prices that may be obtained in negotiated transactions. We are filing the registration statement of which this prospectus is a part pursuant to contractual obligations that exist with the selling stockholders, as described in more detail in this prospectus under "About MBI—Private Placement and Related Transactions."

We are not selling any shares of our common stock under this prospectus and will not receive any proceeds from any sale or disposition by the selling stockholders of the shares of our common stock covered by this prospectus. However, we will receive proceeds in connection with the applicable exercise price of the warrants to purchase shares of our common stock, unless any of such warrants will be exercised via cashless exercise to the extent provided for in the applicable warrant. In addition, we have agreed to pay all fees and expenses incident to our contractual obligations to register the shares of our common stock. The selling stockholders from time to time may offer and sell the shares of our common stock held by them directly or through one or more underwriters, broker-dealers or agents on terms to be determined at the time of sale, as described in more detail in this prospectus under "Plan of Distribution." No shares of our common stock may be sold without delivery of this prospectus describing the method and terms of the offering of such shares.

Our common stock trades on the Nasdaq Capital Market, or Nasdaq, under the symbol "MBII." On April 5, 2018, the last reported sale price of our common stock on Nasdaq was \$2.67 per share.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY READ AND CONSIDER THE RISK FACTORS DESCRIBED IN THIS PROSPECTUS AND IN THE DOCUMENTS INCORPORATED BY REFERENCE INTO THIS PROSPECTUS. SEE "RISK FACTORS" ON PAGE 6 BEFORE MAKING A DECISION TO INVEST IN OUR SECURITIES.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2018

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, using a “shelf” registration process. Under this shelf registration process, the selling stockholders named in this prospectus may sell up to 119,007,618 shares of our common stock previously issued and issuable upon exercise of warrants to purchase shares of our common stock from time to time.

This prospectus provides you with a general description of the securities we may offer. Each time the selling stockholders sell shares of our common stock, we or the selling stockholders will provide a prospectus and any prospectus supplement containing specific information about the terms of the applicable offering, as required by applicable law. The prospectus supplement may also add, update or change information in this prospectus or in documents incorporated by reference in this prospectus. To the extent that any statement that we or the selling stockholders make in a prospectus supplement is inconsistent with statements made in this prospectus or in documents incorporated by reference in this prospectus, the statements made or incorporated by reference in this prospectus will be deemed modified or superseded by those made in the prospectus supplement. You should carefully read both this prospectus and any applicable prospectus supplement together with the additional information described under the heading “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference” before buying any shares of our common stock offered in this offering.

No person has been authorized to give any information or make any representations in connection with this offering other than those contained or incorporated by reference in this prospectus in connection with the offering described in this prospectus, and, if given or made, such information or representations must not be relied upon as having been authorized by us. This prospectus shall not constitute an offer to sell or a solicitation of an offer to buy offered securities in any jurisdiction in which it is unlawful for such person to make such an offering or solicitation. Neither the delivery of this prospectus nor any sale made hereunder shall under any circumstances imply that the information contained or incorporated by reference in this prospectus is correct as of any date subsequent to the date of this prospectus or the date of the document incorporated by reference, as applicable. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus incorporates by reference market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. In addition, the market and industry data and forecasts that may be included or incorporated by reference in this prospectus may involve estimates and assumptions, and these estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading “Risk Factors” contained in this prospectus, and under similar headings in other documents that are incorporated by reference into this prospectus. Accordingly, investors should not place undue reliance on this information.

The selling stockholders may from time to time offer and sell, transfer or otherwise dispose of any or all of the shares of our common stock covered by this prospectus directly or through one or more underwriters, broker-dealers or agents on terms to be determined at the time of sale. A prospectus supplement may describe the terms of the plan of distribution and set forth the names of any underwriters involved in the sale of our common stock. See “Plan of Distribution” for more information.

For purposes of this prospectus, references to the terms “MBI,” “the Company,” “we,” “us” and “our” refer to Marrone Bio Innovations, Inc., unless the context otherwise requires.

Marrone Bio Innovations® and our logo are some of our trademarks used in this prospectus. This prospectus and the documents incorporated by reference herein also include trademarks, tradenames and service marks that are the property of other organizations. Solely for convenience, our trademarks and tradenames referred to in this prospectus appear without the ® and ™ symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable licensor to these trademarks and tradenames.

The registration statement containing this prospectus, including exhibits to the registration statement, provides additional information about us and the common stock offered under this prospectus. The registration statement can be read at the SEC’s website or at the SEC offices mentioned under the heading “Where You Can Find More Information.”

ABOUT MBI

Our Company

We make bio-based pest management and plant health products, targeting the major markets that use conventional chemical pesticides, including certain agricultural and water markets, where our bio-based products are used as alternatives for, or mixed with, conventional chemical pesticides. We also target new markets for which (i) there are no available conventional chemical pesticides or (ii) the use of conventional chemical pesticides may not be desirable or permissible either because of health and environmental concerns (including for organically certified crops) or because the development of pest resistance has reduced the efficacy of conventional chemical pesticides. We deliver EPA-approved and registered biopesticide products and other bio-based products that address the global demand for effective, safe and environmentally responsible products. Six of our seven current products are approved by the United States Environmental Protection Agency, or EPA, and registered as “biopesticides.” Our first non-EPA product, Haven, is a plant health product that is a “biostimulant,” which requires state registrations, but does not require EPA registration. We believe our current portfolio of products and our pipeline address the growing global demand for effective, efficient and environmentally responsible products to control pests, increase crop yields and reduce crop stress.

We primarily sell our products to the crop protection market. Our five commercially available crop protection product lines are Regalia, for controlling plant disease and increasing plant health, Grandevo and Venerate, each for insect and mite control, Majestene and its retail counterpart brand Zelto, for nematode control, and Stargus and its row crop counterpart brand Amplitude, for downy mildew and white mold control. These products can be used in both conventional and organic crop production, and are primarily sold to growers of specialty crops. We also have had some sales for large-acre row crops, including Regalia and Venerate. In March 2016, we entered into an agreement with Isagro USA to distribute Bio-Tam 2.0 for soil-borne disease control and grapevine trunk disease control, which complements our existing products, particularly Regalia, and in May 2017, we entered into an agreement with Jet Harvest Solutions to distribute Jet-Ag biofungicide and disinfectant in certain regions of the United States. In March 2017, we launched Haven, a plant health product that reduces plant stress in drought and intense sunlight. We believe that these existing crop protection and plant health products, or variations thereof, such as the Zelto brand we launched in January 2018, can also be specifically targeted for industrial and institutional, turf and ornamental, home and garden or animal health uses.

In addition, we have developed Zequanox, a commercially available product line that we sell to the water treatment market. Zequanox selectively controls invasive mussels that cause significant infrastructure and ecological damage across a broad range of in-pipe and open-water applications, including hydroelectric and thermoelectric power generation, industrial applications and recreation. In November 2017, we signed an exclusive distribution agreement with a large water treatment company to distribute Zequanox for in-pipe treatments in the United States and Canada.

Private Placement and Related Transactions

On February 5, 2018, we issued to certain accredited investors, collectively referred to as the Buyers, including Ospraie Ag Science LLC, or Ospraie, an aggregate of 44,000,001 units, or Units, with each Unit purchased by Ospraie consisting of one share of our common stock, and one warrant to purchase one share of our common stock, and each Unit purchased by the other Buyers consisting of one share of our common stock and one warrant to purchase 0.8 shares of our common stock, for an aggregate purchase price of \$30,000,000, including the conversion to Units of all aggregate principal amounts outstanding under a secured promissory note made by us to an affiliate of Ospraie, pursuant to a securities purchase agreement, dated as of December 15, 2017, or the Securities Purchase Agreement.

Also on February 5, 2018, we converted \$35,000,000 aggregate principal amount of the Waddell Notes (as defined below) into an aggregate of 20,000,000 shares our common stock and 4,000,000 warrants to purchase shares of our common stock pursuant to an amendment, dated December 15, 2017, to the senior secured promissory notes, dated as of August 20, 2015, in an aggregate principal amount of \$40,000,000, or the Waddell Notes, issued and sold to Ivy Science & Technology Fund, Waddell & Reed Advisors Science & Technology Fund and Ivy VIP Science & Technology, which we collectively refer to herein as Waddell. We refer to the foregoing conversion herein as the Waddell Debt Conversion.

Also on February 5, 2018, we converted \$10,000,000 aggregate principal amount of indebtedness outstanding under the Snyder Loan Agreement (as defined below) into an aggregate of 5,714,285 shares of our common stock and 1,142,856 warrants to purchase shares of common stock pursuant to an amendment, dated December 15, 2017, to the loan agreement, dated as of October 2, 2012, or the Snyder Loan Agreement, between the Company and Gordon Snyder, an individual, as administrative agent to the lenders party thereto. We refer to the foregoing conversion herein as the Snyder Debt Conversion.

In addition, in connection with its role as exclusive placement agent and financial adviser with respect to the transactions contemplated by the Securities Purchase Agreement, National Securities Corporation, or NSC, and its designated affiliates received an aggregate of 800,000 shares of our common stock and warrants to purchase 2,017,143 shares of our common stock.

Collectively, 70,514,286 shares of our common stock and 48,493,332 warrants to purchase shares of our common stock were issued in connection with the foregoing transactions. Pursuant to a registration rights agreement, dated December 15, 2017, among us and the investors party thereto, or the Registration Rights Agreement, we are contractually obligated to file a registration statement registering the shares of our common stock previously issued and issuable upon exercise of the warrants to purchase shares of our common stock within 60 days after the closing date of the transactions described herein, or April 6, 2018. This registration statement is in satisfaction of such contractual obligation pursuant to the Registration Rights Agreement to permit the selling stockholders to resell or otherwise dispose of the shares of our common stock previously issued and issuable upon exercise of the warrants to purchase shares of our common stock in the manner contemplated under "Plan of Distribution."

In connection with the transactions contemplated by the Securities Purchase Agreement, we also entered into a Voting and Lock-up Agreement, dated as of February 5, 2018, with affiliates of Ospraie, or the Ospraie Group, affiliates of Waddell, or the Waddell Group, affiliates of Ardsley Advisory Partners, or Ardsley, and such group, the Ardsley Group, and Pamela G. Marrone, our Chief Executive Officer, which we refer to here in as the Voting and Lock-up Agreement.

Pursuant to the Voting and Lock-up Agreement, each party thereto agreed (i) not to sell, transfer or otherwise dispose of, for a period of 180 days following the date of such agreement, their shares of our common stock and (ii) to vote their shares of our common stock in favor of two additional nominees to our board of directors to be designated by Ospraie at our 2018 annual meeting of stockholders, or the 2018 Annual Meeting. Please see “Selling Stockholders—Relationships with Certain Selling Stockholders—Ospraie.” We have agreed to enforce the 180 day lock-up period, including by means of imposing stop-transfer instructions with our transfer agent, to prevent any actions in violation of the Voting and Lock-up Agreement.

Corporate Information

We were originally incorporated in the State of Delaware in June 2006 as Marrone Organic Innovations, Inc. We subsequently changed our name to Marrone Bio Innovations, Inc. in May 2009. Our corporate headquarters are located at 1540 Drew Avenue, Davis, California 95618. Our telephone number is (530) 750-2800 and our website address is www.marronebioinnovations.com. **The information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus. We have included our web address as an inactive textual reference only.** We make our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to these reports available free of charge on our website as soon as reasonably practicable after we file these reports with the SEC.

RISK FACTORS

Before you invest in our securities, in addition to the other information, documents or reports incorporated by reference in this prospectus and any prospectus supplement or other offering materials, you should carefully consider the risk factors in the section entitled “Risk Factors” in any prospectus supplement, as well as our most recent Annual Report on Form 10-K and in our Quarterly Reports on Form 10-Q filed subsequent to the Annual Report on Form 10-K, which are incorporated by reference into this prospectus and any prospectus supplement in their entirety, as the same may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. Each of the risks described in these sections and documents could materially and adversely affect our business, financial condition, results of operations and prospects, and could result in a partial or complete loss of your investment.

CAUTIONARY NOTE REGARDING FORWARD LOOKING INFORMATION

This prospectus and the documents we incorporate by reference in this prospectus contain forward-looking statements that reflect our plans, estimates and beliefs. Forward-looking statements are identified by words such as “would,” “could,” “will,” “may,” “expect,” “believe,” “should,” “anticipate,” “outlook,” “if,” “future,” “intend,” “plan,” “estimate,” “predict,” “potential,” “targets,” “seek” or “continue” or the negative of these terms or similar expressions. You should read these statements carefully because they discuss future expectations, contain projections of future results of operations or financial condition or state other “forward-looking” information. These statements relate to our future plans, objectives, expectations, intentions and financial performance and the assumptions that underlie these statements, and are based on assumptions and assessments made by our management in light of its experience and its perception of historical trends, current conditions, expected future developments and other factors our management believes to be appropriate. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those discussed in the forward-looking statements, including those risks described or incorporated by reference in this prospectus under “Risk Factors” above.

Forward-looking statements included or incorporated by reference in this prospectus include, for example, statements about: our plans to target our existing products or product variations for new markets and for new uses and applications; our plans and expectations with respect to growth in sales of our product lines and with respect to Bio-Tam 2.0 and Jet-Ag; our ability and plans to develop, register and commercialize additional new product candidates and bring new products to market across multiple categories faster and at a lower cost than other developers of pest management products, including research, development and field trial plans; our expectations regarding registering new products and new formulations and expanded use labels for existing products, including submitting new products to the EPA; our belief that challenges facing the use of conventional chemical pesticides will continue to grow; our beliefs regarding the growth of markets for, and unmet demand for, bio-based products; our beliefs regarding market adoption of our products and our ability to compete in our target markets; our intention to maintain existing, and develop new, supply, sales and distribution channels and extend market access; expectations regarding potential future payments under strategic collaboration and development agreements; our plans and expectations relating to our debt agreements; management’s belief regarding our access to capital resources through equity offerings, debt financings, strategic collaborations or other means; our plans to grow our business while improving efficiency, including by focusing on a limited number of product candidates, taking measures to reduce expenses and expanding our sales and marketing team; our plans and expectations with respect to manufacturing and production; our plans to seek third-party collaborations to develop and commercialize more early stage product candidates; our intention to continue to devote significant resources toward our proprietary technology and research and development; our expectations that sales will be seasonal and the impact of continued drought and other weather-related conditions; our ability to protect our intellectual property in the United States and abroad; our beliefs regarding the effects of the outcome of certain legal matters; our anticipated impact of certain accounting pronouncements; our ability to use carryforwards; our expectations regarding market risk, including interest rate changes, foreign currency fluctuations and commodity price changes; our expectations with respect to future regulatory restrictions on competing products or product ingredients and our future expenditures, available cash and other financial and operating results, and any statements of belief and any statement of assumptions underlying any of the foregoing.

Any such forward-looking statements are not guarantees of future performance and actual results, developments and business decisions may differ from those contemplated by such forward-looking statements. We disclaim any duty to update any forward-looking statements. You should also carefully consider other information set forth in reports or other documents that we file with the SEC from time to time.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares of our common stock previously issued and issuable upon exercise of the warrants to purchase shares of our common stock by the selling stockholders from time to time pursuant to this prospectus. The proceeds from the offering are solely for the account of the selling stockholders. See "Selling Stockholders."

We will, however, receive proceeds in connection with the applicable exercise price of the warrants to purchase shares of our common stock, unless any of such warrants are exercised via cashless exercise to the extent provided for in the applicable warrant. We have also agreed to bear all fees and expenses incident to our obligation to register the shares of our common stock being offered by this prospectus.

DESCRIPTION OF COMMON STOCK

The following description of our common stock, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of our common stock that the selling stockholders may offer under this prospectus. It may not contain all the information that is important to you. For the complete terms of our common stock, please refer to our amended and restated certificate of incorporation and our amended and restated bylaws, which are incorporated by reference into the registration statement which includes this prospectus. The Delaware General Corporation Law, or DGCL, may also affect the terms of our common stock. While the terms we have summarized below will apply generally to any future common stock that the selling stockholders may offer, we will describe the particular terms of the offering in more detail in the applicable prospectus supplement. If we so indicate in a prospectus supplement, the terms of any security offered under that prospectus supplement may differ from the terms we describe below.

Our amended and restated certificate of incorporation provides for one class of common stock. In addition, our amended and restated certificate of incorporation authorizes shares of undesignated preferred stock, the rights, preferences and privileges of which may be designated from time to time by our board of directors.

Our authorized capital stock consists of 270,000,000 shares, all with a par value of \$0.00001 per share, of which:

- 250,000,000 shares are designated as common stock; and
- 20,000,000 shares are designated as preferred stock.

As of March 26, 2018, we had outstanding 102,092,613 shares of common stock, held by 99 stockholders of record. As of March 26, 2018, we also had outstanding options to acquire 5,363,387 shares of our common stock with a weighted average exercise price of \$3.92 per share, as well as restricted stock units outstanding for the issuance of an aggregate of 881,113 shares upon settlement held by current and former employees, directors and consultants. In addition, as of March 26, 2018, there were warrants outstanding for the purchase of an aggregate of 52,724,620 shares of common stock with a weighted average exercise price of \$1.10 per share. Further, as of March 26, 2018, 4,911,799 shares of our common stock are available for issuance pursuant to awards made under the Marrone Bio Innovations, Inc. 2013 Stock Incentive Plan, as amended.

Voting Rights

Under our amended and restated certificate of incorporation, each share of our common stock entitles the holder to one vote with respect to each matter presented to our stockholders on which the holders of our common stock are entitled to vote. Subject to any rights that may be applicable to any then outstanding preferred stock, our common stock votes as a single class on all matters relating to the election and removal of directors on our board of directors and as provided by law. Holders of our common stock do not have cumulative voting rights. Except in respect of matters relating to the election and removal of directors on our board of directors and as otherwise provided in our amended and restated certificate of incorporation or required by law, all matters to be voted on by our stockholders must be approved by a majority of the shares present in person or by proxy at the meeting and entitled to vote on the subject matter. In the case of election of directors, all matters to be voted on by our stockholders must be approved by a plurality of the votes entitled to be cast by all shares of our common stock.

Dividends

Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of our common stock will be entitled to share equally, identically and ratably in any dividends that our board of directors may determine to issue from time to time. We have never paid cash dividends on our common stock. We do not anticipate paying periodic cash dividends on our common stock for the foreseeable future. Any future determination about the payment of dividends will be made at the discretion of our board of directors and will depend upon our earnings, if any, capital requirements, operating and financial conditions and on such other factors as the board of directors deems relevant.

Liquidation Rights

In the event of any voluntary or involuntary liquidation, dissolution or winding up of our affairs, holders of our common stock would be entitled to share ratably in our assets that are legally available for distribution to stockholders after payment of our debts and other liabilities. If we have any preferred stock outstanding at such time, holders of the preferred stock may be entitled to distribution and/or liquidation preferences. In either such case, we must pay the applicable distribution to the holders of our preferred stock before we may pay distributions to the holders of our common stock.

Other Rights

Our stockholders have no preemptive, conversion or other rights to subscribe for additional shares of our common stock. All outstanding shares of our common stock are, and all shares of our common stock offered by this prospectus will be, when sold, validly issued, fully paid and nonassessable. The rights, preferences and privileges of the holders of our common stock will be subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock that we may designate and issue in the future.

Listing

Our common stock is listed on the Nasdaq Capital Market under the symbol "MBII."

Transfer Agent and Registrar

The transfer agent for our common stock is American Stock Transfer & Trust Company, LLC. Its address is 6201 15th Avenue, Brooklyn, New York 11219.

Certain Effects of Authorized but Unissued Stock

We have shares of common stock and preferred stock available for future issuance without stockholder approval. We may issue these additional shares for a variety of corporate purposes, including future public or private offerings to raise additional capital or to facilitate corporate acquisitions or for payment as a dividend on our capital stock. The existence of unissued and unreserved preferred stock may enable our board of directors to issue shares of preferred stock with terms that could render more difficult or discourage a third-party attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise, thereby protecting the continuity of our management. In addition, if we issue preferred stock, the issuance could adversely affect the voting power of holders of common stock and the likelihood that holders of our common stock will receive dividend payments or payments upon liquidation.

ADDITIONAL INFORMATION CONCERNING OUR COMMON STOCK

Anti-Takeover Effects of Provisions of Our Charter Documents

Our amended and restated certificate of incorporation provides for our board of directors to be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, our stockholders holding a majority of the shares of our common stock outstanding will be able to elect all of our directors. Our amended and restated certificate of incorporation and amended and restated bylaws provide that all stockholder actions must be effected at a duly called meeting of stockholders and not by a consent in writing, and that only our board of directors, chairman of the board, chief executive officer or president (in the absence of a chief executive officer) may call a special meeting of stockholders.

Our amended and restated certificate of incorporation and amended and restated bylaws require a 66 2/3% stockholder vote for the removal of a director without cause or the rescission, alteration, amendment or repeal of the bylaws by stockholders, and our amended and restated bylaws require an 80% stockholder vote to amend the provisions of our bylaws relating to the election and classification of directors. The combination of the classification of our board of directors, the lack of cumulative voting and the 66 2/3% and 80% stockholder voting requirements will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

Our amended and restated bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual stockholders meeting, including proposed nominations of persons for election to our board of directors. At an annual stockholders meeting, stockholders may only consider proposals or nominations specified in the notice of meeting or otherwise properly brought before the meeting by our board of directors. Stockholders may also consider a proposal or nomination by a person who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given to the Secretary of the Company timely written notice, in proper form, of his or her intention to bring that business before the annual stockholders meeting. The amended and restated bylaws do not give our board of directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting of the stockholders. However our amended and restated bylaws may have the effect of precluding the conduct of business at a meeting if the proper procedures are not followed.

Our amended and restated bylaws also provide that only our board of directors, the chairperson of the board or the President may call a special meeting of stockholders. Because our stockholders do not have the right to call a special meeting, a stockholder could not force stockholder consideration of a proposal over the opposition of our board of directors by calling a special meeting of stockholders prior to such time as a majority of our board of directors, the chairperson of the board or the President believed the matter should be considered or until the next annual meeting provided that the requestor met the notice requirements. The restriction on the ability of stockholders to call a special meeting means that a proposal to replace the board also could be delayed until the next annual stockholders meeting.

These provisions may have the effect of deterring hostile takeovers or delaying changes in our control or management. These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage certain types of transactions that may involve an actual or threatened acquisition of us. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal. The provisions also are intended to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they also may inhibit fluctuations in the market price of our common stock that could result from actual or rumored takeover attempts.

Anti-Takeover Effects of Provisions of Delaware Law

We are subject to Section 203 of the DGCL, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;

- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an “interested stockholder” as an entity or person who, together with the person’s affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

Limitation of Liability and Indemnification

We have adopted provisions in our certificate of incorporation that limit or eliminate the liability of our directors for monetary damages for breach of their fiduciary duties, except for liability that cannot be eliminated under the DGCL. Section 102(b)(7) of the DGCL, provides that a corporation may, in its original certificate of incorporation or an amendment thereto, eliminate or limit the personal liability of a director for violations of the director’s fiduciary duty, except (1) for any breach of the director’s duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) pursuant to Section 174 of the DGCL, which provides for liability of directors for unlawful payments of dividends or unlawful stock purchases or redemptions or (4) for any transaction from which a director derived an improper personal benefit. Accordingly, our directors will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except with respect to the following:

- any breach of their duty of loyalty to us or our stockholders;
- acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the DGCL; or
- any transaction from which the director derived an improper personal benefit.

This limitation of liability does not apply to liabilities arising under the federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission. If Delaware law is amended to authorize the further elimination or limiting of director liability, then the liability of our directors will be eliminated or limited to the fullest extent permitted by Delaware law as so amended.

Section 145 of the DGCL provides that a corporation may indemnify any person, including an officer or director, who is, or is threatened to be made, party to any threatened, pending or completed legal action, suit or proceeding, whether civil, criminal, administrative or investigative, other than an action by or in the right of such corporation, by reason of the fact that such person was an officer, director, employee or agent of such corporation or is or was serving at the request of such corporation as an officer, director, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such officer, director, employee or agent acted in good faith and in a manner he reasonably believed to be in, or not opposed to, the corporation's best interest and, for criminal proceedings, had no reasonable cause to believe that his conduct was unlawful. A Delaware corporation may indemnify any officer or director in an action by or in the right of the corporation under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses that such officer or director actually and reasonably incurred.

Our certificate of incorporation and our bylaws provide that we shall indemnify our directors and executive officers and shall indemnify our other officers and employees and other agents to the fullest extent permitted by law. We believe that indemnification under our bylaws covers at least negligence and gross negligence on the part of indemnified parties. Our bylaws also permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in this capacity, regardless of whether our bylaws would permit indemnification.

In addition, we have entered and intend to continue to enter into separate indemnification agreements with certain of our directors and executive officers that are, in some cases, broader than the specific indemnification provisions provided by Delaware law and our charter documents, and may provide additional procedural protection. These agreements will require us, among other things, to:

- indemnify officers and directors against certain liabilities that may arise because of their status as officers and directors;
- advance expenses, as incurred, to officers and directors in connection with a legal proceeding subject to limited exceptions; and
- cover officers and directors under any general or directors' and officers' liability insurance policy maintained by us.

We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and executive officers. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling our company pursuant to the foregoing provisions, the opinion of the Securities and Exchange Commission is that such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

In addition, we maintain standard policies of insurance under which coverage is provided to our directors and officers against loss arising from claims made by reason of breach of duty or other wrongful act, and to us with respect to payments which may be made by us to such directors and officers pursuant to the above indemnification provisions or otherwise as a matter of law. We also make available standard life insurance and accidental death and disability insurance policies to our employees.

SELLING STOCKHOLDERS

The common stock being offered by the selling stockholders are those previously issued and issuable to the selling stockholders upon exercise of the warrants to purchase shares of our common stock. For additional information regarding the issuances of those shares of common stock and warrants, see “About MBI—Private Placement and Related Transactions” above. We are registering the shares of common stock in order to permit the selling stockholders to offer the shares for resale or other disposition from time to time. In addition to the ownership of the shares of our common stock and warrants to purchase shares of our common stock that is the subject of this prospectus, certain of the selling stockholders have had material relationships with us within the past three years as disclosed in this prospectus and described below under “—Relationships with Certain Selling Stockholders.”

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of common stock by each of the selling stockholders. The second column lists the number of shares of common stock beneficially owned by each selling stockholder, based on its ownership of the shares of common stock and warrants, as of March 26, 2018, assuming exercise of the warrants held by the selling stockholders on that date.

The third column lists the shares of common stock being offered by this prospectus by the selling stockholders.

In accordance with the terms of the Registration Rights Agreement with the selling stockholders, this prospectus generally covers the resale of at least the sum of (i) the maximum number of shares of common stock issued and (ii) the maximum number of shares of common stock issuable upon exercise of the related warrants, determined as if the outstanding warrants were exercised in full as of the trading day immediately preceding the date this registration statement was initially filed with the SEC, each as of the trading day immediately preceding the applicable date of determination and all subject to adjustment as provided in the Registration Rights Agreement. The fourth column assumes the sale of all of the shares offered by the selling stockholders pursuant to this prospectus, and the fifth column sets forth the applicable percentages assuming such sale.

Unless otherwise noted below, the address of each selling stockholder listed on the table is c/o Marrone Bio Innovations, Inc., 1540 Drew Avenue, Davis, California 95618.

Name of Selling Stockholder	Number of Shares of Common Stock Owned Prior to Offering	Maximum Number of Shares of Common Stock to be Sold Pursuant to this Prospectus	Number of Shares of Common Stock Owned After Offering	Percent of Shares of Common Stock Owned After Offering
Ospraie Ag Science LLC ⁽¹⁾ Entities affiliated with	61,333,334	61,333,334	—	—
Waddell & Reed Financial, Inc. ⁽²⁾ Ardsley Partners Renewable Energy Fund, L.P. ⁽³⁾	28,714,892	24,000,000	8,714,892	8.2
Van Herk Investments B.V. ⁽⁴⁾	15,681,580	12,000,000	3,681,580	3.6
National Securities Corporation ⁽⁵⁾	12,477,481	12,000,000	477,481	*
Cindy Evans ⁽⁶⁾	1,872,344	1,872,344	—	—
Ivan Saval ^{(7)†}	1,074,818	1,055,651	19,167	*
Loma Pomeroy ⁽⁸⁾	889,865	889,865	—	—
Danna J. Holmes Trust ⁽⁹⁾	566,132	550,775	15,357	*
J&W Evans 2005 Revocable Trust ⁽¹⁰⁾	514,043	504,876	9,167	*
Lloyd Family Security Trust fbo Lina Tans ⁽¹¹⁾	514,042	504,876	9,166	*
John and Wendy Evans Charitable Remainder Trust II ⁽¹²⁾	476,658	468,158	8,500	*
John and Wendy Evans Revocable Trust ⁽¹³⁾	448,620	440,620	8,000	*
Anne Berndt 2012 Grandchildren's Trust UAD 10/01/12 Anne Berndt TTEE ⁽¹⁴⁾	431,797	424,097	7,700	*
Dan and Danna Holmes Charitable Remainder Trust I ⁽¹⁵⁾	420,581	413,081	7,500	*
Dan and Danna Holmes Charitable Remainder Trust II ⁽¹⁶⁾	364,503	358,003	6,500	*
Cindy Evans Charitable Remainder Trust ⁽¹⁷⁾	364,503	358,003	6,500	*
Evans Family Limited Partnership ⁽¹⁸⁾	336,464	330,464	6,000	*
John and Wendy Evans Charitable Remainder Trust I ⁽¹⁹⁾	280,387	275,387	5,000	*
Cindy Evans-Ezekiel 36:26 Foundation, The American Endowment Fund ⁽²⁰⁾	224,310	220,310	4,000	*
Holmes Family Foundation, The American Endowment Fund ⁽²¹⁾	220,571	216,638	3,933	*
Evans Family Fund, Stanislaus Community Foundation ⁽²²⁾	220,571	216,638	3,933	*
Holmes 2004 Revocable Trust ⁽²³⁾	220,572	216,638	3,934	*
Frank and McHose 2013 Joint Revocable Trust ⁽²⁴⁾	112,155	110,155	2,000	*
Lina-Leneve Pomeroy Tans 2014 Family Trust for Adrian-John K Tans ⁽²⁵⁾	112,155	110,155	2,000	*
Lina-Leneve Pomeroy Tans 2014 Family Trust for Issue ⁽²⁶⁾	42,058	41,308	750	*
Nikhil Bhambi ^{(27) †}	42,058	41,308	750	*
Jonathan Rich ^{(28) †}	33,806	33,806	—	—
Vincent Calicchia ^{(29) †}	12,677	12,677	—	—
	8,451	8,451	—	—

* Less than 1%.

† The selling stockholder is an affiliate of a broker-dealer. The selling stockholder has represented to us that (1) he received the securities in the ordinary course of business and (2) at the time of the receipt of the securities, he had no agreements or understandings, directly or indirectly, with any person to distribute the securities. The address for the selling stockholder is c/o NSC, 200 Vesey Street, 25th Floor, New York, New York 10281.

- (1) Includes 30,666,667 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 30,666,667 shares of our common stock, which are being registered under this prospectus. As reported in the Schedule 13D filed on February 12, 2018, Mr. Dwight Anderson is the Managing Member of Ospraie Ag Science LLC and, in such capacity, may be deemed to have voting and dispositive power over the securities held for the account of Ospraie Ag Science LLC. Ospraie Ag Science LLC disclaims any beneficial ownership in such securities. The address for each of Ospraie Ag Science LLC and Mr. Dwight Anderson is c/o Ospraie Management LLC, 437 Madison Avenue, 28th Floor, New York, New York 10022.
- (2) Includes (i) 4,000,000 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 20,000,000 shares of our common stock, which are being registered under this prospectus, as well as (ii) 4,714,892 other shares of our common stock held by the selling stockholders, which are not being registered under this prospectus. In addition, the “Number of Shares of Common Stock Owned Prior to Offering” column does not include 4,000,000 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock by funds managed by IICO (as defined below) on August 20, 2015, or the 2015 Warrants, which contain a limitation preventing holders thereof from exercising any portion of the 2015 Warrants to the extent that, after giving effect to such issuance after exercise, such holder would beneficially own any common stock in excess of 19.99% of the number of shares of common stock outstanding immediately after giving effect to such issuance. However, after giving effect to the resale or other disposition of all shares of common stock covered by this prospectus by Waddell, the “Number of Shares of Common Stock Owned After Offering” column gives effect to the 2015 Warrants, which are also not being registered pursuant to this prospectus. As reported in the Schedule 13D/A filed on March 8, 2018, the securities reported on herein are beneficially owned by one or more open-end investment companies or other managed accounts which are advised or sub-advised by Ivy Investment Management Company, or IICO, an investment advisory subsidiary of Waddell & Reed Financial, Inc., or WDR. The investment advisory contracts grant IICO all investment and/or voting power over securities owned by such advisory clients. The investment sub-advisory contracts grant IICO investment power over securities owned by such sub-advisory clients and, in most cases, voting power. Any investment restriction of a sub-advisory contract does not restrict investment discretion or power in a material manner. Therefore, IICO or WDR, because of its control relationship to IICO, may be deemed the beneficial owner of the securities covered by this statement under Rule 13d-3 of the Act. The address of the entities is 6300 Lamar Avenue Overland Park, Kansas 66202.
- (3) Includes (i) 5,333,333 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 6,666,667 shares of our common stock, which are being registered under this prospectus, as well as (ii) 3,681,580 other shares of our common stock held by the selling stockholders, which are not being registered under this prospectus. As reported in the Schedule 13D filed on February 7, 2018, the securities reported on herein are beneficially owned by one or more open-end investment companies or other managed accounts which are owned, advised or sub-advised by Ardsley Advisory Partners, Ardsley Partners I, Phillip J. Hempleman, Ardsley Partners Fund II, L.P., Ardsley Partners Advanced Healthcare Fund, L.P., Ardsley Partners Renewable Energy Fund, L.P. and Ardsley Duckdive Fund, L.P. The address for these entities is 262 Harbor Drive, 4th Floor, Stamford, Connecticut 06902.
- (4) Includes (i) 5,333,333 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 6,666,667 shares of our common stock, which are being registered under this prospectus, as well as (ii) 477,481 other shares of our common stock held by the selling stockholders, which are not being registered under this prospectus. As reported in Schedule 13G filed on February 15, 2018, the securities reported on herein are beneficially owned by (i) Van Herk Investments B.V., a private company with limited liability incorporated under the laws of the Netherlands, or Van Herk, (ii) Van Herk Private Equity Investments B.V., a private company with limited liability incorporated under the laws of the Netherlands, or VHPI, (iii) Stichting Administratiekantoor Penulata, a foundation organized under the laws of the Netherlands, or Penulata, (iv) Van Herk Management Services B.V., a private company with limited liability incorporated under the laws of the Netherlands, or VHMS, (v) Onroerend Goed Beheer- en Beleggingsmaatschappij A. van Herk B.V., a private company with limited liability incorporated under the laws of the Netherlands, or OGBBA, (vi) A. van Herk Holding B.V., a private company with limited liability incorporated under the laws of the Netherlands, or Holdings, (vii) Stichting Administratiekantoor Abchrys, a foundation organized under the laws of the Netherlands, or Abchrys, and (viii) Adrianus van Herk, or Mr. van Herk. Each of Mr. van Herk, VHPI, Penulata, VHMS, OGBBA, Holdings and Abchrys disclaims beneficial ownership of the securities reported on herein. The address for these entities is Lichtenauerlaan 30, 3062ME, Rotterdam, The Netherlands.

- (5) Includes 1,340,644 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 531,700 shares of our common stock. NSC is a broker-dealer and served as our exclusive placement agent and financial advisor with respect to the transactions contemplated by the Securities Purchase Agreement. The address for NSC is 200 Vesey Street, 25th Floor, New York, New York 10281.
- (6) Includes (i) 175,942 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 879,709 shares of our common stock, which are being registered under this prospectus, as well as (ii) 19,167 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus.
- (7) Includes 637,165 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 252,700 shares of our common stock.
- (8) Includes (i) 91,796 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock issued and 458,979 shares of our common stock, which are being registered under this prospectus, as well as (ii) 10,000 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock and 5,357 other shares of our common stock held by the selling stockholder, which are not being registered under this prospectus.
- (9) Includes (i) 84,146 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 420,730 shares of our common stock, which are being registered under this prospectus, as well as (ii) 9,167 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. Danna J. Holmes serves as trustee and has sole voting and dispositive power over its securities.
- (10) Includes (i) 84,146 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 420,730 shares of our common stock, which are being registered under this prospectus, as well as (ii) 9,166 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. John H. Evans and Wendy J. Evans serve as co-trustees and have shared voting and dispositive power over its securities.
- (11) Includes (i) 78,026 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 390,132 shares of our common stock, which are being registered under this prospectus, as well as (ii) 8,500 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. Arthur W. Berndt serves as trustee and has sole voting and dispositive power over its securities.
- (12) Includes (i) 73,437 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 367,183 shares of our common stock, which are being registered under this prospectus, as well as (ii) 8,000 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. John H. Evans and Wendy J. Evans serve as co-trustees and have shared voting and dispositive power over its securities.

- (13) Includes (i) 70,683 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 353,414 shares of our common stock, which are being registered under this prospectus, as well as (ii) 7,700 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. John H. Evans and Wendy J. Evans serve as co-trustees and have shared voting and dispositive power over its securities.
- (14) Includes (i) 68,847 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 344,234 shares of our common stock, which are being registered under this prospectus, as well as (ii) 7,500 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. Arthur W. Berndt and David S. Sloan serve as co-trustees and have shared voting and dispositive power over its securities.
- (15) Includes (i) 59,667 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 298,336 shares of our common stock, which are being registered under this prospectus, as well as (ii) 6,500 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. Dan Holmes and Danna J. Holmes serve as co-trustees and have shared voting and dispositive power over its securities.
- (16) Includes (i) 59,667 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 298,336 shares of our common stock, which are being registered under this prospectus, as well as (ii) 6,500 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. Dan Holmes and Danna J. Holmes serve as co-trustees and have shared voting and dispositive power over its securities.
- (17) Includes (i) 55,077 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 275,387 shares of our common stock, both issued pursuant to the transactions described under “About MBI—Private Placement and Related Transactions” and which are being registered under this prospectus, as well as (ii) 6,000 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. Cindy Evans serves as trustee and has sole voting and dispositive power over its securities.
- (18) Includes (i) 45,898 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 229,489 shares of our common stock, which are being registered under this prospectus, as well as (ii) 5,000 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. Janet Pelton and Gordon Snyder serve as co-managers and have shared voting and dispositive power over its securities.
- (19) Includes (i) 36,718 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 183,592 shares of our common stock, which are being registered under this prospectus, as well as (ii) 4,000 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. John H. Evans and Wendy J. Evans serve as co-trustees and have shared voting and dispositive power over its securities.

- (20) Includes (i) 36,106 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 180,532 shares of our common stock, which are being registered under this prospectus, as well as (ii) 3,933 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. Thomas J. Tobin, President and Chief Executive Officer of the endowment fund, has sole voting and dispositive power over its securities.
- (21) Includes (i) 36,106 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 180,532 shares of our common stock, which are being registered under this prospectus, as well as (ii) 3,933 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. Thomas J. Tobin, President and Chief Executive Officer of the endowment fund, has sole voting and dispositive power over its securities.
- (22) Includes (i) 36,106 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 180,532 shares of our common stock, which are being registered under this prospectus, as well as (ii) 3,934 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. Marian Kaanon, Chief Executive Officer of the foundation, has sole voting and dispositive power over its securities.
- (23) Includes (i) 18,359 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 91,796 shares of our common stock, which are being registered under this prospectus, as well as (ii) 2,000 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. Dan Holmes and Danna J. Holmes serve as co-trustees and have shared voting and dispositive power over its securities.
- (24) Includes (i) 18,359 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 91,796 shares of our common stock, which are being registered under this prospectus, as well as (ii) 2,000 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. Kevin K. Frank and Caryn N. McHose serve as co-trustees and have shared voting and dispositive power over its securities.
- (25) Includes (i) 6,885 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 34,423 shares of our common stock, which are being registered under this prospectus, as well as (ii) 750 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. Lorna P. Adley serves as trustee and has sole voting and dispositive power over its securities.
- (26) Includes (i) 6,885 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 34,423 shares of our common stock, which are being registered under this prospectus, as well as (ii) 750 shares of our common stock issuable upon exercise of other warrants to purchase shares of our common stock, which are not being registered under this prospectus. Lorna P. Adley serves as trustee and has sole voting and dispositive power over its securities.
- (27) Includes 24,206 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 9,600 shares of our common stock.
- (28) Includes 9,077 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 3,600 shares of our common stock.
- (29) Includes 6,051 shares of our common stock issuable upon exercise of warrants to purchase shares of our common stock and 2,400 shares of our common stock.

Relationships with Certain Selling Stockholders

Ospraie

On December 15, 2017, we entered into the Securities Purchase Agreement, pursuant to which Ospraie acquired the shares of common stock and shares issuable upon exercise of warrants to purchase common stock being registered hereunder. See “About MBI—Private Placement and Related Transactions.” The Securities Purchase Agreement includes customary representations and warranties, indemnification and covenants, and we have also agreed under the Securities Purchase Agreement, among other things, to grant Ospraie certain rights, including the right to designate two new directors to our board of directors, which became effective as of February 5, 2018, and the right to designate two additional directors to our board of directors as Class II directors at our 2018 Annual Meeting.

As discussed under “About MBI—Private Placement and Related Transactions,” we have also entered into the Voting and Lock-up Agreement with the parties thereto, including the Ospraie Group, in connection with the election of the two additional directors to our board of directors to be designated by Ospraie at our 2018 Annual Meeting. Pursuant to the Voting and Lock-up Agreement, we have agreed to enforce the 180 day lock-up period, including by means of imposing stop-transfer instructions with our transfer agent, to prevent any actions in violation of the Voting and Lock-up Agreement.

Ardsley

Prior to Ardsley’s purchase of 6,666,667 Units pursuant to the Securities Purchase Agreement (see “About MBI—Private Placement and Related Transactions”), Ardsley was an existing holder of 3,681,580 shares of our common stock, which was purchased by Ardsley in April 2017 in connection with our underwritten public offering of shares of our common stock.

As discussed under “About MBI—Private Placement and Related Transactions,” we have also entered into the Voting and Lock-up Agreement with the parties thereto, including the Ardsley Group, in connection with the election of the two additional directors to our board of directors to be designated by Ospraie at our 2018 Annual Meeting. Pursuant to the Voting and Lock-up Agreement, we have agreed to enforce the 180 day lock-up period, including by means of imposing stop-transfer instructions with our transfer agent, to prevent any actions in violation of the Voting and Lock-up Agreement.

Waddell

Prior to the Waddell Debt Conversion (see “About MBI—Private Placement and Related Transactions”), Waddell was an existing holder of 4,714,192 shares of our common stock and an existing lender pursuant to the Waddell Notes, \$35,000,000 aggregate principal amount of which was converted into an aggregate of 20,000,000 shares our common stock and 4,000,000 warrants to purchase shares of our common stock pursuant to the Waddell Debt Conversion.

As discussed under “About MBI—Private Placement and Related Transactions,” we have also entered into the Voting and Lock-up Agreement with the parties thereto, including the Waddell Group, in connection with the election of the two additional directors to our board of directors to be designated by Ospraie at our 2018 Annual Meeting. Pursuant to the Voting and Lock-up Agreement, we have agreed to enforce the 180 day lock-up period, including by means of imposing stop-transfer instructions with our transfer agent, to prevent any actions in violation of the Voting and Lock-up Agreement.

Lenders under Snyder Loan Agreement

Prior to the Snyder Debt Conversion (see “About MBI—Private Placement and Related Transactions”), the lenders party to the Snyder Loan Agreement were existing lenders of an aggregate \$12,450,000 in principal outstanding pursuant to the Snyder Loan Agreement and held warrants to purchase an aggregate of 124,500 shares of our common stock in connection with an amendment to the Snyder Loan Agreement.

Van Herk

Prior to Van Herk’s purchase of 6,666,667 Units pursuant to the Securities Purchase Agreement (see “About MBI—Private Placement and Related Transactions”), Mr. van Herk was an existing holder of 477,481 shares of our common stock.

NSC

In addition to acting as our exclusive placement agent and financial advisor with respect to the transactions contemplated by the Securities Purchase Agreement, NSC acted as sole underwriter for our public offering of 6,571,429 shares of common stock (including the exercise in full of NSC’s option to purchase additional shares) at a public offering price of \$1.40 per share in April 2017 and received compensation in the form of underwriting discounts and commissions of \$0.112 per share in connection therewith, such that NSC has received an aggregate of \$796,000 and \$1,555,000 in fees, underwriting discounts and commissions from us in 2017 and 2018 to date, respectively.

From time to time in the ordinary course of business, NSC and its respective affiliates has performed and may continue to perform various commercial banking, financial advisory, investment banking and other financial services for us, for which it will receive customary fees and reimbursement of expenses.

PLAN OF DISTRIBUTION

We are registering the shares of common stock previously issued and issuable upon exercise of the warrants to purchase shares of our common stock to permit the resale of these shares of common stock by the holders thereof and holders of the shares of common stock and warrants from time to time after the date of this prospectus. We will receive proceeds in connection with the applicable exercise price of the warrants to purchase shares of our common stock, unless any of such warrants will be exercised via cashless exercise to the extent provided for in the applicable warrant. Other than such exercise price, we will not receive any of the proceeds from the sale by the selling stockholders of the shares of common stock. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

The selling stockholders may sell all or a portion of the shares of common stock beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of common stock are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;

- sales pursuant to Rule 144;
- broker-dealers may agree with the selling securityholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

If the selling stockholders effect such transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of common stock or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of common stock in the course of hedging in positions they assume. The selling stockholders may also sell shares of common stock short and deliver shares of common stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholders may also loan or pledge shares of common stock to broker-dealers that in turn may sell such shares.

The selling stockholders may pledge or grant a security interest in some or all of the warrants or shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act, amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the shares of common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling stockholders and any broker-dealer participating in the distribution of the shares of common stock may be deemed to be “underwriters” within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of common stock is made, a prospectus supplement, if required, will be distributed which will set forth the aggregate amount of shares of common stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling stockholders and any discounts, commissions or concessions allowed or reallocated or paid to broker-dealers.

Under the securities laws of some states, the shares of common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling stockholder will sell any or all of the shares of common stock registered pursuant to the registration statement, of which this prospectus forms a part.

The selling stockholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and the rules and regulations thereunder, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of common stock by the selling stockholders and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making activities with respect to the shares of common stock. All of the foregoing may affect the marketability of the shares of common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock.

We will pay all expenses of the registration of the shares of common stock pursuant to the registration rights agreement, estimated to be approximately \$120,000 in total, including, without limitation, SEC filing fees and expenses of compliance with state securities or “blue sky” laws; provided, however, that a selling stockholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the selling stockholders against liabilities, including some liabilities under the Securities Act, in accordance with the registration rights agreements, or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the selling stockholder specifically for use in this prospectus, in accordance with the Registration Rights Agreement, or we may be entitled to contribution.

Once sold under the registration statement, of which this prospectus forms a part, the shares of common stock will be freely tradable in the hands of persons other than our affiliates.

LEGAL MATTERS

The validity of the securities being offered by this prospectus will be passed upon by Morrison & Foerster LLP of San Francisco, California. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in an applicable prospectus supplement.

EXPERTS

The consolidated financial statements of Marrone Bio Innovations, Inc. appearing in Marrone Bio Innovations, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2017, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements), included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference rooms at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference rooms. The SEC also maintains a website that contains reports, proxy and information statements and other information about issuers, such as us, who file electronically with the SEC. The address of that website is www.sec.gov.

We maintain a website at www.marronebioinnovations.com. Webcasts of presentations we make at certain conferences may also be available on our website from time to time. The information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus. We have included our web address as an inactive textual reference only.

We have filed a registration statement on Form S-3 with the SEC relating to the securities covered by this prospectus. This prospectus is a part of the registration statement and does not contain all of the information in the registration statement. You may review a copy of the registration statement at the SEC's public reference room in Washington, D.C., as well as through the SEC's website at www.sec.gov.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. In addition, information we file with the SEC in the future will automatically update and supersede information contained in this prospectus and any accompanying prospectus supplement.

This prospectus incorporates by reference the documents set forth below that we have previously filed with the SEC:

- our Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC on April 5, 2018;
- our Current Reports on Form 8-K filed with the SEC on January 3, 2018, February 1, 2018, February 6, 2018 and March 26, 2018, respectively; and
- the description of our common stock contained in our Registration Statement on Form 8-A (File No. 001-36030), filed with the SEC on July 29, 2013, pursuant to Section 12(b) of the Exchange Act, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference into this prospectus additional documents that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, excluding, in each case, information deemed furnished and not filed until the termination of the offering of the securities described in this prospectus. Any statements contained in a previously filed document incorporated by reference into this prospectus is deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, or in a subsequently filed document also incorporated by reference herein, modifies or supersedes that statement.

We will provide to you at no cost a copy of any and all of the information incorporated by reference into the registration statement of which this prospectus is a part. You may make a request for copies of this information in writing or by telephone. Requests should be directed to:

Marrone Bio Innovations, Inc.
1540 Drew Avenue
Davis, California 95618
Attn: Pamela G. Marrone, Ph.D., Chief Executive Officer
(530) 750-2800

Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference in this prospectus.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other expenses of issuance and distribution

The following table sets forth all expenses, other than the underwriting discounts and commissions, payable by us in connection with this offering. All the amounts shown are estimates except for the SEC registration fee and FINRA fee.

SEC registration fee	\$	29,484.73
FINRA fee		36,023.77
Accounting fees and expenses		2,000*
Legal fees and expenses		50,000*
Total	\$	117,508.50*

* Estimated solely for purposes of this Item. Actual expenses may vary.

Item 15. Indemnification of Directors and Officers

Section 102(b)(7) of the Delaware General Corporation Law, or DGCL, provides that a corporation may, in its original certificate of incorporation or an amendment thereto, eliminate or limit the personal liability of a director for violations of the director's fiduciary duty, except (1) for any breach of the director's duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) pursuant to Section 174 of the DGCL, which provides for liability of directors for unlawful payments of dividends or unlawful stock purchases or redemptions or (4) for any transaction from which a director derived an improper personal benefit.

Section 145 of the DGCL provides that a corporation may indemnify any person, including an officer or director, who is, or is threatened to be made, party to any threatened, pending or completed legal action, suit or proceeding, whether civil, criminal, administrative or investigative, other than an action by or in the right of such corporation, by reason of the fact that such person was an officer, director, employee or agent of such corporation or is or was serving at the request of such corporation as an officer, director, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such officer, director, employee or agent acted in good faith and in a manner he reasonably believed to be in, or not opposed to, the corporation's best interest and, for criminal proceedings, had no reasonable cause to believe that his conduct was unlawful. A Delaware corporation may indemnify any officer or director in an action by or in the right of the corporation under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses that such officer or director actually and reasonably incurred.

Our certificate of incorporation as currently in effect provides for the indemnification of directors to the fullest extent permissible under Delaware law.

Our bylaws as currently in effect provide for the indemnification of officers and directors acting on our behalf if this person acted in good faith and in a manner reasonably believed to be in and not opposed to our best interest, and, with respect to any criminal action or proceeding, the indemnified party had no reason to believe his or her conduct was unlawful.

In addition, we have entered into separate indemnification agreements with certain of our executive officers and directors. Such agreements may require us, among other things, to advance expenses and otherwise indemnify our executive officers and directors against certain liabilities that may arise by reason of their status or service as executive officers or directors, to the fullest extent permitted by law. We intend to enter into indemnification agreements with any new directors and executive officers in the future.

We have purchased and intend to maintain insurance on behalf of us and any person who is or was a director or officer against any loss arising from any claim asserted against him or her and incurred by him or her in that capacity, subject to certain exclusions and limits of the amount of coverage.

Item 16. Exhibits and Financial Statement Schedules

See the Exhibit Index included immediately prior to the signature page of this registration statement, which is incorporated by reference herein.

Item 17. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

EXHIBIT INDEX

Exhibit Number	Description
3.1	<u>Fourth Amended and Restated Certificate of Incorporation of Marrone Bio Innovations, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Annual Report on Form 10-K, as filed with the SEC on March 25, 2014)</u>
3.2	<u>Amended and Restated Bylaws of Marrone Bio Innovations, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, as filed with the SEC on August 8, 2017)</u>
4.1	<u>Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Company's Form S-1/A, as filed with the SEC on July 22, 2013)</u>
10.1	<u>Securities Purchase Agreement, dated as of December 15, 2017, by and among the Company and the Buyers named therein (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on December 18, 2017)</u>
10.2	<u>Omnibus Amendment No. 4 to Notes, dated as of December 15, 2017, by and among the Company, Ivy Science & Technology Fund, Waddell & Reed Advisors Science & Technology Fund, Ivy VIP Science & Technology and Ospraie Management LLC (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on December 18, 2017)</u>
10.3	<u>Sixth Amendment to Loan Agreement, dated as of December 15, 2017, by and among the Company and Gordon Snyder, an individual, as administrative agent (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed with the SEC on December 18, 2017)</u>
10.4	<u>Registration Rights Agreement, dated as of December 15, 2017, by and among the Company and the Investors named therein (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed with the SEC on December 18, 2017)</u>
10.5	<u>Voting and Lock-Up Agreement, dated as of February 5, 2018, by and among the Ospraie Group, the Ardsley Group, the Waddell Group, Pamela G. Marrone and the Company (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on February 6, 2018)</u>
5.1	<u>Opinion of Morrison & Foerster LLP</u>
23.1	<u>Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm</u>
23.2	<u>Consent of Morrison & Foerster LLP (included in Exhibit 5.1)</u>
24.1	<u>Power of Attorney (included on signature page)</u>

April 6, 2018

Marrone Bio Innovations, Inc.
1540 Drew Avenue
Davis, California 95618

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to Marrone Bio Innovations, Inc., a Delaware corporation (the "Company"), in connection with the resale from time to time by the selling stockholders named in the Registration Statement (as defined below), any pre-effective amendment to the Registration Statement and any prospectus supplements to the final prospectus included as part of the Registration Statement, of up to 70,514,286 shares (the "Shares") of the Company's common stock, par value \$0.00001 per share (the "Common Stock") and up to 48,493,332 shares of Common Stock (the "Warrant Shares") that are issuable upon the exercise of outstanding warrants ("Warrants") to purchase Common Stock. The Shares and the Warrant Shares are included in the Registration Statement on Form S-3 (the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), filed with the Securities and Exchange Commission (the "Commission"), including the base prospectus, which forms part of the Registration Statement (the "Base Prospectus").

In connection with this opinion, we have examined such corporate records, documents, instruments, certificates of public officials and of the Company and such questions of law as we have deemed necessary for the purpose of rendering the opinions set forth herein. We also have examined the Registration Statement. In such examination, we have assumed the genuineness of all signatures and the authenticity of all items submitted to us as originals and the conformity with originals of all items submitted to us as copies.

Based upon and subject to the foregoing, we are of the opinion that (i) the Shares are validly issued, fully paid and nonassessable, and (ii) the Warrant Shares, when issued in accordance with the terms of the Warrants, will be duly authorized, validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the Base Prospectus which forms part of the Registration Statement. In giving such permission, we do not admit hereby that we come within the category of persons whose consent is required under Section 7 of the Securities Act, or the rules and regulations of promulgated thereunder. This opinion is expressed as of the date hereof, and we disclaim any undertaking to advise you of any subsequent changes of the facts stated or assumed herein or of any subsequent changes in applicable law.

Very truly yours,

/s/ Morrison & Foerster LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the reference to our firm under the caption “Experts” in the Registration Statement (Form S-3) and related Prospectus of Marrone Bio Innovations, Inc. for the registration of 119,007,618 shares of its common stock and to the incorporation by reference therein of our report dated April 4, 2018, with respect to the consolidated financial statements of Marrone Bio Innovations, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2017, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Roseville, California
April 6, 2018
