

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

FORM 10-K/A

Amendment No. 1

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934

For the year ended December 31, 2017

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 001-37383

**Arcadia Biosciences, Inc.**

(Exact name of Registrant as specified in its Charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)  
202 Cousteau Place, Suite 105  
Davis, CA  
(Address of principal executive offices)

81-0571538  
(I.R.S. Employer  
Identification No.)

95618  
(Zip Code)

(530) 756-7077

(Registrant's Telephone Number, Including Area Code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class  
Common Stock, par value \$0.001 per share

Name of each exchange on which registered  
The Nasdaq Capital Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark if disclosure of delinquent filers in response to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K/A or any amendment to this Form 10-K/A.

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 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  Smaller reporting company   
Emerging growth company

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 13(a) of the Exchange Act.

Indicate by check mark if the registrant is a shell company (as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended). YES  NO

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes  No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant as of June 30, 2017, the last business day of the Registrant's most recently completed second fiscal quarter, was approximately \$4,900,000 (based on the closing price of \$9.00 on June 30, 2017 on the Nasdaq Global Market).

The number of shares outstanding of the Registrant's common stock on April 9, 2018, was 2,481,137 shares.

DOCUMENTS INCORPORATED BY REFERENCE:

None

EXPLANATORY NOTE

We are filing this Amendment No. 1 on Form 10-K/A to amend our Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the Securities and Exchange Commission on March 20, 2018 (Original Filing), to include the information required by Part III of Form 10-K. The Part III information was previously omitted from the Original Filing in reliance on General Instruction G(3) to Form 10-K, which permits the information in the above referenced items to be incorporated in the Form 10-K by reference from our definitive proxy statement if such statement is filed no later than 120 days after our fiscal year-end. The information required by Items 10-14 of Part III is no longer being incorporated by reference to the proxy statement relating to our 2018 Annual Meeting of Shareholders. The reference on the cover of the Original Filing to the incorporation by reference to portions of our definitive proxy statement into Part III of the Original Filing is hereby deleted. This Amendment No. 1 is not intended to update any other information presented in the Original Filing.

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**FORM 10-K/A**  
Amendment No. 1

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**PART III**  
**DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE**

**Executive Officers and Directors**

The following table sets forth the names, ages and positions of our executive officers and directors (ages as of March 28, 2018):

<b>Name</b>	<b>Age</b>	<b>Position</b>
Rajendra Ketkar	63	President, Chief Executive Officer, and Director
Matthew T. Plavan	54	Chief Financial Officer
Zhongjin Lu, Ph.D.	52	Vice President of Product Development
Sarah Reiter	46	Chief Commercial Officer
Kevin Comcowich	49	Chair of the Board of Directors
Uday Garg	39	Director
Eric J. Rey	62	Director
Gregory D. Waller	68	Director
Amy Yoder	51	Director

**Executive Officers**

**Rajendra Ketkar** has served as our president and chief executive officer since May 2016. He brings nearly 35 years of agriculture and agricultural biotechnology business experience in the U.S. and internationally, including more than 30 years in a variety of business, operations, and strategy roles for Monsanto Company. His positions included managing director of the Mahyco-Monsanto Biotech joint venture in India and director of biotechnology strategy. Mr. Ketkar holds a master's degree in chemical engineering from Oklahoma State University and a Master of Business Administration from the University of New Orleans.

**Matthew T. Plavan** has served as our chief financial officer since September 2016. He brings nearly 30 years of financial and executive leadership experience in biotech, healthcare and high technology sectors. Prior to joining Arcadia, Mr. Plavan served as CFO, COO and CEO of Cesca Therapeutics, Inc., and CFO of Strion Air, Inc. and Reason, Inc. He also held executive finance positions with McKesson Corporation and audit and advisory management positions with Ernst & Young. Mr. Plavan is a certified public accountant and earned a bachelor's degree in business economics from the University of California, Santa Barbara.

**Zhongjin Lu, Ph.D.** has served as our vice president of product development since February 2010. Dr. Lu has been with Arcadia since its inception, first as director of product development and plant breeding, and, since May 2010, as vice president of product development. Prior to joining Arcadia, Dr. Lu was the director of plant breeding and senior scientist at Seaphire International, Inc., a seawater-based agricultural company. Previously, he was employed by Monsanto Company and the University of Arizona, and he was associated with the Jiangsu Academy of Agricultural Sciences in China. Dr. Lu holds a master's degree in plant genetics and breeding from Nanjing Agricultural University in China and a doctorate in plant physiology from Technion – Israel Institute of Technology.

**Sarah Reiter** joined the Company as our chief commercial officer in March 2018. She has over 20 years of experience in agriculture with a strong focus on crop protection and sustainability. Prior to joining Arcadia, Ms. Reiter was the USA country head for STK Bio-ag Technologies and Global Product Manager for Biologics for Bayer CropScience. She previously served as vice president of marketing and communications for AgraQuest and served in several positions with Syngenta USA. Ms. Reiter holds a Bachelor's Degree in English from the University of California, Davis and a Master's Certificate in Business Administration from the Villanova School of Business.

Each executive officer serves at the discretion of our board of directors and holds office until his or her successor is duly elected and qualified or until his or her earlier resignation or removal. There are no family relationships among any of our directors or executive officers.

**Non-employee Directors**

**Kevin Comcowich** has served as a director since November 2016 and chair of the board since November 2017. He has most recently served as the chief executive officer and portfolio manager of HTX Energy Fund in Houston, Texas. He was previously the president and chief investment officer (CIO) of Sound Energy Partners and served as CIO and research analyst for Southport Energy Plus Partners Fund. Mr. Comcowich received his Master of Business Administration from the University of Indiana and earned his bachelor's degree from the College of the Holy Cross. We believe Mr. Comcowich is qualified to serve on our board of directors due to his extensive experience in financial leadership, business strategy, investment management and global capital market strategies.

**Uday Garg** has served as a director since June 2014. He has also served as a director of Jain Fresh Foods Limited, India since March 2016. Mr. Garg founded Mandala Capital, a private equity fund, in 2008 and has served as managing director and a director since its inception. As part of his duties at Mandala, Mr. Garg serves on the boards of various Mandala portfolio companies and affiliated investment vehicles. Previously, Mr. Garg was a portfolio manager at Duet Group, Altima Partners, and Amaranth Advisors. He began his career as an investment banker in the corporate finance and mergers and acquisitions department of Deutsche Bank. He holds a Bachelor of Science in Economics with a concentration in finance from the Wharton School of Business at the University of Pennsylvania. We believe Mr. Garg is qualified to serve on our board of directors due to his considerable experience in the private equity industry and extensive knowledge of the seed business in India, which provides our board of directors a useful perspective on our business strategy in India.

**Eric J. Rey** has served as a director since June 2017. He is one of our founders and served as our president and chief executive officer of our company from August 2003 until his resignation in February 2016. He also served as a member of our board of directors from 2005 until February 2016. Mr. Rey has served as a director of Phytelligence, Inc. since 2015, and as a director and a member of the compensation committee of Texas Crop Science, LLC since 2016. Mr. Rey has approximately 35 years of management experience in agricultural biotechnology, most of which have focused specifically on food, feed, and industrial products from agricultural biotechnology. Prior to founding our company, Mr. Rey worked as a partner with Rockridge Group, a management consulting firm, to manage the development of strategic partnerships for early-stage companies developing genomic, biopharmaceutical, nutraceutical, crop protection, animal nutrition and health, alternative crop, and industrial products. Prior to his work with Rockridge, Mr. Rey served as vice president of operations with Calgene Inc. for 17 years, including two years with Monsanto Company following its acquisition of Calgene. During his 17 years at Calgene and Monsanto, he was responsible for the establishment and management of the company's operational, product development, and agricultural infrastructure. Mr. Rey holds a Bachelor of Science in Plant Science from the University of California, Davis. We believe that Mr. Rey is qualified to serve as a member of our board of directors because of his extensive and unique knowledge of the company's operations and business by virtue of his prior service as president and chief executive officer for more than a decade, in addition to his prior service as a director of our company.

**Gregory D. Waller** has served as a director since June 2017. He has served as a director of CHF Solutions since August 2011. Mr. Waller also serves on the board of Endologix Corporation and is the chair of its audit committee and a member of its nominating and governance committee. Until April 2015, Mr. Waller was chief financial officer of Ulthera Corporation, a privately-held company providing ultrasound technology for aesthetic and medical applications, which was sold to Merz North America in July 2014. From March 2006 until April 2011, Mr. Waller was chief financial officer of Universal Building Products, a manufacturer of concrete construction accessories. Mr. Waller served as vice president-finance, chief financial officer and treasurer of Sybron Dental Specialties, Inc., a manufacturer and marketer of consumable dental products, from August 1993 until his retirement in May 2005 and was formerly the vice president and treasurer of Kerr, Omco Corporation, and Metrex. Mr. Waller's prior board experience includes service as a director for the following publicly-traded companies: Cardiogenesis Corporation, from April 2007 until its acquisition by Cryolife in 2011; Clariant, Inc., from December 2006 until its acquisition by General Electric Company in December 2010; Biolase Technology, Inc., from October 2009 to August 2010; SenoRx, Inc., from May 2006 until its acquisition by C.R. Bard, Inc. in July 2010; and Alsius Corporation, from June 2007 until its acquisition by Zoll Medical Corporation in September 2009. Mr. Waller has an Master of Business Administration with a concentration in accounting from California State University, Fullerton. We believe Mr. Waller is qualified to serve as a member of our board of directors because of his 44 years of financial and management experience, as well as his familiarity with public company board functions from his service on the boards of other public companies.

**Amy Yoder** has served as a director of our Company since August 2017. She is president and CEO of Anuvia Plant Nutrients, a company that creates enhanced plant nutrition products from recycled organic waste sources. Ms. Yoder is the former president and CEO of Arysta Life Science and has held a variety of senior sales, marketing and executive positions with companies throughout the agricultural and related industries, including Spectrum Brands, BioLab and United Agri Products. Ms. Yoder received a Bachelor's Degree in Agricultural Technology and Systems Management from Michigan State University, with an emphasis in crop and soil science. She has served on boards of various agricultural associations and universities and currently serves as a director for Compass Minerals International. We believe Ms. Yoder is qualified to serve on our board of directors due to her extensive experience across various agriculture sectors, deep knowledge of the capital markets and public board governance expertise.

## **Board Composition**

Our business and affairs are managed under the direction of our board of directors. The number of directors is fixed by our board of directors, subject to the terms of our Certificate of Incorporation and bylaws. Our board of directors currently consists of six directors, four of whom qualify as "independent" under the listing standards of The Nasdaq Stock Market.

Our bylaws permit our board of directors to establish by resolution the authorized number of directors, and as of March 28, 2018, seven directors are currently authorized. We currently have one vacancy on the board.

In accordance with our Certificate of Incorporation and our bylaws, our board of directors is 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. Our directors are divided among the three classes as follows:

- the Class I directors are Rajendra Ketkar and Kevin Comcowich, and their terms will expire at the annual meeting of stockholders to be held in 2019;
- the Class II directors are Eric J. Rey, and Gregory D. Waller, and their terms will expire at the annual meeting of stockholders to be held in 2020; and
- the Class III directors are Uday Garg and Amy Yoder, and their term will expire at the 2018 Annual Meeting.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change of control. Under Delaware law, our directors may be removed for cause by the affirmative vote of the holders of a majority of our outstanding voting stock. Directors may not be removed by our stockholders without cause.

Any increase or decrease in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors.

### **Board Meetings and Director Communications**

During fiscal year 2017, the board of directors held nine meetings and each director attended at least 75% of the aggregate of (i) the total number of meetings of the board of directors held during the period for which he or she has been a director and (ii) the total number of meetings held by all committees of the board of directors on which he or she served during the periods that he or she served. Although, we have no formal policy regarding director attendance at annual meetings, we encourage all directors to attend. A majority of the directors attended last year's annual meeting of stockholders.

Stockholders and other interested parties may communicate with the non-management members of the board of directors by mail sent to the Company's corporate secretary in Davis, CA, addressed to the intended recipient and care of the corporate secretary. The corporate secretary will review all incoming stockholder communications (except for mass mailings, job inquiries, business solicitations and patently offensive or otherwise inappropriate material) and route such communications as appropriate to member(s) of the board of directors. For a more detailed description of stockholder communications, see "Communications with Our board of directors."

### **Director Independence**

Our board of directors has undertaken a review of its composition, the composition of its committees, and the independence of each director, and has considered whether any director has a material relationship with the Company that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. Based on information provided by each director concerning his or her background, employment, and affiliations, including family relationships, our board of directors has determined that Ms. Yoder and none of Messrs. Garg, Comcowich and Waller, have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the applicable rules and regulations of the SEC, and the listing standards of The Nasdaq Stock Market (the "Applicable Rules"). The board determined that Mr. Ketkar and Mr. Rey, are not "independent" as that term is defined under the Applicable Rules. In making these determinations, our board of directors considered the current and prior relationships that each director has with our Company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each director or affiliated entities, and the transactions involving them described in the section titled "Certain Relationships and Related Party Transactions."

The board of directors also has determined that each director other than Rajendra Ketkar is a non-employee director, as defined pursuant to Rule 16b-3 promulgated under the Exchange Act, and an outside director, as defined pursuant to Section 162(m) of the Internal Revenue Code, as amended.

### **Board Committees**

Our board of directors currently has an audit committee, a compensation committee, and a nominating and governance committee. The composition and responsibilities of each of the committees of our board of directors are described below. Members serve on these committees until their resignation or until otherwise determined by our board of directors.

### ***Audit Committee***

Our audit committee is currently comprised of Messrs. Waller, Comcowich, and Garg, with Mr. Waller serving as audit committee chair. Our board of directors has determined that each of the members of our audit committee satisfies the requirements for independence and financial literacy under the current listing standards of The Nasdaq Stock Market and SEC rules and regulations, including Rule 10A-3. Our board of directors also has determined that Mr. Waller is an audit committee financial expert within the meaning of Item 407(d) of Regulation S-K under the Securities Act of 1933, as amended, or the Securities Act. Our audit committee held four meetings in fiscal 2017. The responsibilities of our audit committee include, among other things:

- selecting a qualified firm to serve as the independent registered public accounting firm to audit our financial statements;
- helping to ensure the independence and performance of the independent registered public accounting firm;
- discussing the scope and results of the audit with the independent registered public accounting firm, and reviewing, with management and the independent registered public accounting firm, our interim and year-end operating results;
- developing procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- reviewing our policies on risk assessment and risk management;
- reviewing related party transactions; and
- approving all audit and all permissible non-audit services, other than de minimis non-audit services, to be performed by the independent registered public accounting firm.

In accordance with and pursuant to Section 10A(i)(3) of the Exchange Act, our board of directors has delegated to Mr. Waller the authority to pre-approve any auditing and permissible non-auditing services to be performed by our registered independent public accounting firm, provided that all such decisions to pre-approve an activity are presented to the full audit committee at its first meeting following any such decision.

Our audit committee was established in accordance with, and operates under a written charter that satisfies the applicable rules of the SEC and the listing standards of The Nasdaq Stock Market. A copy of the charter of our audit committee is available in the Investors section of our website at <http://ir.arcadiabio.com> under “Corporate Governance.”

### ***Compensation Committee***

Our compensation committee is currently comprised of Ms. Yoder and Mr. Garg, with Ms. Yoder serving as compensation committee chair. Each member of our compensation committee meets the requirements for independence for compensation committee members under current Nasdaq Stock Market and SEC rules and regulations. Each member of our compensation committee is also a non-employee director, as defined pursuant to Rule 16b-3 promulgated under the Exchange Act, and an outside director, as defined pursuant to Section 162(m) of the Internal Revenue Code of 1986. The purpose of our compensation committee is to discharge the responsibilities of our board of directors relating to compensation of our executive officers.

During fiscal year 2017, our compensation committee held five meetings. The responsibilities of our compensation committee include, among other things:

- reviewing, approving, and determining, or making recommendations to our board of directors regarding, the compensation of our executive officers;
- administering our stock and equity incentive plans;
- reviewing and approving or making recommendations to our board of directors regarding incentive compensation and equity plans; and
- establishing and reviewing general policies relating to compensation and benefits of our employees.

Our compensation committee has, as it has determined necessary, engaged Compensia, Inc., an independent compensation consulting firm, to provide data and recommendations that the compensation committee has used in setting executive and non-employee director compensation.

Our compensation committee was established in accordance with, and operates under, a written charter that satisfies the applicable rules of the SEC and the listing standards of The Nasdaq Stock Market. A copy of the charter of our compensation committee is available in the Investors section of our website at <http://ir.arcadiabio.com> under “Corporate Governance.”

### ***Nominating and Governance Committee***

Our nominating and governance committee is currently comprised of Ms. Yoder and Messrs. Comcowich and Waller, each of whom is a non-employee member of our board of directors, with Ms. Yoder serving as nominating and governance committee chair. Each member of our nominating and governance committee meets the requirements for independence for compensation committee members under current Nasdaq Stock Market and SEC rules and regulations.

During fiscal year 2017, our nominating and governance committee held six meetings. The responsibilities of our nominating and governance committee include, among other things:

- identifying, evaluating, and selecting, or making recommendations to our board of directors regarding, nominees for election to our board of directors and its committees;
- considering and making recommendations to our board of directors regarding the composition of our board of directors and its committees;
- reviewing and assessing the adequacy of our corporate governance practices and recommending any proposed changes to our board of directors; and
- evaluating the performance of our board of directors and of individual directors.

Our nominating and governance committee operates under a written charter that satisfies the applicable listing requirements and rules of The Nasdaq Stock Market. A copy of the charter of our nominating and governance committee is available in the Investors section of our website at <http://ir.arcadiabio.com> under “Corporate Governance.”

**Committee Membership**

The members of each of these committees as of March 28, 2018 are identified below.

Audit Committee	Compensation Committee	Nominating and Governance Committee
Gregory D. Waller (chair)	Amy Yoder (chair)	Amy Yoder (chair)
Kevin Comcowich	Uday Garg	Kevin Comcowich
Uday Garg		Gregory D. Waller

**Considerations in Evaluating Director Nominees**

Our nominating and governance committee uses a variety of methods for identifying and evaluating director nominees. In its evaluation of director candidates, our nominating and governance committee will consider the current size and composition of our board of directors and the needs of our board of directors and the respective committees of our board of directors. Some of the qualifications that our nominating and governance committee considers include, without limitation: issues of character, integrity, and judgment; independence; diversity, including diversity of experience; experience in corporate management, operations, finance, business development, and mergers and acquisitions; experience relevant to the Company’s industry; experience as a board member or executive officer of another publicly held company; length of service; and any other relevant qualifications, attributes, or skills. Nominees also must have the ability to offer advice and guidance to our chief executive officer based on past experience in positions with a high degree of responsibility and should be leaders in the companies or institutions with which they are affiliated. Director candidates must have sufficient time available in the judgment of our nominating and governance committee to perform all board of directors responsibilities and responsibilities of those committees on which they serve.

Members of our board of directors are expected to prepare for, attend, and participate in all board of directors and applicable committee meetings. Other than the foregoing, there are no stated minimum criteria for director nominees, although our nominating and governance committee may also consider such other factors as it may deem, from time to time, are in the best interests of the Company and its stockholders.

The policy of our nominating and governance committee is to consider properly submitted stockholder recommendations for candidates for membership on the board. In evaluating such recommendations, the nominating and governance committee will address the membership criteria set forth above.

Although our board of directors does not maintain a specific policy with respect to board diversity, our board of directors believes that it should be a diverse body, and our nominating and governance committee considers a broad range of backgrounds and experiences. In making determinations regarding nominations of directors, our nominating and governance committee may take into account the benefits of diverse viewpoints. Our nominating and governance committee also considers these and other factors as it oversees the annual board of directors and committee evaluations. After completing its review and evaluation of director candidates, our nominating and governance committee recommends to our full board of directors the director nominees for selection.

**Code of Business Conduct and Ethics**

We have adopted a Code of Business Conduct and Ethics that is applicable to all of our employees, officers, and directors, including our chief executive officer, chief financial officer, and other executive and senior financial officers. A copy of our Code of Business Conduct and Ethics is available in the Investors section of our website at <http://ir.arcadiabio.com> under “Corporate Governance.”



## Board Leadership Structure

Mr. Comcowich currently serves as chair of our board and Mr. Ketkar serves as president and chief executive officer, as well as a member of our board. The board has not adopted a specific policy on whether the same person should serve as both the chief executive officer and chair of the board or, if the roles are separate, whether the chair should be selected from the non-employee directors or should be an employee. The board believes it is appropriate to retain the discretion and flexibility to make these determinations from time to time as needed to provide appropriate leadership for the Company. At this time, the board believes that it has achieved the best board leadership structure for the Company by separating the roles of chair and chief executive officer.

Mr. Comcowich, as chair, presides at all meetings of the board, including executive sessions of the board and the independent directors, facilitates discussions among independent directors on key issues and concerns outside of board meetings, serves as a liaison between the chief executive officer and the other directors, reviews information to be sent to the board, collaborates with the chief executive officer and other members of Company management to set meeting agendas and board information, assists the chairs of the committees of the board as requested, and performs such other functions and responsibilities as requested by the board or the independent directors from time to time. In performing the duties described above, the chair is expected to consult with, and does consult with, the chairs of the appropriate board committees.

## Board's Role in Risk Oversight

In addition to the responsibilities performed by our audit committee, the board of directors plays an active role in overseeing management of the Company's risks. The board of directors focuses on the most significant operational risks facing our Company related to our business, assets, and liabilities, as well as our key financial risks, such as credit risk, interest rate risk, liquidity risk, and other market-related risk. Our board seeks to ensure that risks undertaken by the Company are consistent with an overall risk profile that is appropriate for the Company and the achievement of its business objectives and strategies. The board of directors recognizes that risk management and oversight comprise a dynamic and continuous process and therefore reviews the Company's risk model and process periodically. The board of directors performs these tasks both in collaboration with and independently of the audit committee and Company management.

## Non-Employee Director Compensation

The following table summarizes compensation paid to our non-employee directors for services performed during the year ended December 31, 2017. Directors who are also our employees receive no additional compensation for their service as a director. During the year ended December 31, 2017, Mr. Ketkar, our current president and chief executive officer, was an employee. Compensation for Mr. Ketkar is discussed in "Executive Compensation."

Name	Fees Earned or Paid in Cash(1)	Option Awards(2)	Total
Kevin Comcowich	\$ 65,867	\$ 30,000	\$ 95,867
Uday Garg	\$ 48,224	\$ 30,000	\$ 78,224
Eric J. Rey	\$ 24,396	\$ 60,000	\$ 84,396
Gregory D. Waller	\$ 32,352	\$ 60,000	\$ 92,352
Amy Yoder	\$ 17,645	\$ 60,000	\$ 77,645
Rajiv Shah, M.D.	\$ 18,846	\$ -	\$ 18,846
Vic Knauf	\$ 15,604	\$ -	\$ 15,604
George F.J. Gosbee	\$ 96,799	\$ 70,000	\$ 166,799

(1) Represents the cash annual retainer and the meeting attendance fees earned by the non-employee directors.

(2) Amounts do not reflect compensation actually received by the non-employee director. Instead, the amounts represent aggregate grant date fair value of options granted during 2017 computed in accordance with ASC Topic 718 *Stock Compensation*. The valuation assumptions used in determining such amounts are described in Note 11 of the Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended December 31, 2017. Messrs. Comcowich and Garg, as continuing non-employee directors, each received a grant of 3,018 stock options, which vest as described below. Messrs. Rey and Waller, as new non-employee directors, each received a grant of 5,969 stock options, which vest as described below. Ms. Yoder, as a new non-employee director, received a grant of 10,123 options which vest as described below. Mr. Gosbee, as previous chair of the board of directors, received a grant of 7,041 stock options, which was to vest over a three-year period. Mr. Gosbee passed away in November 2017.

The following table lists all outstanding equity awards held by our non-employee directors as of December 31, 2017.

Director Name	Option Grant Date	Number of Options Granted	Option Exercise Price Per Share (\$)(1)	Option Expiration Date
Kevin Comcovich	10/30/2016	2,396 (2)	\$ 34.40	10/30/2026
	6/7/2017	3,018 (3)	\$ 14.60	6/7/2027
Uday Garg	8/18/2016	906 (4)	\$ 42.80	8/18/2026
	6/7/2017	3,018 (3)	\$ 14.60	6/7/2027
Eric J. Rey	6/30/2008	26,005 (4)	\$ 21.60	6/30/2018
	11/1/2009	6,875 (4)	\$ 44.80	11/1/2019
	1/1/2010	9,375 (4)	\$ 44.80	1/1/2020
	1/1/2011	6,250 (4)	\$ 271.20	1/1/2021
	12/31/2012	1,250 (4)	\$ 271.20	12/31/2022
	10/29/2014	1,250 (4)	\$ 122.40	10/29/2024
Gregory D. Waller	6/7/2017	5,969 (5)	\$ 14.60	6/7/2027
	6/7/2017	5,969 (5)	\$ 14.60	6/7/2027
Amy Yoder	8/7/2017	10,123 (6)	\$ 8.60	8/7/2027

- (1) The option exercise price per share reflects the fair market value per share of our common stock on the date of grant.
- (2) These options vest in three equal annual installments on October 30, 2017, 2018, and 2019, subject to the director's continued service through each vesting date.
- (3) These options vest on the earlier of the one-year anniversary of the date of grant and the date of the Company's next annual meeting, subject to the director's continued service through the vesting date.
- (4) These options are fully vested.
- (5) These options vest in three equal annual installments on June 7, 2018, 2019, and 2020, subject to the director's continued service through each vesting date.
- (6) These options vest in three equal annual installments on August 7, 2018, 2019, and 2020, subject to the director's continued service through each vesting date.

## Non-Employee Director Compensation Policy

### Cash Compensation

Each non-employee director is entitled to an annual cash retainer at a rate of \$30,000 for serving on our board of directors. The retainer is payable in arrears in equal quarterly installments, subject to such director's continued service on the last day of the preceding quarter and prorated as necessary to reflect service commencement or termination during the quarter. In addition, each non-employee director shall receive the following amount for each regular meeting of the board attended: (i) \$2,500 if attendance is in person or (ii) \$500 if attendance is through remote means (e.g., attending by telephone); provided, however, that the total meeting fees may not exceed \$10,000 per calendar year.

The chair and non-chair members of the board's three standing committees are entitled to the following additional annual cash fees (payable quarterly in arrears and prorated for partial service in a quarter):

Board Committee	Chair Fee	Non-Chair Member Fee
Audit Committee	\$ 18,000	\$ 7,500
Compensation Committee	12,000	6,000
Nominating and Governance Committee	8,500	4,500

The chair of the board is entitled to an additional \$40,000 annual cash fee (payable quarterly in arrears and prorated for partial service in a quarter).

### Equity Compensation

Upon joining the board, each newly elected non-employee director (excluding an employee director who ceases to be an employee, but who remains a director) receives an initial option to purchase a number of shares of our common stock equal to equal to (x) \$60,000 divided by (y) the Black-Scholes value of a share on the date of grant, as determined consistent with the historical practices of the Company. This initial option will vest and become exercisable in three equal installments on each of the first three anniversaries of the date of grant, subject to the director's continued service through each vesting date. The per share exercise price for the initial option shall be equal to the fair market value for a share of our common stock on the date of grant, which shall be equal to the closing price of our common stock on the date of grant. An employee director who ceases to be an employee, but who remains a director, will not receive an option grant.

On the date of each annual meeting of our stockholders, each non-employee director (including a non-employee director who was previously an employee) will be granted an annual option to purchase a number of shares of our common stock equal to equal to (x) \$30,000 divided by (y) the Black-Scholes value of a share on the date of grant, as determined consistent with the historical practices of the Company. This annual option will vest and become exercisable on the earlier of (i) the one-year anniversary of the date of grant or (ii) the date of our next annual meeting of stockholders, subject to the director's continued service through the vesting date. The per share exercise price for the annual option shall be equal to the fair market value for a share of our common stock on the date of grant.

On the date of each annual meeting of our stockholders, the chair of the board will be granted an additional annual option to purchase a number of shares of our common stock equal to equal to (x) \$40,000 divided by (y) the Black-Scholes value of a share on the date of grant, as determined consistent with the historical practices of the Company. This annual option for the chair of the board will vest and become exercisable on the earlier of (i) the one-year anniversary of the date of grant or (ii) the date of our next annual meeting of stockholders, subject to the chair of the board's continued service through the vesting date. The per share exercise price for the annual option for the chair of the board shall be equal to the fair market value for a share of our common stock on the date of grant.

Notwithstanding the vesting schedules described above, the vesting of each equity award will accelerate in full upon a change in control and termination of directorship.

#### **Section 16(a) Beneficial Ownership Reporting Compliance**

Section 16(a) of the Exchange Act requires directors, certain officers, and ten percent (10%) stockholders to file reports of ownership and changes in ownership with the SEC. Based upon a review of filings with the SEC and/or written representations that no other reports were required, we believe that all reports for the Company's officers and directors that were required to be filed under Section 16 of the Exchange Act were timely filed for fiscal year 2017.

### **ITEM 11. EXECUTIVE COMPENSATION**

#### **Processes and Procedures for Compensation Decisions**

Our compensation committee is responsible for the executive compensation programs for our executive officers and reports to the board of directors on its discussions, decisions and other actions. Historically, our chief executive officer has made recommendations to our compensation committee, often attended committee meetings, and was involved in the determination of compensation for the respective executive officers that report to him, except that our chief executive officer did not make recommendations as to his own compensation. Additionally, our chief executive officer made recommendations to our compensation committee regarding short- and long-term compensation for all executive officers (other than himself) based on our results, an individual executive officer's contribution toward these results, and performance toward individual goal achievement. Our compensation committee then reviews the recommendations and other data and makes decisions as to total compensation for each executive officer other than the chief executive officer, as well as each individual compensation component. Our compensation committee makes recommendations to the board of directors regarding compensation for our chief executive officer. The independent members of the board of directors make the final decisions regarding executive compensation for our chief executive officer.

The compensation committee is authorized to retain the services of one or more executive compensation advisors, as it sees fit, in connection with the establishment of our compensation programs and related policies.

## 2017 Summary Compensation Table

The following table provides information regarding the compensation of our 2017 named executive officers during the fiscal years ended December 31, 2017 and 2016.

Name and Principal Position	Fiscal Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$)(1)	Non-Equity Incentive Plan Compensation (\$)(2)	All Other Compensation (\$)	Total (\$)
Rajendra Ketkar	2017	\$350,002	—	—	\$157,232	\$136,920	\$ -	\$644,154
President and Chief Executive Officer	2016	\$208,654	—	—	\$535,589	\$84,583	\$33,050 (3)	\$861,876
Matthew Plavan	2017	\$280,010	—	—	\$108,853	\$95,844	\$ -	\$484,707
Chief Financial Officer	2016	\$80,771	—	—	\$640,077	\$28,583		\$749,432
Zhongjin Lu, Ph.D.	2017	\$237,994	—	—	\$24,190	\$58,191	\$ -	\$320,374
Vice President, Product Development	2016	\$237,999	—	—	\$78,988	\$8,925		\$325,911

- (1) The amounts shown represent the grant date fair value of awards granted, calculated in accordance with ASC Topic 718. For a discussion of the assumptions made in the valuations reflected in this column, see Note 11 of the Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended December 31, 2017.
- (2) The amounts shown for 2017 represent amounts earned pursuant to our Executive Incentive Bonus Plan for services in 2017, which were paid in 2018. The amounts for Messrs. Ketkar and Plavan and Dr. Lu were determined based on a weighted average of the following metrics: Financial Goals, Strategic Goals and Individual Goals. The amounts shown for 2016 represent amounts earned pursuant to our Executive Incentive Bonus Plan for services in 2016, which were paid in 2017. The 2016 bonus amounts for Messrs. Ketkar and Plavan and Dr. Lu were determined at the discretion of the Compensation Committee.
- (3) This amount represents relocation costs reimbursed to Mr. Ketkar, as agreed to in his offer letter.

### Executive Employment Arrangements

#### *Rajendra Ketkar (President and Chief Executive Officer)*

In connection with the appointment of Mr. Ketkar to the position of president and chief executive officer in May 2016, we entered into a confirmatory offer letter with Mr. Ketkar. The offer letter has no specific term and provides that Mr. Ketkar is an at-will employee. Pursuant to the offer letter, Mr. Ketkar's annual base salary was established as \$350,000 and his target bonus opportunity is 40% of his annual base salary. Additionally, the offer letter provided for an immediate grant of an option to purchase 750,000 shares of the common stock of the Company. Mr. Ketkar's right to exercise the option vests over 4 years (25% on the one-year anniversary of May 23, 2017 and 1/48 per month thereafter), subject to his continued service.

#### *Matthew T. Plavan (Chief Financial Officer)*

In connection with the appointment of Mr. Plavan to the position of chief executive officer in September 2016, we entered into a confirmatory offer letter with Mr. Plavan. The offer letter has no specific term and provides that Mr. Plavan is an at-will employee. Pursuant to the offer letter, Mr. Plavan's annual base salary was established as \$280,000 and his target bonus opportunity is 35% of his annual base salary. Additionally, the offer letter provided for an immediate grant of an option to purchase 500,000 shares of the common stock of the Company. Mr. Plavan's right to exercise the option vests over 4 years (25% on the one-year anniversary of September 12, 2017 and 1/48 per month thereafter), subject to his continued service.

#### *Dr. Zhongjin Lu (Vice President, Product Development)*

In connection with the IPO, we entered into a confirmatory offer letter with Dr. Lu, our vice president, product development. The offer letter had no specific term and provided that Dr. Lu is an at-will employee. The confirmatory offer letter set forth, as of the effectiveness of the IPO, Dr. Lu's annual base salary of \$238,000 and his target bonus opportunity was 25% of his annual base salary.

### *Severance and Change in Control Agreements*

In February 2015, our board approved severance and change in control agreements (the "CIC Agreements") for each of our executive officers, the specific terms of which are discussed below. Each of the CIC Agreements expires by its terms on the third anniversary of the effective date of such agreement.

Pursuant to the CIC Agreements, if we terminate an executive's employment with us for a reason other than cause (as defined in the CIC Agreements) or the executive's death or disability (as defined in the CIC Agreements) at any time other than during the twelve-month period immediately following a change of control (as defined in the CIC Agreements), then such executive will receive the following severance benefits from the Company: (i) severance in the form of base salary continuation for a period of six months (twelve months for Mr. Ketkar); and (ii) reimbursement for premiums paid for coverage pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended, or COBRA, for the executive and the executive's eligible dependents for up to six months (twelve months for Mr. Ketkar).

If during the twelve-month period immediately following a change of control (as defined in the CIC Agreements), (x) we terminate an executive's employment with us for a reason other than cause (as defined in the CIC Agreements) or the executive's death or disability (as defined in the CIC Agreements), or (y) an executive resigns from such employment for good reason (as defined in the CIC Agreements), then, in lieu of the above described severance benefits, such executive shall receive the following severance benefits from the Company: (i) severance in the form of base salary continuation for a period of twelve months (24 months for Mr. Ketkar); (ii) reimbursement for premiums paid for coverage pursuant to COBRA, for the executive and the executive's eligible dependents for up to twelve months (24 months for Mr. Ketkar); and (iii) vesting shall accelerate as to 100% of all of the executive's outstanding equity awards.

An executive's receipt of severance payments or benefits pursuant to a CIC Agreement is subject to the executive signing a release of claims in our favor and complying with certain restrictive covenants set forth in the CIC Agreement.

Each CIC Agreement contains a "better after-tax" provision, which provides that if any of the payments to an executive constitutes a parachute payment under Section 280G of the Code, the payments will either be (i) reduced or (ii) provided in full to the executive, whichever results in the executive receiving the greater amount after taking into consideration the payment of all taxes, including the excise tax under Section 4999 of the Code, in each case based upon the highest marginal rate for the applicable tax.

#### Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information regarding outstanding stock options held by our named executive officers as of December 31, 2017.

Name and Principal Position	Option Awards			
	Number of securities underlying unexercised options (#) exercisable(1)	Number of securities underlying unexercised options (#) unexercisable(1)	Option Exercise Price (\$)	Option Expiration Date
Rajendra Ketkar	4,164	5,836 (2)	\$ 27.00	5/23/2026
	4,684	6,566 (2)	\$ 120.00	5/23/2026
	4,684	6,566 (2)	\$ 160.00	5/23/2026
	1,041	1,459 (2)	\$ 240.00	5/23/2026
	1,041	1,459 (2)	\$ 300.00	5/23/2026
	-	16,250 (3)	\$ 14.00	6/8/2027
Matthew T. Plavan	2,083	4,167 (4)	\$ 43.80	9/12/2026
	2,500	5,000 (4)	\$ 120.00	9/12/2026
	2,500	5,000 (4)	\$ 160.00	9/12/2026
	625	1,250 (4)	\$ 240.00	9/12/2026
	625	1,250 (4)	\$ 300.00	9/12/2026
	-	11,250 (3)	\$ 14.00	6/8/2027
Zhongjin Lu, Ph.D.	1,750	—	\$ 21.60	6/30/2018
	1,000	—	\$ 44.80	11/1/2019
	1,000	—	\$ 44.80	1/1/2020
	625	—	\$ 271.20	1/1/2021
	938	—	\$ 271.20	12/31/2022
	625	—	\$ 122.40	10/29/2024
	911	339 (5)	\$ 144.00	2/11/2025
	885	1,615 (6)	\$ 42.80	8/18/2026
	—	2,500 (3)	\$ 14.00	6/8/2027

(1) Stock options to purchase our common stock were granted pursuant to our 2015 Omnibus Incentive Plan.

- (2) The stock options vested as to 25% of the shares on May 23, 2017, with the remaining 75% of shares vesting in 36 equal monthly installments commencing on May 31, 2017 and ending on April 30, 2020 such that the award is fully vested on April 30, 2020, subject to the executive officer's continued service through each vesting date.
- (3) The stock options will vest as to 25% of the shares on June 8, 2018, with the remaining 75% vesting in 36 equal monthly installments beginning on June 30, 2018 and ending on May 31, 2021 such that the award is fully vested on May 31, 2021, subject to the executive officer's continued service through each vesting date.
- (4) The stock options vested as to 25% of the shares on September 12, 2017, with the remaining 75% of shares vesting in 36 equal monthly installments commencing on September 30, 2017 and ending on August 31, 2020 such that the award is fully vested on August 31, 2020, subject to the executive officer's continued service through each vesting date.
- (5) The stock options vested as to 25% of the shares on February 11, 2016 with the remaining 75% of shares vesting in 36 equal monthly installments commencing on February 28, 2016 and ending on January 31, 2019, subject to the executive officer's continued service through each vesting date.
- (6) The stock options vested as to 25% of the shares on August 18, 2017, with the remaining 75% of shares vesting in 36 equal monthly installments commencing on August 30, 2017 and ending on July 31, 2020, such that the award will be fully vested on July 31, 2020, subject to the executive officer's continued service through each vesting date.

## EQUITY BENEFIT AND STOCK PLANS

### *Securities Authorized for Issuance under Equity Compensation Plans*

As of December 31, 2017, we maintained three equity compensation plans, all of which were approved by the board of directors and our stockholders prior to our initial public offering in May 2015. The following table provides the information shown for each of the three plans as of December 31, 2017.

Plan	Shares issuable upon exercise of outstanding plan options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Shares remaining available for future issuance under equity compensation plans (excluding those reflected in column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders <sup>(1)</sup>	144,743	\$ 79.53	293,917
Equity compensation plans not approved by security holders	—	—	—
<b>Total</b>	<b>144,743</b>	<b>\$ 79.53</b>	<b>293,917</b>

- (1) Includes the following plans: 2006 Stock Plan, 2015 Omnibus Equity Incentive Plan (“2015 Plan”), and 2015 Employee Stock Purchase Plan (“ESPP”). Only option grants were made under the 2006 Stock Plan and 2015 Plan.
- (2) As of December 31, 2017, there were 288,129 outstanding options or other equity grants under the 2015 Plan, and there had been purchases pursuant to the ESPP of 5,731 shares.
- (3) There are no shares of common stock available for issuance under our 2006 Stock Plan, but that plan will continue to govern the terms of option and stock purchase rights granted thereunder. Any shares of common stock that are subject to outstanding awards under our 2006 Stock Plan that are issuable upon the exercise of stock options or purchase of shares pursuant to stock purchase rights that expire or become unexercisable for any reason without having vested or been exercised in full will generally be available for future grant and issuance as shares of common stock under our 2015 Plan. This number includes 224,647 shares available for issuance under the 2015 Plan and 69,270 shares reserved for issuance under our ESPP. The 2015 Plan provides that on the first day of each fiscal year beginning in 2016 and ending in 2025, the number of shares available for issuance thereunder is automatically increased by a number equal to the least of (i) 82,500 shares, (ii) 4% of the outstanding shares of our common stock as of the last day of our immediately preceding fiscal year or (iii) such other amount as the board of directors may determine. Our ESPP provides that on the first day of each fiscal year beginning in 2016, the number of shares available for issuance thereunder is automatically increased by a number equal to the least of (i) 21,875 shares, (ii) 1% of the outstanding shares of our common stock on the first day of such fiscal year, or (iii) such other amount as the board of directors may determine.

## **ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.**

### **SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

The following table sets forth information regarding beneficial ownership of our common stock as of March 28, 2018 by:

- (1) each person or group of affiliated persons known by us to be the beneficial owner of more than 5% of our common stock;
- (2) each of our named executive officers as of December 31, 2017;
- (3) each of our directors; and
- (4) all of our executive officers and directors as a group.

We have determined beneficial ownership in accordance with the rules of the SEC and the information is not necessarily indicative of beneficial ownership for any other purpose. Unless otherwise indicated below, to our knowledge, the persons and entities named in the table have sole voting and sole investment power with respect to all shares that they beneficially own, subject to community property laws where applicable. To our knowledge, no person or entity, except as set forth below, is the beneficial owner of more than 5% of the voting power of our common stock as of the close of business on March 28, 2018.

Under SEC rules, the calculation of the number of shares of our common stock beneficially owned by a person and the percentage ownership of that person includes both outstanding shares of our common stock then owned as well as any shares of our common stock subject to options or warrants held by that person that are currently exercisable or exercisable within 60 days of March 28, 2018. Shares subject to those options or warrants for a particular person are not included as outstanding, however, for the purpose of computing the percentage ownership of any other person. We have based percentage ownership of our common stock on 2,481,137 shares of our common stock outstanding as of March 28, 2018.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Arcadia Biosciences, Inc., 202 Cousteau Place, Suite 105, Davis, CA 95618.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percent of Shares Outstanding
<b>Named Executive Officers and Directors:</b>		
Rajendra Ketkar(1)	18,734	*
Zhongjin Lu(2)	6,854	*
Matthew Plavan(3)	10,413	*
Kevin Comcowich(4)	799	*
Uday Garg(5)	510,691	20.1%
Eric J. Rey(6)	32,085	1.3%
Gregory D. Waller	—	*
Amy Yoder	—	*
All current executive officers and directors as a group (9 persons)(7)	579,576	22.3%
<b>5% Stockholders:</b>		
Moral Compass Corporation(8) 4835 E. Exeter Blvd. Phoenix, AZ 85018	1,125,769	45.4%
Mandala Agribusiness Fund(5) c/o Sanne Maritius, IFS Court, Bank Street, TwentyEight Cybercity, Ebene, Mauritius	509,785	20.1%
Hudson Bay Master Fund Ltd.(9) 777 Third Avenue, 30 <sup>th</sup> Floor New York, NY 10017 Attention: Yoav Roth	258,946	9.99%
Sabby Volatility Warrant Master Fund, Ltd. (10) c/o Ogier Fiduciary Services (Cayman) Limited, 89 Nexus Way, Camana Bay, Grand Cayman KY1-9007, Cayman Islands	258,946	9.99%

\* Represents beneficial ownership of less than 1% of the outstanding shares of our common stock.

- (1) Mr. Ketkar is our current president and chief executive officer and a member of our board of directors. Beneficial ownership consists of 18,734 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 28, 2018.
- (2) Dr. Lu is our current vice president of product development. Beneficial ownership includes (i) 558 shares of common stock and (ii) 6,296 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 28, 2018.
- (3) Mr. Plavan is our current chief financial officer. Beneficial ownership consists of 10,413 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 28, 2018.
- (4) Mr. Comcowich is the current chair of our board of directors. Beneficial ownership consists of 799 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 28, 2018.
- (5) Beneficial ownership information is based on information for Mandala Agribusiness Fund (“MAF”). Also included are 906 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 28, 2018, which Mr. Garg received as a member of our board of directors. The board of directors of MAF has shared voting and dispositive power over (i) 435,291 shares of common stock owned by Mandala Agribusiness Co-Investments I Ltd. (“MACIL”), (ii) 18,750 shares of common stock owned by Mandala Capital AG Limited (“MCAL”), and (iii) 55,744 shares of common stock issuable pursuant to warrants held by MACIL that are currently exercisable. Mr. Garg is the managing director and a member of the board of directors of MACIL. Mr. Garg, Tej Gujadhur, and Sheekumar Gujadhur are members of the board of directors of MAF.
- (6) Mr. Rey serves as a member of our board of directors and previously served as our president and chief executive officer. Beneficial ownership consists of (i) 7,335 shares of common stock and (ii) 24,750 shares of common stock issuable pursuant to stock options exercisable within 60 days after March 28, 2018.
- (7) Beneficial ownership consists of (i) 461,934 shares of common stock (ii) 55,744 shares of common stock issuable pursuant to exercisable warrants, and (iii) 61,898 shares of common stock subject to options exercisable within 60 days after March 28, 2018, in each case beneficially owned by our current executive officers and directors.
- (8) Beneficial ownership is based on information contained in a Schedule 13D amendment filed on March 9, 2018 by Moral Compass Corporation (“MCC”). This schedule indicates that, as of March 9, 2018, MCC had sole voting and sole dispositive power over 1,125,769 shares of our common stock. MCC is owned by the John G. Sperling 2012 Irrevocable Trusts No. 1, 2 and 3 (collectively, the “Sperling Trusts”). Darby Shupp, Terri Bishop, and Peter Sperling together serve as trustees of the Sperling Trusts and have shared voting and investment power of the shares held by MCC.



- (9) The ownership of Hudson Bay Master Fund Ltd. is subject to a 9.99% ownership blocker, pursuant to which shares of our common stock may not be issued, whether pursuant to the Securities Purchase Agreement or Warrants, to the extent such issuance would cause Hudson Bay Master Fund Ltd. to beneficially own more than 9.99% of our outstanding common stock. The share ownership numbers and percentages for Hudson Bay Master Fund Ltd. in the table above reflect this 9.99% blocker. As of the March 28, 2018, Hudson Bay Master Fund Ltd. owns 150,376 outstanding shares of our common stock and a Warrant to purchase 150,376 shares of our common stock. To the extent Proposal 1 is approved, the number of Shares of our common stock that will become issuable to Hudson Bay Master Fund Ltd. will increase as described above in this proxy statement. Hudson Bay Capital Management, L.P., the investment manager of Hudson Bay Master Fund Ltd., has voting and investment power over these securities. Sander Gerber is the managing member of Hudson Bay Capital GP LLC, which is the general partner of Hudson Bay Capital Management, L.P. Each of Hudson Bay Master Fund Ltd. and Sander Gerber disclaims beneficial ownership over these securities.
- (10) The ownership of Sabby Volatility Warrant Master Fund, Ltd. is subject to a 9.99% ownership blocker, pursuant to which shares of our common stock may not be issued, whether pursuant to the Securities Purchase Agreement or Warrants, to the extent such issuance would cause Sabby Volatility Warrant Master Fund, Ltd. to beneficially own more than 9.99% of our outstanding common stock. The share ownership numbers and percentages for Sabby Volatility Warrant Master Fund, Ltd. in the table above reflect this 9.99% blocker. As of the March 28, 2018, Sabby Volatility Warrant Master Fund, Ltd. owns 150,376 outstanding shares of our common stock and a Warrant to purchase 150,376 shares of our common stock. To the extent Proposal 1 is approved, the number of Shares of our common stock that will become issuable to Sabby Volatility Warrant Master Fund, Ltd. will increase as described above in this proxy statement. Sabby Management, LLC serves as the investment manager of Sabby Volatility Warrant Master Fund, Ltd. Hal Mintz is the manager of Sabby Management, LLC and has voting and investment control of the securities held by Sabby Volatility Warrant Master Fund, Ltd. Each of Sabby Management, LLC and Hal Mintz disclaims beneficial ownership over the securities beneficially owned by Sabby Volatility Warrant Master Fund, Ltd., except to the extent of their respective pecuniary interest therein.

### **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

In addition to the director and executive officer compensation arrangements and indemnification arrangements discussed above under “Directors, Executive Officers and Corporate Governance” and “Executive Compensation,” since January 1, 2017, we have not been a party to any transactions in which the amount involved exceeded or will exceed \$120,000 and in which any of our directors, executive officers, beneficial holders of more than 5% of our capital stock, or entities affiliated with them, had or will have a direct or indirect material interest.

#### **Policies and Procedures for Related Party Transactions**

Our audit committee charter states that our audit committee is responsible for reviewing and approving in advance any related party transaction, which is a transaction between us and related persons in which the aggregate amount involved exceeds or may be expected to exceed \$120,000 in any calendar year and in which a related person has or will have a direct or indirect interest. Our audit committee has adopted policies and procedures for review of, and standards for approval of, such a related party transaction. For purposes of these policies and procedures, a related person is defined as an executive officer, director, or nominee for director, including his or her immediate family members, or a beneficial owner of greater than 5% our common stock, in each case since the beginning of the most recently completed year. Prior to the creation of our audit committee, our full board of directors reviewed related party transactions, with any directors abstaining from matters in which the director had an interest.

It is our intention to ensure that all future transactions between us and our officers, directors, and principal stockholders and their affiliates are approved by the audit committee of our board of directors and are on terms no less favorable to us than those that we could obtain from unaffiliated third parties.

#### **Director Independence**

For information regarding director independence, please refer to the discussion set forth in Item 10 under the caption, "Director Independence."

### **ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

Our audit committee of the board of directors has appointed Deloitte & Touche LLP as Arcadia’s independent registered public accountants for the year ending December 31, 2018, and the board recommends that stockholders vote for ratification of such appointment.

Notwithstanding its selection or voting results, the audit committee in its discretion may appoint new independent registered public accountants at any time during the year if the audit committee believes that such a change would be in the best interests of Arcadia and its stockholders. If our stockholders do not ratify the appointment, the audit committee may reconsider whether it should appoint another independent registered public accounting firm.

Deloitte & Touche LLP served as Arcadia's independent registered public accounting firm for the year ended December 31, 2017. We expect that representatives of Deloitte & Touche LLP will be present at the Annual Meeting to respond to appropriate questions and to make a statement if they so desire.

#### Principal Accounting Fees and Services

The following table sets forth all fees accrued or paid to Deloitte & Touche LLP for the years ended December 31, 2017 and 2016:

	<u>Year Ended December 31,</u>	
	<u>2017</u>	<u>2016</u>
Audit Fees(1)	\$ 453,867	\$ 506,460
Audit-Related Fees	—	—
Tax Fees	—	—
All Other Fees(2)	2,058	2,172
Total	\$ 455,925	\$ 508,632

- (1) Audit Fees consist of professional services rendered in connection with the audit of our annual consolidated financial statements, including audited financial statements presented in our Annual Report on Form 10-K and services that are normally provided by the independent registered public accountants in connection with statutory and regulatory filings or engagements for those fiscal years.
- (2) All Other Fees consist of licensing fees for Deloitte & Touche LLP's accounting research software.

*Pre-approval Policy.* Under our audit committee's policy governing our use of the services of our independent registered public accountants, the audit committee is required to pre-approve all audit and permitted non-audit services performed by our independent registered public accountants in order to ensure that the provision of such services does not impair the public accountants' independence. In the years ended December 31, 2017 and 2016, all fees identified above under the captions "Audit Fees," and "All Other Fees" that were billed by Deloitte & Touche LLP were approved by the audit committee in accordance with SEC requirements.

In the year ended December 31, 2017, there were no other professional services provided by Deloitte & Touche LLP, other than those listed above, that would have required our audit committee to consider their compatibility with maintaining the independence of Deloitte & Touche LLP.

#### PART IV

#### ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

We have filed the following documents as part of this report.

## Exhibit Index

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	File No.	Filing Date	
3.1	<a href="#">Amended and Restated Certificate of Incorporation of Registrant.</a>	8-K	001-37383	3.1	5/26/2015
3.2	<a href="#">Amendment to the Amended and Restated Certificate of Incorporation of Registrant.</a>	8-K	001-37383	3.1	1/23/2018
3.3	<a href="#">Amended and Restated Bylaws of Registrant.</a>	8-K	001-37383	3.2	5/26/2015
4.1	<a href="#">Form of Registrant's common stock certificate.</a>	S-3	333-224061	4.1	3/30/2018
4.2	<a href="#">Amended and Restated Stock Purchase Warrant dated December 11, 2013 between the Registrant and Mahyco International Pte Ltd.</a>	S-1/A	333-202124	4.7	4/30/2015
4.3	<a href="#">Form of Common Stock Purchase Warrant between the Registrant and certain purchasers of its Series D Preferred Stock.</a>	S-1	333-202124	4.8	2/17/2015
4.4	<a href="#">Form of Warrant</a>	8-K	001-37383	4.1	3/23/2018
10.1†	<a href="#">License Agreement dated October 2, 2006 between the Registrant and The Governors of the University of Alberta.</a>	S-1	333-202124	10.1	2/17/2015
10.2†	<a href="#">Intellectual Property License Agreement dated January 1, 2003 between the Registrant and Blue Horse Labs, Inc., as amended.</a>	8-K	001-37383	10.2	6/10/2015
10.3†	<a href="#">Exclusive License Agreement for Drought-Resistant Plants dated July 2, 2010 between the Registrant and The Regents of the University of California, as amended.</a>	S-1/A	333-202124	10.3	4/6/2015
10.4†	<a href="#">License Agreement dated February 14, 2002 between the Registrant and The University of Toronto Innovations Foundation.</a>	S-1	333-202124	10.4	2/17/2015
10.5†	<a href="#">Amended and Restated License Agreement dated July 25, 2007 between the Registrant and Ross Products Division of Abbott Laboratories, as amended.</a>	S-1/A	333-202124	10.5	4/6/2015
10.6†	<a href="#">Collaborative Research and Development Agreement dated July 31, 2009 between the Registrant and Maharashtra Hybrid Seeds Co. Ltd.</a>	S-1	333-202124	10.6	2/17/2015
10.7†	<a href="#">Cooperative Agreement dated September 30, 2008 between the Registrant and the United States Agency for International Development, as amended.</a>	S-1	333-202124	10.13	2/17/2015
10.8†	<a href="#">Cooperative Agreement dated October 11, 2012 between the Registrant and the United States Agency for International Development, as amended.</a>	S-1	333-202124	10.14	2/17/2015
10.9*	<a href="#">Form of Indemnification Agreement between the Registrant and each of its Officers and Directors.</a>	S-1	333-202124	10.7	2/17/2015
10.10*	<a href="#">2006 Stock Plan, as amended and restated, and form of agreement thereunder.</a>	S-1	333-202124	10.8	2/17/2015
10.11*	<a href="#">2015 Omnibus Equity Incentive Plan and forms of agreement thereunder.</a>	S-1/A	333-202124	10.9	5/11/2015

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.12*	<a href="#">2015 Employee Stock Purchase Plan and form of agreement thereunder.</a>	S-1/A	333-202124	10.10	5/11/2015	
10.13*	<a href="#">Executive Incentive Bonus Plan.</a>	S-1/A	333-202124	10.15	5/11/2015	
10.14*	<a href="#">Director Compensation Policy.</a>	10-Q	001-37383	10.16	6/25/2015	
10.15*	<a href="#">Form of Severance and Change in Control Agreement.</a>	S-1/A	333-202124	10.18	4/6/2015	
10.16	<a href="#">Office Lease dated March 17, 2003 between the Registrant and Buzz Oates LLC as successor to Marvin L. Oates, Trustee of the Marvin L. Oates Trust, as amended.</a>	S-1	333-202124	10.12	2/17/2015	
10.17	<a href="#">Loan and Security Agreement dated December 29, 2015 between the Registrant, as borrower, and Silicon Valley Bank, as lender.</a>	8-K	001-37383	10.1	12/30/2015	
10.18	<a href="#">Securities Purchase Agreement dated as of March 19, 2018, between Arcadia Biosciences, Inc. and each purchaser named in the signature pages thereto</a>	8-K	001-37383	10.1	3/25/2018	
10.19	<a href="#">Form of Registration Rights Agreement</a>	8-K	001-37383	10.2	3/25/2018	
21.1	<a href="#">List of subsidiaries of the Registrant.</a>	S-1	333-202124	21.1	2/17/2015	
31.1	<a href="#">Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>					X
31.2	<a href="#">Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>					X
32.1	<a href="#">Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</a>					X
32.2	<a href="#">Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</a>					X

\* Indicates a management contract or compensatory plan or arrangement.

† Confidential treatment has been requested to certain portions of this exhibit. Omitted portions have been separately filed with the SEC.



**CERTIFICATION PURSUANT TO  
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,  
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Rajendra Ketkar, certify that:

1. I have reviewed this Annual Report on Form 10-K of Arcadia Biosciences, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 13, 2018

By: \_\_\_\_\_  
/s/ RAJENDRA KETKAR  
Rajendra Ketkar  
President and Chief Executive Officer  
(Principal Executive Officer)



**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Arcadia Biosciences, Inc. (the "Company") on Form 10-K for the year ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 13, 2018

By: \_\_\_\_\_ /s/ RAJENDRA KETKAR  
Rajendra Ketkar  
President and Chief Executive Officer  
(Principal Executive Officer)



**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Arcadia Biosciences, Inc. (the "Company") on Form 10-K for the year ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 13, 2018

By: \_\_\_\_\_ /s/ MATTHEW T. PLAVAN  
Matthew T. Plavan  
Chief Financial Officer  
(Principal Financial Officer)