

**UNITED STATES DISTRICT COURT
DISTRICT OF DELAWARE**

NICHOLAS W. FULTON, derivatively on behalf
of OVASCIENCE, INC.,

Plaintiff,

MICHELLE DIPP, RICHARD ALDRICH,
JEFFREY D. CAPELLO, MARY FISHER,
JOHN HOWE III, MARC KOZIN, THOMAS
MALLEY, and JOHN SEXTON,

Defendants,

-and-

OVASCIENCE, INC., a Delaware corporation,

Nominal Defendant.

Civil Action No. _____

**VERIFIED SHAREHOLDER
DERIVATIVE COMPLAINT**

Plaintiff Nicholas W. Fulton (“Fulton” or “Plaintiff”), by and through his undersigned attorneys, brings this Verified Shareholder Derivative Complaint (“Complaint”) in the name of and on behalf of Nominal Defendant OvaScience, Inc. (“OvaScience” or the “Company”) against certain directors and officers of OvaScience named herein for breaches of fiduciary duty, unjust enrichment, waste of corporate assets, and violations of Section 14(a) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Plaintiff alleges the following based upon personal knowledge as to himself and his own acts, and information and belief as to all other matters, based upon, *inter alia*, the investigation conducted by and through Plaintiff’s attorneys, which included, among other things, a review of the Defendants’ public documents, conference calls, and announcements made by Defendants, United States Securities and Exchange Commission (“SEC”) filings, wire and press releases published by and regarding the Company,

legal filings, news reports, securities analysts' reports and advisories about the Company, and information readily obtainable on the Internet. Plaintiff believes that substantial additional evidentiary support will exist for the allegations set forth herein after a reasonable opportunity for discovery.

SUMMARY OF THE ACTION

1. OvaScience's Board of Directors (the "Board") has adopted a compensation plan which grossly overcompensates the Non-Employee Director Defendants (defined below), in relation to companies of comparable market capitalization, industry, and size (*i.e.*, commonly referred to as "peers").

2. Moreover, the compensation plan fails to take into account any relevant metrics, such as revenue, profit, and performance, in setting compensation. As a result, the Non-Employee Director Defendants have been, and continue to be paid more than twice the compensation of their peers at similarly-sized, publicly traded companies.

3. Plaintiff brings this action to recoup the excessive compensation being paid to the Non-Employee Director Defendants, and to impose meaningful corporate governance reforms that will both restrict the Non-Employee Director Defendants' ability to award themselves unreasonably excessive levels compensation and to align the elements of compensation, including grants of fully vested shares of OvaScience common stock and of stock options to purchase shares of OvaScience common stock, with the Company's success and long-term interests.

4. In addition, because in rejecting Plaintiff's demand in this matter, OvaScience asserted that the valuation metric used in its public filings to value the Company's options "is not an appropriate metric for assessing the adequacy and fairness of compensation awards to non-

employee directors of biotechnology corporations,” it has admitted that its public filing contains a material misstatement that the Company’s shareholders were and remain unaware of.

5. Accordingly, Plaintiff seeks injunctive relief requiring the Board of Directors to amend OvaScience’s previous public filings so as to advise OvaScience’s shareholders of this material information.

JURISDICTION AND VENUE

6. Pursuant to 28 U.S.C. § 1331 and section 27 of the Exchange Act, this Court has jurisdiction over the claims asserted herein for violations of Section 14(a) of the Exchange Act and SEC Rule 14a-9 promulgated thereunder. This Court has supplemental jurisdiction over the remaining claims under 28 U.S.C. § 1367.

7. Venue is proper in this Court pursuant to 28 U.S.C. § 1391 because OvaScience is incorporated in this District.

PARTIES AND OTHER PERSONS

A. Plaintiff

8. Plaintiff Nicholas W. Fulton is, and at all times relevant hereto has been, an owner and holder of OvaScience common stock.

B. Nominal Defendant

9. Nominal Defendant OvaScience, Inc. is a Delaware corporation with its principal executive offices located in Waltham, Massachusetts. OvaScience is a life sciences company that focuses on discovering, developing and commercializing new fertility treatments. The Company was incorporated under the laws of the State of Delaware in April 2011 under the name Ovastem, Inc. and changed its name to OvaScience, Inc. in May 2011. It held its initial public offering (“IPO”) in May 2013.

C. Director Defendants

10. Defendant Michelle Dipp, M.D., Ph.D. (“Dipp”) co-founded the Company in April 2011. Dipp has served as a member of the Board since July 2011, Chief Executive Officer from June 2011 until July 2016, President from September 2011 until December 2014 and Executive Chair since January 2016. Dipp has served as acting President and principal executive officer since December 21, 2016. She is scheduled to step down as acting President and principal executive officer on September 1, 2017.

11. Defendant Richard Aldrich (“Aldrich”) co-founded the Company in a non-operational role in April 2011. He has served as a member of the Board since July 2011 and served as the Chair of the Board from March 2012 until January 2016. In March 2016, Aldrich was appointed as Independent Lead Director of the Board by the independent directors. Aldrich serves as Chair of the Nominating and Corporate Governance Committee.

12. Defendant Jeffrey D. Capello (“Capello”) has served as a member of the Board since March 2012. Capello serves as Chair of the Audit Committee.

13. Defendant Mary Fisher (“Fisher”) has served as a member of the Board since June 2013. Fisher is a member of the Compensation Committee.

14. Defendant John Howe, III, M.D. (“Howe”) has served as a member of the Board since June 2015. Howe is a member of the Audit Committee, and the Compensation Committee, and has served as Chair of the Audit Committee since June 12, 2017.

15. Defendant Marc Kozin (“Kozin”) has served as a member of the Board since January 2014. Kozin is a member of the Nominating and Corporate Governance Committee and the Audit Committee.

16. Defendant Thomas Malley (“Malley”) served as a member of the Board since

October 2012 until June 12, 2017. Malley served as Chair of the Compensation Committee, and was a member of the Audit Committee.

17. Defendant John Sexton, Ph.D. (“Sexton”) has served as a member of the Board since April 2015.

18. The defendants identified in paragraphs 8-15 are referred to collectively as the “Director Defendants.”

19. The defendants identified in paragraphs 9-15 are referred to collectively as the “Non-Employee Director Defendants.”

**NON-EMPLOYEE DIRECTOR DEFENDANTS AWARD
THEMSELVES EXCESSIVE COMPENSATION**

20. In breach of their fiduciary duties, the Non-Employee Director Defendants granted, and continue to grant, themselves excessive compensation. Over the past three reported years, the years ended December 31, 2014, to December 31, 2016, the three full fiscal years since the Company’s IPO, the Non-Employee Director Defendants received, on average, per annum, approximately \$198,537 in compensation each.¹ For the year ended December 31, 2015 alone, the Non-Employee Director Defendants received, on average, approximately \$362,434 in compensation each.

21. This level of compensation significantly exceeded the median total director compensation of \$281,667 for a Fortune 50 company,² an average of \$277,237 for an S&P 500 company,³ and the median total director compensation for 2016 of \$260,000 for a sample of

¹ Excluded from this average is Kozin’s “All Other Compensation” related to consultation services he provides to the Company.

² See Meridian Compensation Partners, LLC press release, May 29, 2015, concerning compensation for the year 2014.

³ See Spencer Stuart’s Board Index 2015.

large cap companies.⁴

22. OvaScience is *not* a Fortune 50 company or a S&P 500 constituent. In fact, OvaScience is a current constituent of the Russell Microcap Index, a micro-cap US equity index.⁵

23. OvaScience's average annual total director compensation over the past three reported years greatly exceeds the median total director compensation of \$113,665 for the years 2014-2016, on average, for companies with a market capitalization of between \$50 million and \$500 million.⁶ As such, the Non-Employee Director Defendants' compensation is unwarranted and grossly excessive in comparison to other companies of similar size.

24. The Company's director compensation practices and policies have caused the Non-Employee Director Defendants to be compensated in amounts averaging approximately \$198,537 per annum each since the IPO, consisting of an annual cash retainer, fully vested shares of OvaScience common stock and stock options to purchase shares of OvaScience common stock plus Chair's and committee membership fees.

25. In the Company's Schedule 14A, filed April 18, 2016, with the Securities and Exchange Commission, it was revealed that the Board had adopted an amended and restated non-employee director compensation policy (the "2015 Policy") in which all non-employee directors participate. The 2015 Policy has not been approved by shareholders at any time.

26. Under the 2015 Policy, beginning in 2016 the compensation of each non-employee director consisted of (i) a \$35,000 annual cash retainer, and (ii) an award of a stock option to purchase 12,000 shares of OvaScience common stock awarded under the Company's

⁴ See Frederic W. Cook & Co., Inc.'s 2016 Director Compensation Report.

⁵ The Russell Microcap Index is a U.S. equity index produced annually by Frank Russell Company trading as Russell Investments.

⁶ See National Association of Corporate Directors and Pearl Meyer & Partners, LLC's January 2017 webinar on director compensation.

2012 Stock Incentive Plan (the “2012 Plan”) at an exercise price equal to the fair market value of the Company’s common stock on the date of grant, which option vests monthly over one year. Additionally, non-employee directors acting as Chair of any Board committee are eligible for additional fees of up to \$15,000 per director and other members of committees receive fees of up to \$8,000 per committee. In addition, newly-elected non-employee directors will be awarded an initial grant of a stock option to purchase 8,650 shares of OvaScience common stock. Under the 2015 Policy, non-employee directors may elect to receive their annual fees for Board and committee service from January 1 to December 31 of a given year in either cash or fully vested shares of OvaScience common stock.

27. Neither the 2015 Policy nor the 2012 Plan contain any director-specific limitations on director compensation.

28. The fair value of the equity compensation awarded to the Non-Employee Director Defendants under the 2015 Policy (as well as the 2012 Plan and its 2011 predecessor), is computed in accordance with the Financial Accounting Standards Board *Accounting Standards Codification*® Topic 718 *Compensation — Stock Compensation*,⁷ one of the Generally Accepted Accounting Principles (“GAAP”), and it is therefore properly subject to comparison to the equity compensation awards awarded to directors of other companies which also account for non-employee share-based payment under GAAP.

29. OvaScience made the choice to use the Black-Scholes option pricing model to value its stock option awards each and every year.

30. The Black-Scholes option pricing model is one of several models in use for the valuation of options, and is widely used by the Company’s peers. Use of the Black-Scholes

⁷ This generally accepted accounting principle is commonly referred to as FASB ASC 718, ASC 718 or Topic 718 or a similar reference.

valuation methodology requires a company to make assumptions as to the expected dividend yield, price volatility of the company's common stock, the risk-free interest rate for a period that approximates the expected term of the stock options, and the expected term of the stock options.

31. In OvaScience's 2017 Schedule 14A (the "Proxy Statement"), filed with the SEC on April 26, 2017, the Company notes that the value of option awards to directors was calculated as follows:

The amounts in the "Option Awards" column reflect the aggregate grant date fair value of stock options granted during the year computed in accordance with the provisions of ASC 718. The assumptions that we used to calculate these amounts are discussed in Notes 2 and 8 to our financial statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

32. In its Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed with the SEC on March 2, 2017, as it has done every year in the past, OvaScience describes its option valuation methodology as follows:

Since our inception in April 2011, we have applied the fair value recognition provisions of FASB ASC Topic 718, Compensation—Stock Compensation, which we refer to as ASC 718. Determining the amount of stock-based compensation to be recorded requires us to develop estimates of the fair value of stock options as of their grant date. Stock-based compensation expense is recognized ratably over the requisite service period, which in most cases is the vesting period of the award. For awards with performance conditions, we estimate the likelihood of satisfaction of the performance criteria, which affects the awards expected to vest and the period over which the expense is recognized, and recognize the expense using the accelerated attribution model to the extent the condition is deemed probable. Calculating the fair value of stock-based awards requires that we make certain subjective assumptions, including estimating the expected term of the options issued and the estimated volatility of our stock price over the expected term. *We used the Black-Scholes option pricing model to value our stock option awards.* (Emphasis added).

33. For example, in 2016, the assumptions made by OvaScience for the purpose of valuation were: a volatility of 78%-89%; a risk-free interest rate of 1.3%-2.0%; and an expected term of 5.3-9.9 years. In the year before, in 2015, the assumptions were: a volatility of 72%-

78%; a risk-free interest rate of 1.6%-2.3%; and an expected term of 5.3-9.9 years.

34. On April 4, 2017, Plaintiff sent a demand (the “Demand”) to the Board indicating, *inter alia*, that based on the Company’s own valuation metrics (*i.e.*, Black-Scholes), its compensation policies, including option grants, placed OvaScience well beyond that of its peers. *See* Plaintiff’s Demand attached hereto as Exhibit A.

35. On April 25, 2017, the Board responded to the Demand in writing (attached hereto as Exhibit B), wherein it rejected the Demand’s valuation analysis stating, *inter alia*:

the valuation metric used for SEC disclosure purposes (Black-Sholes) is not an appropriate metric for assessing adequacy and fairness of compensation awards to non-employee directors of biotechnology corporations. A key driver of the Black-Scholes model is volatility. Given the extreme volatility of biotechnology corporations in general, and OvaScience in particular in 2014-2015, a Black-Scholes analysis produces “valuations” that bear little or no relationship to the actual fairness and adequacy of the compensation awarded.

36. The above statement directly and materially contradicts the Company’s publicly-disclosed reliance on the Black-Scholes option pricing model as an appropriate metric for assessing the adequacy and fairness of its compensation awards among biotechnology companies. In fact, despite its newly-stated – albeit undisclosed -- position that Black-Scholes is inappropriate, the OvaScience has used Black-Scholes to value its stock option awards every year since its inception and every year it reported its requisite assumptions made, including concerning volatility, with no reference whatsoever at any time to the Black-Scholes analysis having produced results that bear little or no relationship to the actual fairness and adequacy of the compensation awarded.

37. Taking the valuation of the Non-Employee Director Defendants’ total annual compensation including the fair value of the equity awards contained therein as determined by the Company as true, the compensation that the Non-Employee Director Defendants have

awarded and will continue to award themselves greatly exceeds that of the Company's peers, which similarly use the Black-Scholes option pricing model and account for non-employee share-based payment under GAAP, standing at a level more than twice that which is appropriate.

38. The Board's present level of compensation is and will be harmful to both the Company and its shareholders as it wastes valuable and limited corporate assets. Since OvaScience's IPO, the Company has accumulated more than \$200 million in negative net income.

39. Investment analysts expect the losses to continue. The consensus forecast amongst four investment analysts covering the Company polled by Thomson Reuters advises that the company will continue to report losses for the current and next fiscal years, in the amounts of \$55 million in negative net income for the year ending December 31, 2017, and \$44 million in negative net income for the year ending December 31, 2018.

40. The Board's self-dealing compensation practice lacks any modicum of alignment with the long-term interests of the Company.

DERIVATIVE AND DEMAND REFUSED ALLEGATIONS

41. Plaintiff brings this action derivatively in the right of and for the benefit of OvaScience to redress injuries suffered, and to be suffered, by OvaScience as a direct result of the breaches of fiduciary duty by the Director Defendants.

42. OvaScience is named as a Nominal Defendant in this case solely in a derivative capacity. This is not a collusive action to confer jurisdiction on this Court that it would not otherwise have. Plaintiff was a shareholder of OvaScience at the time of the transgressions of which he complains, and continues to be so.

43. Plaintiff will adequately and fairly represent the interests of OvaScience and its

shareholders in prosecuting and enforcing their rights. Prosecution of this action, independent of the current Board of Directors, is in the best interests of the Company.

44. The wrongful acts complained of herein subject, and will continue to subject, OvaScience to continuing harm because the adverse consequences of the actions are still in effect and ongoing.

45. OvaScience's current Board consists of the following seven individuals: Director Defendants Dipp, Aldrich, Capello, Fisher, Howe, Kozin, and Sexton.

46. On April 4, 2017, Plaintiff, through his attorneys, made the Demand. *See* Exhibit A.

47. On behalf of OvaScience, the Demand requested that the Board take action, within 21 days, to reduce the amount of executive compensation received by the Director Defendants.

48. On April 25, 2017, the Board, by and through its attorneys, responded in writing, denying the demand and concluding that "the Board has somehow 'wasted' corporate assets is legally and factually untenable." *See* Exhibit B.

49. As of the date of this Verified Complaint, Plaintiff has received no further communication from the Company.

50. The Board's wrongful refusal of the Demand is not unexpected. In fact, based on the within allegations, it is reasonable to conclude that each of the Director Defendants lack disinterest and independence and/or that the challenged compensation awards are not the product of a valid exercise of business judgment. Accordingly, even in the absence of the Demand, the effort can be deemed futile based upon, *inter alia*:

- (a) the Board ignored Demand;

- (b) the Non-Employee Director Defendants stand on both sides of the challenged compensation awards having approved the compensation and being past and/or future beneficiaries of the challenged compensation;
- (c) the Non-Employee Director Defendants received and/or stand to receive the challenged compensation, and thus derived and/or stand to derive substantial personal financial benefit from the transactions at issue; and
- (d) each of the Non-Employee Director Defendants has wasted the Company's assets by accepting (or agreeing to accept) the improper compensation detailed herein as no disinterested director would take advantage of the opportunity to award compensation far beyond the Company's peers and in utter disregard of the Company's financial performance and market value.

51. As the Director Defendants lack disinterest and, having the burden of proving the entire fairness of their compensation, there is more than a reasonable doubt that the Board could impartially consider a demand on themselves.

52. Accordingly, even if the Demand was not already deemed refused, demand would have been excused in light of the Director Defendants' conflicts of interest, cause of waste, and manifest lack of independence.

COUNT I
Derivatively Against the Director Defendants
for Breach of the Fiduciary Duty of Loyalty

53. Plaintiff incorporates by reference and re-alleges each and every allegation above as though fully set forth herein.

54. By reason of their fiduciary relationship with OvaScience, the Director Defendants owed and owe OvaScience the highest obligation of loyalty.

55. In derogation of these duties, the Director Defendants have harmed the Company by awarded to the Non-Employee Director Defendants excessive and improper compensation at the Company's expense.

56. As a result of their breaches, OvaScience has suffered and will suffer significant damages, as explained herein.

57. Thus, the Director Defendants are liable to the Company.

58. These breaches of fiduciary duty are not subject to exculpation.

59. Plaintiff, on OvaScience's behalf, has no adequate remedy at law.

COUNT II
Derivatively Against the Director Defendants
for Breach of Fiduciary Duty of Good Faith

60. Plaintiff incorporates by reference and re-alleges each and every allegation above as though fully set forth herein.

61. By reason of their fiduciary relationship with OvaScience, the Director Defendants owed and owe OvaScience the highest obligation of good faith and fair dealing.

62. In derogation of these duties, the Director Defendants have improperly and in bad faith refused to consider the Demand, and thus, by their wrongful acts and omissions, determined that no pursuit of the demanded actions has been or will be taken, in breach of their fiduciary duty of good faith owed to OvaScience.

63. As a direct and proximate result of the Director Defendants' breaches of their fiduciary obligations, OvaScience has sustained, and will continue to sustain, significant damages, as alleged herein.

64. The Director Defendants are liable to the Company for the misconduct alleged herein.

65. These breaches of fiduciary duty are not subject to exculpation.

66. Plaintiff, on OvaScience's behalf, has no adequate remedy at law.

COUNT III

**Derivatively Against the Director Defendants
for Waste of Corporate Assets**

67. Plaintiff incorporates by reference and re-alleges each and every allegation above as though fully set forth herein.

68. As a result of the Director Defendants' self-dealing, the Company has wasted and continues to waste its valuable assets by paying the Director Defendants excessive compensation.

69. As a result of this waste of corporate assets, the Director Defendants are liable to the Company.

70. Plaintiff, on OvaScience's behalf, has no adequate remedy at law.

**COUNT IV
Derivatively Against the Director Defendants
for Unjust Enrichment**

71. Plaintiff incorporates by reference and re-alleges each and every allegation above as though fully set forth herein.

72. By their wrongful acts and omissions, as alleged herein, the Non-Employee Director Defendants were unjustly enriched at the expense of, and to the detriment of, OvaScience.

73. Plaintiff, as a shareholder and representative of OvaScience, seeks restitution from the Non-Employee Director Defendants, and each of them, and seeks an order from this Court requiring the Non-Employee Director Defendants to disgorge all profits, benefits, and other compensation obtained by these Defendants, and each of them, from their wrongful conduct and fiduciary breaches.

74. Plaintiff, on OvaScience's behalf, has no adequate remedy at law.

COUNT V

Derivatively Against All Defendants for Violations of Section 14(a) of the Securities Exchange Act of 1934 and SEC Rule 14a-9 Promulgated Thereunder

75. Plaintiff incorporates by reference and re-alleges each and every allegation above as though fully set forth herein.

76. Rule 14a-9, promulgated pursuant to Section 14(a) of the Securities Exchange Act of 1934, provides that no proxy statement shall contain “any statement which, at the time and in the light of the circumstances under which it is made, is false or misleading with respect to any material fact, or which omits to state any material fact necessary in order to make the statements therein not false or misleading.” 17 C.F.R. §240.14a-9.

77. Here, OvaScience’s Proxy Statements for 2015, 2016, and 2017 violated Section 14(a) and Rule 14a-9 by omitting material facts, specifically that “the valuation metric used for SEC disclosure purposes (“Black-Scholes”) is not an appropriate metric for assessing the adequacy and fairness of compensation awards to non-employee directors of biotechnology corporations....Given the extreme volatility of biotechnology corporations in general, and OvaScience in particular in 2014-2015, a Black-Scholes analysis produces ‘valuations’ that bear little or no relationship to the actual fairness and adequacy of the compensation awarded.”

78. The omission of this material information rendered OvaScience’s Proxy Statements for 2015, 2016, and 2017 false and misleading.

79. Further, because OvaScience’s Proxy Statements for 2015, 2016, and 2017 sought shareholder votes for, among other things, director nominations, the Proxy Statements failed to disclose that the Company’s method for valuing the options awarded to non-employee directors was inappropriate.

80. In the exercise of reasonable care, the Director Defendants should have known that the statements made in OvaScience's Proxy Statements for 2015, 2016, and 2017 were materially false and misleading and/or that they omitted material information.

81. As a consequence of the foregoing, the Company was damaged as a result of the Director Defendants' material misrepresentations and omissions.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff demands judgment as follows:

A. Against all of the Director Defendants and in favor of the Company for the amount of damages sustained by the Company as a result of the Director Defendants' breaches of fiduciary duties, waste of corporate assets, and unjust enrichment;

B. Directing OvaScience to take all necessary actions to reform and improve its corporate governance and internal procedures to comply with applicable laws and to protect OvaScience and its shareholders from a repeat of the damaging events described herein. In particular, the Board must take all necessary steps to bring its director compensation in line with that of the Company's peers using reasonable and accepted metrics as well as market and performance considerations and take into account an appropriate sample of companies for purposes of its own compensation and enumerate the Company's objectives and market conditions it incorporates into its compensation plan and then present the same such for changes to the shareholders for a vote;

C. Extraordinary equitable and injunctive relief as permitted by law, equity, and state statutory provisions sued hereunder, including attaching, impounding, imposing a constructive trust on, or otherwise restricting the proceeds of defendants' trading activities or their other assets so as to assure that Plaintiff on behalf of OvaScience has an effective remedy;

D. Awarding to OvaScience restitution from Non-Employee Director Defendants, and each of them, and ordering disgorgement of all profits, benefits, and other compensation obtained by the Director Defendants;

E. Requiring OvaScience to issue a corrective disclosure to shareholders; disclosing that OvaScience relied upon an inappropriate option value calculation method in its 2015, 2016, and 2017 public filings;

F. Awarding to Plaintiff the costs and disbursements of the action, including reasonable attorneys' fees, accountants' and experts' fees, costs, and expenses; and

G. Granting such other and further relief as the Court deems just and proper under the circumstances.

Dated: June 30, 2017

RIGRODSKY & LONG, P.A.

/s/ Brian D. Long
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Brian D. Long (#4347)
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Exhibit A

NEWMAN FERRARA LLP

1250 Broadway, 27th Floor, New York, NY 10001
tel. 212-619-5400 • fax 212-619-3090
www.nflfp.com

April 4, 2017

Via Overnight Mail

The Board of Directors
OvaScience, Inc.
9 Fourth Avenue
Waltham, Massachusetts 02451-7506

Attn: Michelle Dipp M.D., Ph.D., Executive Chair

Re: Shareholder demand concerning non-employee director compensation policy

Dear Board of Directors:

We write on behalf of our client, Nicholas W. Fulton, who is a current shareholder of OvaScience, Inc. (“OvaScience” or the “Company”). The purpose of this letter is to demand that the Company’s Board of Directors (the “Board”) take action to address excessive director compensation as well as compensation practices and policies pertaining to directors. Additionally, Mr. Fulton demands that the Company’s shareholders be provided an opportunity to review, consider, and approve the same.

In the Company’s Schedule 14A, filed April 18, 2016, with the Securities and Exchange Commission, it was revealed that the Board had adopted an amended and restated non-employee director compensation policy (the “2015 Policy”), in which all non-employee directors participate. The 2015 Policy has not been approved by shareholders at any time.

Under the 2015 Policy, the compensation of each non-employee director consisted of: (i) a \$35,000 annual cash retainer; and (ii) an award of a stock option to purchase 12,000 shares of OvaScience common stock. Additionally, non-employee directors acting as Chair of any Board committee are eligible for additional fees of up to \$15,000 per director and other members of committees receive fees of up to \$8,000 per committee. In addition, newly elected non-employee directors will be awarded an initial grant of a stock option to purchase 8,650 shares of OvaScience common stock.

The Company’s director compensation practices and policies have caused the non-employee directors to be compensated at an extraordinarily high level – averaging in excess of \$300,000 per annum each. In fact, further to the 2015 Policy, the average total annual

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OvaScience, Inc.

April 4, 2017

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compensation per non-employee director per annum in 2015 was \$362,434.¹

In comparison, the average total compensation of S&P 500 directors for 2015 was \$277,237.² OvaScience, however, *is not* a constituent of the S&P 500 index but rather a current member of the Russell Microcap Index, a US micro-cap equity index. The median value of annual compensation for micro-cap companies in 2015 was \$115,125.³ The compensation that non-employee directors awarded themselves under the 2015 Policy (they adopted) thus greatly exceeds that of their peers, standing at a level well more than three times that which was appropriate.

In addition to waste of corporate assets, we submit that the compensation practices and policies pertaining to directors constitute a breach of fiduciary duty and amounts to an unjust enrichment for the non-employee directors who agree to accept the excessive levels of compensation they granted themselves. The Company and its shareholders should not bear the burden of these unreasonable costs.

As noted above, the 2015 Policy, which is concerned exclusively with the compensation of non-employee directors, has not been approved by shareholders since its adoption and becoming effective. Furthermore, the 2015 Policy does not contain any provision imposing some meaningful limitation on the awards that may be made to non-employee directors.

Accordingly, on behalf of our client, we demand that the Board takes all action necessary, including revising the awards of stock options and shares of common stock and cancelling any option and stock awards granted under the 2015 Policy until a newly revised director compensation plan may be proposed by the Company and reviewed, considered and approved by shareholders prior to its adoption. Considering the current make-up of the Board, we trust the Board will respond to this demand independently and impartially on behalf of the Company.⁴

¹ This amount of average total compensation per non-employee director during the year of 2015 consists of the award of \$263,430 in options or, in relation to newly elected non-employee directors, \$453,319 in options, plus where applicable a cash retainer and/or various additional fees and/or stock awards. Under the 2015 Policy, non-employee directors may elect to receive their annual fees for board and committee service in either cash or fully vested shares of OvaScience common stock.

² See Spencer Stuart's Board Index 2015.

³ See National Association of Corporate Directors and Pearl Meyer's Compensation Series, 2016.

⁴ The majority of the current Board is made up of independent directors. Presently, seven of eight directors (*i.e.*, Drs. Sexton and Howe, Ms. Fisher, and Messrs. Aldrich, Capello, Kozin, and Malley) are "independent" as defined under the rules of The NASDAQ Stock Market.

NEWMAN FERRARA LLP

OvaScience, Inc.

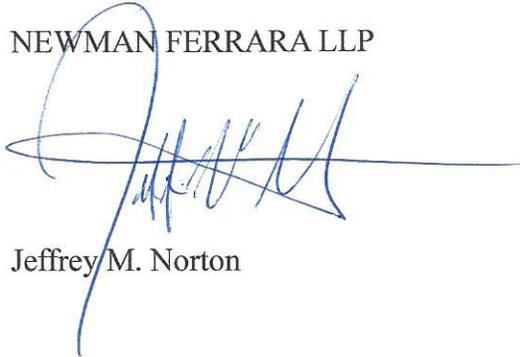
April 4, 2017

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Without a definitive response to this demand within twenty-one (21) days (*i.e.*, confirmation that the Board has taken or will take action with regard to the terms of this demand), such will be deemed a failure to act independently within a reasonable period of time. Thereafter, Mr. Fulton will consider available actions and remedies in order to compel the Board to act for the benefit of OvaScience and its shareholders.

Yours very truly,

NEWMAN FERRARA LLP



Jeffrey M. Norton

cc: Werner R. Kranenburg, Esq.

Exhibit B

MINTZ LEVIN

John F. Sylvia | 617 348 1820 | jsylvia@mintz.com

One Financial Center
Boston, MA 02111
617-542-6000
617-542-2241 fax
www.mintz.com

April 25, 2017

Via Email (jnorton@nflp.com) and First Class Mail

Jeffrey M. Norton, Esq.
Newman Ferrara LLP
1250 Broadway, 27th Floor
New York, NY 10001

Re: OvaScience, Inc. – Response to Shareholder Demand Letter

Dear Mr. Norton:

Mintz Levin has been retained to represent the Board of Directors (the “Board”) of OvaScience, Inc. (“OvaScience”) in connection with the claims asserted in your letter of April 4, 2017. For the reasons discussed below, the Board rejects your assertion that compensation paid to the Board in 2015 was “excessive,” and accordingly declines to implement your client’s demands.

As noted in your letter, non-employee director compensation in 2015 consisted of both cash and equity components. You argue that the combined cash and equity award is excessive because the award exceeds the median value for micro-cap companies in 2015. That analysis is flawed for several reasons.

First, OvaScience was not a micro-cap company in 2015. Accordingly, your comparison offers no insight into the reasonableness of non-employee director compensation awarded in 2015. The error is compounded by your inclusion of initial equity grants to newly elected non-employee directors. Backing these one-time payments out of the calculation yields an average much closer to the S&P 500 average you cite.

Second, the valuation metric used for SEC disclosure purposes (Black-Scholes) is not an appropriate metric for assessing the adequacy and fairness of compensation awards to non-employee directors of biotechnology corporations. A key driver of the Black-Scholes model is volatility. Given the extreme volatility of biotechnology corporations in general, and OvaScience in particular in 2014-2015, a Black-Scholes analysis produces “valuations” that bear little or no relationship to the actual fairness and adequacy of the compensation awarded. To address this disparity, it is a well-recognized practice for compensation consultants to perform a comparative peer-group analysis of annual equity grants as a percentage of fully diluted shares outstanding rather than a Black-Scholes analysis. In 2015, OvaScience engaged Pearl Meyer & Partners (“Pearl Meyer”) as an independent compensation consultant to review its board compensation. Pearl Meyer performed a comparative peer group analysis and concluded that annual director cash compensation was aligned with the market median for Ovascience’s peer

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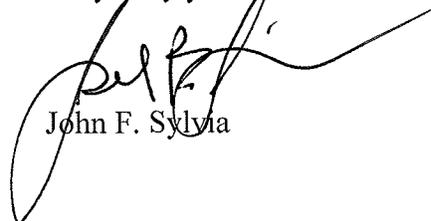
April 25, 2017
Page 2

group and that equity compensation trailed the peer group as a percentage of fully diluted shares outstanding. As a consequence, Pearl Meyer recommended that OvaScience increase the annual non-employee director option grant to 12,000 options to improve the company's competitive positioning. The Board adopted Pearl Meyer's recommendation.

Finally, as disclosed in OvaScience's Schedule 14A, filed on April 18, 2016, none of the non-employee directors exercised any of the options granted in 2015. Those option awards now are significantly out of the money and have only a nominal current value. The net result is that the actual compensation realized by OvaScience's non-employee directors in 2015 trailed both the median value of annual compensation awarded to directors of micro-cap companies in 2015 and the compensation awarded to the Board's peer group directors by a significant margin.

Given the foregoing, your claim that the Board has somehow "wasted" corporate assets is legally and factually untenable. Commencing litigation would serve no purpose other than to needlessly divert corporate assets that otherwise could be used to further the company's efforts to enhance shareholder value.

Very truly yours,

A handwritten signature in black ink, appearing to read "John F. Sylvia", with a long, sweeping horizontal line extending to the right.

John F. Sylvia

UNITED STATES DISTRICT COURT
DISTRICT OF DELAWARE

NICHOLAS W. FULTON, derivatively
on behalf of OVASCIENCE, INC.,

Civil Action No. _____

Plaintiff,

MICHELLE DIPP, RICHARD
ALDRICH, JEFFREY D. CAPELLO,
MARY FISHER, JOHN HOWE III,
MARC KOZIN, THOMAS MALLEY,
and JOHN SEXTON,

**AFFIDAVIT AND
VERIFICATION**

Defendants,

-and-

OVASCIENCE, INC., a Delaware
corporation,

Nominal Defendant.

STATE OF NEW YORK)
) ss.
COUNTY OF BROOME)

I, NICHOLAS W. FULTON, being duly sworn, do hereby state as follows:

1. My name is Nicholas W. Fulton and I make this Affidavit and Verification pursuant to Fed. R. Civ. P. 23.1(b) in connection with the filing of a Verified Stockholder Derivative Complaint for Breaches of Fiduciary Duty, Waste

of Corporate Assets, Unjust Enrichment, and violations of Section 14(A) of the Securities Exchange Act of 1934 (the "Complaint") in the above-captioned action.

2. I currently hold shares of OvaScience, Inc. and have held such shares continuously throughout the wrongs alleged in the Complaint.

3. I have reviewed and authorized the filing of the Complaint against the defendants in this action. I am familiar with the allegations of the Complaint.

4. I verify that I have reviewed the foregoing Complaint and that the allegations as to me and my own actions are true and correct and all other allegations upon information and belief are true and correct.

5. Neither I nor anyone else affiliated with me has received, been promised or offered, and will not accept any form of compensation, directly or indirectly, for prosecuting or serving as a representative party in this action except for (i) such damages or other relief as the Court may award me as a member of the Class; (ii) such fees, costs or other payments as the Court expressly approves to be paid to me or on my behalf; or (iii) reimbursement, paid by my attorneys, of actual and reasonable out-of-pocket expenses incurred by me directly in connection with prosecution of this action.

I make this Affidavit and Verification under penalty of perjury that the foregoing is true and correct.

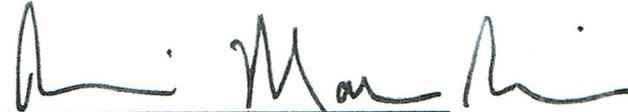
Executed this 26th day of JUNE, 2017.



NICHOLAS W. FULTON

SWORN TO AND SUBSCRIBED

before me this 26th day of JUNE, 2017.



Notary Public

RICHARD MARK REINGOLD
My Commission Expires WITH LIFE

NOTARY PUBLIC
LONDON, ENGLAND
RICHARD M. REINGOLD
(My Commission expires with Life)

 **QUILL NOTARIES**
Notaries Public
1 Fore Street
London EC2Y 9DT England
Telephone: +44 (0) 207638 6067
Facsimile: +44 (0) 207638 6076



CIVIL COVER SHEET

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON NEXT PAGE OF THIS FORM.)

I. (a) PLAINTIFFS

(b) County of Residence of First Listed Plaintiff _____
(EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorneys (Firm Name, Address, and Telephone Number)

DEFENDANTS

County of Residence of First Listed Defendant _____
(IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE TRACT OF LAND INVOLVED.

Attorneys (If Known)

II. BASIS OF JURISDICTION (Place an "X" in One Box Only)

- 1 U.S. Government Plaintiff
- 2 U.S. Government Defendant
- 3 Federal Question (U.S. Government Not a Party)
- 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES (Place an "X" in One Box for Plaintiff and One Box for Defendant)

- | | | | | | |
|---|----------------------------|----------------------------|---|----------------------------|----------------------------|
| | PTF | DEF | | PTF | DEF |
| Citizen of This State | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 | Incorporated or Principal Place of Business In This State | <input type="checkbox"/> 4 | <input type="checkbox"/> 4 |
| Citizen of Another State | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 | Incorporated and Principal Place of Business In Another State | <input type="checkbox"/> 5 | <input type="checkbox"/> 5 |
| Citizen or Subject of a Foreign Country | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 | Foreign Nation | <input type="checkbox"/> 6 | <input type="checkbox"/> 6 |

IV. NATURE OF SUIT (Place an "X" in One Box Only)

CONTRACT	TORTS	FORFEITURE/PENALTY	BANKRUPTCY	OTHER STATUTES	
<input type="checkbox"/> 110 Insurance <input type="checkbox"/> 120 Marine <input type="checkbox"/> 130 Miller Act <input type="checkbox"/> 140 Negotiable Instrument <input type="checkbox"/> 150 Recovery of Overpayment & Enforcement of Judgment <input type="checkbox"/> 151 Medicare Act <input type="checkbox"/> 152 Recovery of Defaulted Student Loans (Excludes Veterans) <input type="checkbox"/> 153 Recovery of Overpayment of Veteran's Benefits <input type="checkbox"/> 160 Stockholders' Suits <input type="checkbox"/> 190 Other Contract <input type="checkbox"/> 195 Contract Product Liability <input type="checkbox"/> 196 Franchise	PERSONAL INJURY <input type="checkbox"/> 310 Airplane <input type="checkbox"/> 315 Airplane Product Liability <input type="checkbox"/> 320 Assault, Libel & Slander <input type="checkbox"/> 330 Federal Employers' Liability <input type="checkbox"/> 340 Marine <input type="checkbox"/> 345 Marine Product Liability <input type="checkbox"/> 350 Motor Vehicle <input type="checkbox"/> 355 Motor Vehicle Product Liability <input type="checkbox"/> 360 Other Personal Injury <input type="checkbox"/> 362 Personal Injury - Medical Malpractice	PERSONAL INJURY <input type="checkbox"/> 365 Personal Injury - Product Liability <input type="checkbox"/> 367 Health Care/Pharmaceutical Personal Injury Product Liability <input type="checkbox"/> 368 Asbestos Personal Injury Product Liability PERSONAL PROPERTY <input type="checkbox"/> 370 Other Fraud <input type="checkbox"/> 371 Truth in Lending <input type="checkbox"/> 380 Other Personal Property Damage <input type="checkbox"/> 385 Property Damage Product Liability	<input type="checkbox"/> 625 Drug Related Seizure of Property 21 USC 881 <input type="checkbox"/> 690 Other LABOR <input type="checkbox"/> 710 Fair Labor Standards Act <input type="checkbox"/> 720 Labor/Management Relations <input type="checkbox"/> 740 Railway Labor Act <input type="checkbox"/> 751 Family and Medical Leave Act <input type="checkbox"/> 790 Other Labor Litigation <input type="checkbox"/> 791 Employee Retirement Income Security Act IMMIGRATION <input type="checkbox"/> 462 Naturalization Application <input type="checkbox"/> 465 Other Immigration Actions	<input type="checkbox"/> 422 Appeal 28 USC 158 <input type="checkbox"/> 423 Withdrawal 28 USC 157 PROPERTY RIGHTS <input type="checkbox"/> 820 Copyrights <input type="checkbox"/> 830 Patent <input type="checkbox"/> 840 Trademark SOCIAL SECURITY <input type="checkbox"/> 861 HIA (1395ff) <input type="checkbox"/> 862 Black Lung (923) <input type="checkbox"/> 863 DIWC/DIWW (405(g)) <input type="checkbox"/> 864 SSID Title XVI <input type="checkbox"/> 865 RSI (405(g)) FEDERAL TAX SUITS <input type="checkbox"/> 870 Taxes (U.S. Plaintiff or Defendant) <input type="checkbox"/> 871 IRS—Third Party 26 USC 7609	<input type="checkbox"/> 375 False Claims Act <input type="checkbox"/> 400 State Reapportionment <input type="checkbox"/> 410 Antitrust <input type="checkbox"/> 430 Banks and Banking <input type="checkbox"/> 450 Commerce <input type="checkbox"/> 460 Deportation <input type="checkbox"/> 470 Racketeer Influenced and Corrupt Organizations <input type="checkbox"/> 480 Consumer Credit <input type="checkbox"/> 490 Cable/Sat TV <input type="checkbox"/> 850 Securities/Commodities/Exchange <input type="checkbox"/> 890 Other Statutory Actions <input type="checkbox"/> 891 Agricultural Acts <input type="checkbox"/> 893 Environmental Matters <input type="checkbox"/> 895 Freedom of Information Act <input type="checkbox"/> 896 Arbitration <input type="checkbox"/> 899 Administrative Procedure Act/Review or Appeal of Agency Decision <input type="checkbox"/> 950 Constitutionality of State Statutes

V. ORIGIN (Place an "X" in One Box Only)

- 1 Original Proceeding
- 2 Removed from State Court
- 3 Remanded from Appellate Court
- 4 Reinstated or Reopened
- 5 Transferred from Another District (specify)
- 6 Multidistrict Litigation

VI. CAUSE OF ACTION

Cite the U.S. Civil Statute under which you are filing (Do not cite jurisdictional statutes unless diversity):

Brief description of cause:

VII. REQUESTED IN COMPLAINT:

CHECK IF THIS IS A CLASS ACTION UNDER RULE 23, F.R.Cv.P. DEMAND \$ _____

CHECK YES only if demanded in complaint:
JURY DEMAND: Yes No

VIII. RELATED CASE(S) IF ANY

(See instructions):

JUDGE _____

DOCKET NUMBER _____

DATE _____

SIGNATURE OF ATTORNEY OF RECORD _____

FOR OFFICE USE ONLY

RECEIPT # _____

AMOUNT _____

APPLYING IFP _____

JUDGE _____

MAG. JUDGE _____

INSTRUCTIONS FOR ATTORNEYS COMPLETING CIVIL COVER SHEET FORM JS 44

Authority For Civil Cover Sheet

The JS 44 civil cover sheet and the information contained herein neither replaces nor supplements the filings and service of pleading or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. Consequently, a civil cover sheet is submitted to the Clerk of Court for each civil complaint filed. The attorney filing a case should complete the form as follows:

- I.(a) Plaintiffs-Defendants.** Enter names (last, first, middle initial) of plaintiff and defendant. If the plaintiff or defendant is a government agency, use only the full name or standard abbreviations. If the plaintiff or defendant is an official within a government agency, identify first the agency and then the official, giving both name and title.
 - (b) County of Residence.** For each civil case filed, except U.S. plaintiff cases, enter the name of the county where the first listed plaintiff resides at the time of filing. In U.S. plaintiff cases, enter the name of the county in which the first listed defendant resides at the time of filing. (NOTE: In land condemnation cases, the county of residence of the "defendant" is the location of the tract of land involved.)
 - (c) Attorneys.** Enter the firm name, address, telephone number, and attorney of record. If there are several attorneys, list them on an attachment, noting in this section "(see attachment)".
- II. Jurisdiction.** The basis of jurisdiction is set forth under Rule 8(a), F.R.Cv.P., which requires that jurisdictions be shown in pleadings. Place an "X" in one of the boxes. If there is more than one basis of jurisdiction, precedence is given in the order shown below.
- United States plaintiff. (1) Jurisdiction based on 28 U.S.C. 1345 and 1348. Suits by agencies and officers of the United States are included here.
 - United States defendant. (2) When the plaintiff is suing the United States, its officers or agencies, place an "X" in this box.
 - Federal question. (3) This refers to suits under 28 U.S.C. 1331, where jurisdiction arises under the Constitution of the United States, an amendment to the Constitution, an act of Congress or a treaty of the United States. In cases where the U.S. is a party, the U.S. plaintiff or defendant code takes precedence, and box 1 or 2 should be marked.
 - Diversity of citizenship. (4) This refers to suits under 28 U.S.C. 1332, where parties are citizens of different states. When Box 4 is checked, the citizenship of the different parties must be checked. (See Section III below; **NOTE: federal question actions take precedence over diversity cases.**)
- III. Residence (citizenship) of Principal Parties.** This section of the JS 44 is to be completed if diversity of citizenship was indicated above. Mark this section for each principal party.
- IV. Nature of Suit.** Place an "X" in the appropriate box. If the nature of suit cannot be determined, be sure the cause of action, in Section VI below, is sufficient to enable the deputy clerk or the statistical clerk(s) in the Administrative Office to determine the nature of suit. If the cause fits more than one nature of suit, select the most definitive.
- V. Origin.** Place an "X" in one of the six boxes.
- Original Proceedings. (1) Cases which originate in the United States district courts.
 - Removed from State Court. (2) Proceedings initiated in state courts may be removed to the district courts under Title 28 U.S.C., Section 1441. When the petition for removal is granted, check this box.
 - Remanded from Appellate Court. (3) Check this box for cases remanded to the district court for further action. Use the date of remand as the filing date.
 - Reinstated or Reopened. (4) Check this box for cases reinstated or reopened in the district court. Use the reopening date as the filing date.
 - Transferred from Another District. (5) For cases transferred under Title 28 U.S.C. Section 1404(a). Do not use this for within district transfers or multidistrict litigation transfers.
 - Multidistrict Litigation. (6) Check this box when a multidistrict case is transferred into the district under authority of Title 28 U.S.C. Section 1407. When this box is checked, do not check (5) above.
- VI. Cause of Action.** Report the civil statute directly related to the cause of action and give a brief description of the cause. **Do not cite jurisdictional statutes unless diversity.** Example: U.S. Civil Statute: 47 USC 553 Brief Description: Unauthorized reception of cable service
- VII. Requested in Complaint.** Class Action. Place an "X" in this box if you are filing a class action under Rule 23, F.R.Cv.P.
- Demand. In this space enter the actual dollar amount being demanded or indicate other demand, such as a preliminary injunction.
 - Jury Demand. Check the appropriate box to indicate whether or not a jury is being demanded.
- VIII. Related Cases.** This section of the JS 44 is used to reference related pending cases, if any. If there are related pending cases, insert the docket numbers and the corresponding judge names for such cases.

Date and Attorney Signature. Date and sign the civil cover sheet.