May 4, 2006

VIA EDGAR AND MESSENGER

Securities and Exchange Commission
Division of Corporate Finance
100 F Street, N.E.
Washington, D.C. 20549-6010

Mail Stop 6010

Attention: Mr. Jeffrey P. Riedler
Ms. Sonia Barros
Ms. Suzanne Hayes
Ms. Tabatha Akins
Mr. Oscar Young

Re: Luna Innovations Incorporated
Registration Statement on Form S-1 (File No. 333-131764)
Initially filed on February 10, 2006
Amendment No. 2 filed on April 10, 2006
Amendment No. 3 filed on April 28, 2006

Ladies and Gentlemen:

On behalf of Luna Innovations Incorporated (the "**Company**"), we respectfully submit this letter as a supplement to our letter to you dated April 27, 2006 (the "**April 27 Response Letter**") and in response to our telephone discussion with you on May 3, 2006.

In the April 27 Response Letter, we submitted for review the Company's response to comments from the staff (the "**Staff**") of the Securities and Exchange Commission (the "**Commission**") received by letter dated April 24, 2006, relating to the Company's Amendment No. 2 ("**Amendment No. 2**") to Registration Statement on Form S-1 (File No. 333-131764) filed with the Commission on April 10, 2006 (the "**Registration Statement**"). Concurrent with its filing of the April 27 Response Letter, the Company filed via EDGAR Amendment No. 3 to the Registration Statement ("**Amendment No. 3**").

In this letter, we have provided supplemental responses to certain comments from the Staff. To facilitate your review, we have recited these comments in italicized, bold type and have

followed each comment with the Company's supplemental response thereto. Except as otherwise specifically indicated, page references in the Company's supplemental response are to the corresponding page in Amendment No. 3. References to "we," "our" or "us" mean the Company or its advisors, as the context may require.

Use of Proceeds, page 28

1. *We note your response to our prior comment 17 and reissue that comment in part. Please estimate the amount of funds you anticipate using for each project and identify the stage of development you expect to achieve with those funds. You state that you intend to use the net proceeds of this offering to partially fund FDA clinical trials of your MRI contrast agent and ultrasound medical device products, but that due to the uncertainties inherent in the clinical trial process you are unable to estimate the total costs that will be required to complete FDA clinical trials. You do not have to provide an estimate of the total costs to complete FDA clinical trials. You must, however, disclose any amounts you currently expect to spend on this project and the stage of development you expect to achieve with these funds.*

SUPPLEMENTAL RESPONSE TO COMMENT 1:

In the April 27 Response Letter, the Company noted that it revised the disclosure on page 28 of Amendment No. 3 in response to the Staff's comment. The Company supplementally advises the Staff that it intends to further revise this disclosure in its next amendment to the Registration Statement to provide additional detail regarding stage of development as set forth below:

We intend to use the net proceeds from this offering principally to fund further development and expansion of our products and product candidates, in particular our nanomaterial and ultrasound-related product candidates, and for general working capital purposes. Specifically, in 2006 and 2007 we currently estimate spending:

- approximately $4 million to $6 million to develop disease-targeting MRI contrast agents and other nanomaterial applications through completion of pre-clinical trials and the filing of an Investigational New Drug application for a lead contrast agent;
- approximately $2 million to $3 million to complete FDA Phase I clinical trials for one lead disease-targeting MRI contrast agent including generation of preliminary efficacy data;
- approximately $2 million to $3 million to complete the development stage of our first medical product based on our innovative ultrasound platform technology; and

- approximately $2 million to $3 million to fund completion of a 510(k) premarketing notification review process with the FDA to allow us to market in the U.S. our first medical device product based on our innovative ultrasound platform technology.

Thereafter, we intend to use the net proceeds of this offering to continue to fund FDA clinical trials of additional, currently unidentified, MRI contrast agent and ultrasound medical device products, with the remainder being available for general working capital purposes. However, due to the uncertainties inherent in the clinical trial process and given that our product candidates have not yet entered clinical development, we are unable to estimate the total costs that will be required to complete the development of our product candidates. As a result, we cannot estimate what amount of the net proceeds will be available for general working capital purposes.

Moreover, our current estimates may change as we begin to develop and expand our product candidates, and we may decide to use our net proceeds for other product candidates or other business purposes. In addition, we may decide to fund our development efforts in part or in whole through outside sources, including licensing revenues or other sources of financing. The foregoing use of proceeds are only our current estimates, and we retain broad discretion to change the application of the proceeds from this offering.

Results of Operations, page 41

Other Income (Expense), page 42

5. *We note your statement that prior to your acquisition of Luna Technologies in September 2005, your pro rata portion of the losses of Luna Technologies were reported in "operating income." This does not appear to explain the reason for the decrease in other expenses. If you meant to refer to "other income" please revise. Also, if the decrease in other expenses was also due to the fact that Luna Technologies had no losses for the nine months ended September 30, 2005, please add this to the explanation.*

SUPPLEMENTAL RESPONSE TO COMMENT 5:

As previously discussed with the Staff on May 3, 2006, the Company supplementally advises the Staff that it intends to include the additional disclosure from the April 27 Response Letter in its next amendment to the Registration Statement.

Intellectual Property, pages 59-63

9. *We note your response to our prior comment 26 and reissue that comment in part. Please disclose the following:*

- ***aggregate potential milestone payments under the Virginia Tech agreement as we consider aggregate potential milestone payments to be material information,***
- ***the annual expenditures you are required to make toward development of the licensed products under the Virginia Tech agreement,***
- ***all amounts paid to date under each agreement,***
- ***all minimum annual royalty payments, and***
- ***term and termination provisions for the June 2005 Joint Cooperation Agreement.***

Please note that this is not the type of information for which we are willing to grant confidential treatment. We generally are willing to grant confidential treatment for milestone payments as long as the amounts paid to date and the amount of aggregate potential payments are disclosed.

SUPPLEMENTAL RESPONSE TO COMMENT 9:

In the April 27 Response Letter, the Company noted that it revised the disclosures at pages 37, 60, and 63-64 of Amendment No. 3 in accordance with the Staff's comment. The Company supplementally advises the Staff that it intends to further revise this disclosure in its next amendment to the Registration Statement as set forth in Attachment A hereto to provide additional detail regarding aggregate historical payments and future minimum royalty payments for each material license agreement.

Index to Financial Statements, page F-l

Luna Innovations Incorporated and Subsidiaries consolidated financial . . ., page F-2

Notes to consolidated financial statements, page F-7

Contract Research Revenues, page F-7

10. Regarding the third paragraph of your response to prior comment 40, please elaborate on why the proportional performance model is the best method to measure the satisfaction of your obligations to the customer under contracts that

involve the delivery of only research reports. In this regard, it is unclear whether each report represents a separate unit of accounting under EITF 00-21 and whether recognition should be deferred until the delivery of all reports within one unit of accounting. To the extent you use the proportional performance model, an input-based model, for other types of contracts, please clarify the terms, deliverables, milestones and other outputs of those contracts and how they support using the proportional performance model over an output-based model.

SUPPLEMENTAL RESPONSE TO COMMENT 10:

In the April 27 Response Letter, the Company advised the Staff that the Company does not believe that the provisions of EITF 00-21 *Revenue Arrangements with Multiple Deliverables* would apply to fixed price research contracts, as the interim deliverables do not constitute multiple elements since they are only used as a means to measure performance and have no standalone value.

The Company supplementally advises the Staff that the Company's fixed price research contracts generally provide for termination following notice by the customer or the Company; however, these contracts generally provide that costs incurred and related fees, if any, through the point of termination are recoverable. Although infrequent, the Company has had one contract terminated by the government for convenience. In such instance, the Company was able to recover amounts due through such termination and as a result did not incur a loss on this particular contract.

The Company also advises the Staff that billings under these contracts are generally in the form of progress payments. These fixed price contracts do not generally include any significant up-front costs nor do they provide for up-front payments to the Company.

Accordingly, due to the nature of these contracts, the Company believes that the proportional performance methodology approximates straight-line revenue recognition and approximates the flow of progress payments.

9. Stockholders' Equity, page F-l9

11. *In the conclusion to your response to prior comment 55, you noted that the increase in the fair value of the stock could not be attributed to a single factor but reflects a number of factors. As such, please elaborate on the extent to which each of the factors contributed to the increase, with as much quantification as possible. In addition, please update your analysis through the date of your next and any*

subsequent responses or amendments. When you have an estimate of the IPO price, please ensure that you have sufficiently discussed the factors contributing to the difference between the fair value of the stock at the issuance date and the estimated IPO price, as contemplated by part f. of our comment.

SUPPLEMENTAL RESPONSE TO COMMENT 11:

In response to the Staff's comment and subsequent conversations with the Staff, the Company is supplementally providing the following information for the Staff's consideration in connection with the Company's pricing of stock option grants made during the period from December 31, 2004 through the date of this supplemental response (the "**Updated Review Period**"). The following information includes (i) a qualitative discussion of the factors influencing the increase in valuation during the Updated Review Period and also incorporates a revised stock-based compensation charge for options granted since December 31, 2005 and (ii) assumes a proposed 1-for-1.7691911 reverse stock split that the Company will effect immediately prior to the effective date of the Registration Statement.

In general, the change in the Company's valuation during 2005 and early 2006 reflects the shift in the Company's business model from a contract research organization, generating net margins of 5 to 7 percent, to a product-oriented company with significant projected future cash flows from products such as fiber optic testing equipment, ultrasound medical devices and magnetic resonance imaging, or MRI, contrast agents. While the Company has been successful in commercializing products in the past, such commercialization efforts were largely dependent on the influx of working capital from venture capitalists, strategic investors and joint venture partners. The Company's valuation - in early 2005 in particular - was heavily influenced by the fact that the Company had, to that point, been unsuccessful in raising outside capital and had not yet successfully transitioned from a contract research organization to a product revenue-based business model. In fact, revenue and cash flows from licensing arrangements declined significantly from 2004 to 2005 because the Company had not yet secured alternative forms of financing while previous revenue arrangements, such as the Luna Energy transaction, wound down. Despite modest technical progress described in more detail below, this state of affairs characterized the valuation of the Company during the first half of 2005.

In June 2005, the Company entered into a non-binding letter of intent for $15 million in equity financing from Carilion Health System to be provided in three tranches. The first $7 million tranche of this investment closed in August 2005, which allowed the Company to aggressively ramp up hiring of key management and technical personnel. Such hires were deemed necessary for the Company to accelerate development of product candidates in its pipeline that are anticipated to be the source of revenue and cash flow in coming years. In turn, the Company's valuation in late 2006 took into account the Company's increased financial flexibility as well as several significant technological developments involving its nanomaterials and advanced materials business. In addition, the re-acquisition of Luna Technologies, Inc. during the third quarter of 2005 further strengthened the Company's revenue and cash flow position, providing a more diversified and attractive opportunity for prospective investors. The receipt of an additional $8 million in late 2005 further reinforced this trend.

In the first quarter of 2006, the Company completed the initial filing of its Registration Statement with the SEC. This event was viewed by the Company, its board of directors and its independent third-party valuation expert as a key milestone in the Company's ability to execute on its business model and realize its long-term product revenue forecasts. As the Company moves closer to the anticipated pricing of its initial public offering in late-May or mid-June of 2006, the probability that the Company will successfully complete the offering is expected to increase dramatically. The increased likelihood of obtaining the working capital necessary to fund continued product development, particularly of its medical device and pharmaceutical products which require significant investments before being commercially viable, in turn makes the realization of future cash flows more likely. This reality is reflected in an increasing valuation of the Company throughout early 2006 and is anticipated to continue up until the day of pricing of the offering, at which time the risk and marketability discounts applied to the Company's valuation will become negligible. If, on the other hand, the Company is unable to effect its public offering because of lack of demand or unfavorable external market conditions, it will be forced to continue to rely on low margin, contract research services as its primary source of revenue. This, in turn, would have a significant and negative impact on the Company's future valuation, as contract research businesses are typically valued at a fraction (i.e., 0.3 to 0.6x) of net income rather than the higher multiples (10 to 25x) of revenue more typical of biotechnology and high-technology product companies.

As discussed in the April 27 Response Letter, the increase in the estimated fair value of the Company's non-voting Class B Common Stock during the Updated Review Period is not attributable to any single event, but rather reflects the cumulative effect of a number of factors affecting the final per share value. These factors are described more fully below.

First and Second Quarter 2005 Milestones

As previously discussed with the Staff, between January 1, 2005 and June 30, 2005, the valuation of one share of the Company's non-voting Class B Common Stock provided by an independent third-party valuation consultant increased from $0.58 to $0.81 per share on a post-stock-split basis from the beginning of the period to the end of the period, respectively. For purposes of calculating the stock-based compensation expense for options granted during this period, and in the absence of objective quantitative data regarding valuation of the Company's capital stock on a specific grant date, the most recent prior valuation was the Company's best estimate of the fair value of one share of the Company's non-voting Class B Common Stock on the date of grant. Both the Company and the Company's independent third-party valuation consultant attributed a significant portion of the change in per share value during this period to an increase in the enterprise value of the Company caused by a number of achievements. Specifically, during this period the Company achieved the following product development, financing and business milestones:

- Awarded a $1.5 million subcontract by Anteon International Corporation and a $2.3 million contract by Air Force Office of Scientific Research (AFOSR), with each such contract providing proving additional stability to the Company's revenue base;

- Completed build-out of a 20,000 sq. ft. nanomaterials research laboratory and office space at the Luna nanoWorks Division in Danville, Virginia;
- Initiated operation of scaled-up reactors for nanomaterial manufacturing and process improvements in nanomaterial purification/separation;
- Hired key management personnel for the Luna nanoWorks Division, including Division President, Executive Vice President, Director of Manufacturing, and Solar Cell Technology Lead Scientist;
- Hired key senior management for Luna Innovations, including a Chief Financial Officer; and
- Executed a non-binding term sheet for a $15 million equity investment by Carilion Health System.

Third Quarter 2005 Milestones

Between June 30, 2005 and September 30, 2005, the valuation of one share of the Company's non-voting Class B Common Stock provided by an independent third-party valuation consultant increased from $0.81 to $1.63 per share on a post-stock-split basis from the beginning of the period to the end of the period, respectively. For purposes of calculating the stock-based compensation expense for options granted during this period, and in the absence of objective quantitative data regarding valuation of the Company's capital stock on a specific grant date, the most recent prior valuation was the Company's best estimate of the fair value of one share of the Company's non-voting Class B Common Stock on the date of grant. Both the Company and the independent third-party valuation consultant attributed a significant portion of this change in per share value to an increase in the enterprise value of the Company caused by a number of achievements during the quarter. Specifically, during this period the Company achieved the following product development, financing and business milestones that contributed to the increase in the Company's enterprise value:

- Closing of the first tranche of equity investment with initial proceeds of $7 million by Carilion Health System ("**Carilion**") and entering into a contractual obligation by Carilion to invest an additional $8 million in two tranches upon the achievement of certain product development milestones involving the Company's MRI contrast agent products. Such development milestones included identification of lead product candidates and the filing of an investigational new drug application;
- The closing of the acquisition of Luna Technologies, Inc. in a stock-for-stock transaction. The Company believes that Luna Technologies will likely contribute a material amount of the Company's consolidated revenue in future quarterly periods;

- Improvements achieved in nanomaterial manufacturing business, including significant increases in throughput and corresponding decreases in per unit manufacturing costs;
- Launch of the Company's nanomaterials supply business fulfilling orders to third-party research institutions;
- Successful testing of flame retardant products in the Company's textile manufacturing facility; and
- Hiring of key senior management for Luna Innovations, including Chief Operating Officer and Chief Technology Officer.

Fourth Quarter 2005 Milestones

Between September 30, 2005 and December 31, 2005, the valuation of one share of the Company's non-voting Class B Common Stock provided by an independent third-party valuation consultant increased from $1.63 to $1.65 per share on a post-stock-split basis from the beginning of the period to the end of the period, respectively. For purposes of calculating the stock-based compensation expense for options granted during this period, and in the absence of objective quantitative data regarding valuation of the Company's capital stock on a specific grant date, the most recent prior valuation was the Company's best estimate of the fair value of one share of the Company's non-voting Class B Common Stock on the date of grant. Although the Company's enterprise value increased modestly due to the factors set forth below, the per share effect of such increase was offset by the issuance of 897,303 additional options to employees, directors and consultant in November 2005. The Company achieved the following product development, financing and business milestones during this period:

- Closing of an additional investment with proceeds of $8 million by Carilion in equity and senior convertible notes. The Company also restructured Carilion's rights and obligations under its investments;
- Identification of four potential lead compounds as magnetic resonance imaging, or MRI, contrast agents;
- Hired key senior management, including the President of Luna Advanced Systems Division and General Counsel.

Despite the progress noted above, the Company had not yet actively deployed the capital raised in the August 2005 Carilion financing, as evidenced by the amount of cash ($12.5 million) on the Company's balance sheet as of December 31, 2005. During this period, the Company also missed its internal cash flow and revenue forecasts. This failure to meet budgeted numbers was in part attributable to diversion of management's attention to external transactions, such as

the Company's initial public offering, the post-acquisition integration of Luna Technologies, and the restructuring of the second tranche of the Carilion financing in December 2005.

First Quarter 2006 Milestones

Between December 31, 2005 and March 31, 2006, the valuation of one share of the Company's non-voting Class B Common Stock provided by an independent third-party valuation consultant increased from $1.65 to $6.79 per share on a post-stock-split basis from the beginning of the period to the end of the period, respectively. Both the Company and the independent third-party valuation consultant attributed a significant portion of this change to an increase in the enterprise value of the Company and the increased likelihood that the Company would be able to effect a successful initial public offering in the first half of 2006. As discussed with the Staff and elaborated upon in the Use of Proceeds section of Amendment No. 3, the Company anticipates using between $10 and $15 million of the proceeds from the offering to support MRI contrast agent development, completion of initial (Phase I) human clinical trials of its lead MRI contrast agent candidate, further development and refinement of the Company's medical ultrasound technology, and achievement of FDA approval of the Company's EDAC ultrasound medical device product. The Company expects that these medical-related product lines will contribute significant revenue and cash flow to the business in future years and could not be successfully developed and brought to market without the significant amount of capital expected to be raised in the initial public offering. Without the funds from the public offering, the Company is unlikely to realize these product development milestones and would, therefore, be unlikely to realize the enterprise valuation estimated by the Company's underwriters in the near term.

During the first quarter 2006, the Company achieved the following product development, financing and business milestones that contributed to the increase in the Company's enterprise value:

- Filed the initial version of Company's registration statement of Form S-1 on February 10, 2006, thereby substantially improving the chances of a first-half 2006 initial public offering;
- Executed the term sheet, negotiated and closed the acquisition of key intellectual property related to the Company's emboli detection and classification ("EDAC") product – the Company's first medical device product using its quantitative ultrasound platform;
- Conducted investigational tests of the Company's EDAC product in a clinical setting and hired marketing support personnel to assist with the development of an EDAC product launch strategy for mid-2006;

- Further improvements achieved in nanomaterial manufacturing business, including significant increases in throughput and corresponding decreases in per unit manufacturing costs;
- Execution of a lease for approximately 32,000 sq. ft. of combined laboratory, manufacturing and office space in Blacksburg, Virginia, which will allow the Company to consolidate research, development and administrative resources from four different locations;
- Successful integration of the Luna Technologies business and personnel into the Company's business;
- Hiring of additional technical staff to support the Company's MRI contrast agent and EDAC medical device product development efforts (funded by Carilion financing proceeds); and
- Hiring of key management and sales personnel, including a Chief Accounting Officer and senior sales personnel for various product lines.

Revised Stock-Based Compensation Charge for 2006 Option Grants

Upon further consideration of the technical, financial and business milestones achieved by the Company in the six-month period beginning November 30, 2005 through the anticipated pricing of the Company's initial public offering in late May, 2006, the Company has revised the stock-based compensation charge for options granted during the first quarter 2006. The Company has elected to record an aggregate charge for compensation expense for the Updated Review Period of $5,063,270 as reflected in the tabular presentation below. This charge represents an increase of $3,285,617 from the aggregate amount of compensation expense reflected in Amendment No. 3. Below is an updated tabular presentation that summarizes all equity awards granted to employees, directors and consultants of the Company during the Updated Review Period. The table below includes the amounts recorded as stock-based compensation expense as a result of those evaluations and as a result of the Company's adoption, effective January 1, 2006, of Financial Accounting Standards No. 123R, *Share Based Payment* (SFAS No. 123R). All share and per share numbers in the table reflect a 1-for-1.7691911 reverse stock split that the Company will effect immediately prior to the closing of the offering.

Grant Date	Number of Shares Granted	Per Share Value of Stock as Determined by the Board on the Grant Date	Reassessed Estimated Fair Value for Financial Accounting Purposes	Total Stock Based Compensation Expense[3]
1/1/05	310,662	$0.35	$0.58	$71,450
03/21/05	1,130	$0.35	$0.58	$260
04/18/05	2,826	$0.35	$0.58	$650
05/20/05	1,048,363	$0.35	$0.58	$241,120
5/20/05	113,046	$0.39[1]	$0.58	$21,479
06/01/05	2,826	$0.35	$0.58	$650
06/03/05	22,609	$0.35	$0.58	$5,200
07/01/05	56,523	$0.35	$0.81	$26,000
307/21/05	11,305	$0.35	$0.81	$5,200
08/01/05	108,242	$0.35	$0.81	$49,790
11/11/05	897,303	$1.77	$1.77	$-0-
2/8/06	868,900	$1.77	$6.00	$3,630,875[2]
3/14/06	113,046	$1.77	$8.00	$706,440[2]
4/19/06	50,871	$7.08	$9.00	$304,156[2]
				TOTAL: $5,063,270

[1] This grant was made to Dr. Kent Murphy, who holds a significant minority interest in the Company. As a result, options granted to Dr. Murphy must have a strike price of at least 110% of fair market value to receive tax treatment as an incentive stock option under the Internal Revenue Code.

[2] Effective January 1, 2006, the Company adopted Financial Accounting Standards No. 123R, *Share Based Payment* (SFAS No. 123R) using the modified prospective transition method. Under such transition method, the Company's financial statements for periods prior to January 1, 2006 will not be restated. However, new awards and awards modified, repurchased or cancelled after January 1, 2006 will trigger compensation expense based on the fair value of the stock option as determined by a Black-Scholes option pricing model. The Company will amortize stock-based compensation for such awards on a straight-line method over the related service period of the awards taking into account the effects of the employees' expected exercise and post-vesting employment termination behavior.

[3] The Company will amortize stock-based compensation for such awards on a straight-line method over the related vesting period of the awards taking into account the effects of the employees' expected exercise and post-vesting employment termination behavior.

10. Commitments and Contingencies, page F-21

Governor's Opportunity Fund, page F-22

12. *Please refer to your response to prior comment 57. Please clarify whether the $450,000 related to leasehold improvements will be recorded as an offset to your leasehold improvements when you satisfy the terms of the grant. If not, please tell us how it will be recorded and why that recognition would be appropriate.*

SUPPLEMENTAL RESPONSE TO COMMENT 12:

In the April 27 Response Letter, the Company noted that it had revised the disclosure at pages F-24 to F-25 of Amendment No. 3 in accordance with the Staff's comment. The Company supplementally advises the Staff that $450,000 of the grant will be used to offset leasehold improvements (a credit to leasehold improvements) being made at the Company's Danville facility.

Luna Technologies, Inc. financial statements . . ., page F-26

13. Regarding the revisions you made in response to prior comment number 62, please further revise the interim financial statements of Luna Technologies so that they are as of the end of and through the latest interim date prior to the acquisition. As the acquisition occurred on September 30, 2005, it would not appear appropriate for the interim financial statements to be as of and through that date because they would presumably have to reflect either the acquisition or only some of the transactions that occurred that day. Neither would appear to be consistent with Rules 3-05(b) and 3-02 of Regulation S-X.

SUPPLEMENTAL RESPONSE TO COMMENT 13:

In the April 27 Response Letter, the Company noted that it had revised the interim financial statements of Luna Technologies to reflect the interim period ended September 29, 2005, in accordance with prior discussions with the Staff. The Company supplementally advises the Staff that it does not believe that a one-calendar-day difference in either of the interim periods ended September 29, 2005, or September 30, 2004, would have a material impact on the results of operations of the comparative periods presented. The Company notes that the net impact from changing the end of the interim period in the April 27 Response Letter from September 30, 2005 to September 29, 2005 was approximately $36 thousand.

* * *

Please direct your questions or comments to the undersigned at (703) 734-3105 or to Trevor J. Chaplick at (703) 734-3106. In addition, we would request that you provide a facsimile of any additional comments you may have to the attention of Mr. Chaplick and the undersigned at (703) 734-3199. Thank you for your assistance.

Very truly yours,
WILSON SONSINI GOODRICH & ROSATI
Professional Corporation

/s/ Mark R. Fitzgerald

cc: Kent A. Murphy, Ph.D.
Aaron S. Hullman, Esq.
Luna Innovations Incorporated

Trevor J. Chaplick, Esq.
Wilson Sonsini Goodrich & Rosati, Professional Corporation

Marjorie Sybul Adams, Esq.
Daniel I. Goldberg, Esq.
DLA Piper Rudnick Gray Cary US LLP

ATTACHMENT A

REVISED DISCLOSURE OF LICENSE SUMMARIES

We consider the following exclusive license agreements to be material to our business:

- **Virginia Tech nanomaterials license.** Our Amended and Restated License Agreement with Virginia Tech Intellectual Properties, Inc., or VTIP, dated March 19, 2004, relating to Trimetasphere™ nanomaterials, which provides us with rights to one issued U.S. patent, one U.S. patent application and one foreign patent application. Under this license agreement, VTIP granted us an exclusive worldwide license, in all fields of use, under the foregoing patent rights, to make, have made, use and sell licensed products, with a reservation of rights by VTIP for educational and research purposes. We are required to diligently pursue development, manufacture and sale of licensed products, and are also required to, among other things, raise financing before March 19, 2009, make annual expenditures toward development of the licensed products, use reasonable efforts to market the licensed products and meet market demand, and distribute research samples of the licensed products. If we fail to do so, VTIP has the right to terminate the license or to change the exclusive license to a non-exclusive license. We paid up-front fees for this license agreement and are required to pay to VTIP royalties on product sales, including royalties on product sales by companies to which we have granted a sublicense. We are also required to pay VTIP $225 thousand in the aggregate upon the achievement of certain milestones. We have made aggregate payments of $38 thousand through March 31, 2006 under this agreement, representing payment of up-front fees. Our licensed products sold in the United States must be manufactured substantially in the United States. The license expires upon the expiration of the last licensed patent set forth in the license agreement, and our remaining milestone and minimum royalty payment obligations through that date are $225 thousand in the aggregate. We have the right to terminate the license agreement for convenience, and VTIP has the right to terminate the agreement upon a material breach by us or our failure to make a payment. We agreed to indemnify VTIP against any claims arising out of our exercise of the license granted or any sublicense, including for products liability claims. VTIP is responsible for diligently pursuing the prosecution and maintenance of the patents at issue, and must consult with us and provide us with a reasonable opportunity to review and comment on all proposed submissions to any patent office. VTIP has the first right to institute an action for infringement of the licensed intellectual property; we can bring an infringement claim against third parties only if VTIP elects not to. Recoveries from any such action belong to the party bringing suit. If legal actions are brought jointly by VTIP and us where we each fully participate in such action, the recoveries are shared in jointly in proportion to the share of expense paid by each party.
- **NASA ultrasound technologies license.** Our License Agreement No. DE-384 with NASA dated October 28, 2004, relating to ultrasound technologies, which provides us with rights to 10 issued U.S. patents, two U.S. patent applications and one foreign patent application. Under this license agreement, NASA granted us a terminable, exclusive license to make, have made, use and sell licensed inventions, in the United States (including its territories and possessions) and other jurisdictions that are covered by a patent or patent application, in the field of medical applications for assessing and measuring intracranial pressure and

compartment syndrome. We are required to achieve practical application, which is generally defined as a commercial application or use for which a market exists, of the licensed application before September 7, 2006, and achieve certain milestones along the way. We paid up-front fees for this license agreement and are required to pay to NASA and to the University of California, a joint owner with NASA of one of the patent applications covered by the license agreement, royalties on product sales, including minimum annual royalties from 2004 through the term of the license agreement as well as royalties on product sales by companies to which we have granted a sublicense. We have made aggregate payments of five thousand dollars through March 31, 2006 under this agreement. Our products under this license must be manufactured substantially in the United States. The license expires upon the expiration of the last licensed patent set forth in the license agreement, and our minimum annual royalty payments and fees from January 1, 2006 through that date are $235 thousand in the aggregate. We may terminate the license agreement with advance notice or immediately upon a material breach by NASA. NASA may terminate the license upon a material breach by us or if NASA determines, among other things, that (i) we have failed to achieve or maintain practical application of the licensed invention before September 7, 2006, (ii) we have not substantially manufactured the licensed invention in the United States, or (iii) we have failed to meet market demand, to pay royalties or to submit required reports. In addition, until September 7, 2009, NASA is permitted to unilaterally modify or revoke the license as to any licensed invention for which we have not achieved a practical application. We agreed to indemnify NASA and the University of California against claims arising out of our use of the licensed invention or our sale, use or disposition of products or processes made by use of such inventions. We have the right to enforce the licensed patents, subject to the U.S. government's right to bring suit or intervene, and any recoveries must be shared with NASA and the University of California on terms to be negotiated with them.

In addition to the exclusive license agreements described above, we consider the following non-exclusive license agreements to be material to our business because they relate to certain of our key products:

- **NASA OVA and OBR products and DSS technology licenses.** Our License Agreement with NASA No. DN-982 dated June 10, 2002, as modified on dated January 23, 2006, and our License Agreement with NASA No. DN-951 dated December 20, 2000, relating to our OVA and OBR products and DSS technology, which provide us with rights to four issued U.S. patents and two foreign patent applications. Under these license agreements, NASA granted us a terminable, non-exclusive license to make, have made, use and sell licensed inventions, in the United States (including its territories and possessions), in all fields of use. We paid up-front fees for this license agreement and are required to pay royalties on product sales, including minimum annual royalties from 2003 through the term of the license agreement as well as royalties on product sales by, and other payments we receive from, companies to which we have granted a sublicense. We have made aggregate payments of $350 thousand through March 31, 2006 under this agreement. Our products under this license must be manufactured substantially in the United States. The license expires upon the expiration of the last licensed patent set forth in the license agreement, and our minimum annual royalty payments from January 1, 2006 through that date are $3.5 million in the aggregate. We may terminate the license agreement with advance notice or immediately upon a material breach by NASA. NASA may terminate the license upon a material breach by us or if NASA determines, among other things, that (i) we failed to achieve or maintain practical application

of the licensed invention before June 10, 2004, (ii) we have not substantially manufactured the licensed invention in the United States, or (iii) we have failed to meet market demand, to pay royalties or to submit required reports. In addition, NASA is permitted to unilaterally modify or terminate the agreement in event of a breach by us by providing notice to us and allowing us to challenge or protest its decision. We agreed to indemnify NASA against claims arising out of our use of the licensed invention or information provided by NASA, or our sale, use or disposition of products or processes made by use of such inventions or such information. We have the right to enforce the licensed patents, subject to the U.S. government's right to bring suit or intervene, and any recoveries must be shared with NASA on terms to be negotiated with them.

- **United Technologies Corporation DSS technology license.** Our Fiber Optic Patent License with United Technologies Corporation, or UTC, dated September 22, 2003, relating to DSS technology, which provides us with rights to two issued U.S. patents. Under this license agreement, UTC granted us a non-exclusive, non-transferable, worldwide license, under the foregoing patent rights, to make, have made, use and sell licensed products, without the right to grant sublicenses. We paid non-refundable up-front fees for this license agreement and are required to pay royalties on product sales. We have made aggregate payments of $51 thousand through March 31, 2006 under this agreement. The license expires upon the expiration of the patent licensed that has the longest life unless earlier terminated. We do not have the right to terminate the license agreement without the agreement of UTC, but UTC has the right to terminate upon, among other things, a material breach by us or our failure to make a payment. We agreed to indemnify UTC against any claims relating to (i) use of the licensed patents by us, our customers, subcontractors, agents or employees, and (ii) our manufacture, use and sale of the licensed products. UTC may decide in its sole discretion whether to enforce its rights under the licensed patents or to defend any action with respect to such patents. Any such action would be under UTC's sole control and at its expense, and UTC would retain all damages and recoveries from any such action.