

# **Luna Discovers Nanomedicine Prototype Affects Hair Growth**

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#### Discovery Opens New Pathway to Understanding the Process of Hair Follicle Regeneration

DANVILLE, Va.--(BUSINESS WIRE)--March 25, 2008--Luna Innovations Incorporated (NASDAQ:LUNA) announced today the discovery that a nanomedicine prototype aids in the growth of new hair follicles. Scientists at Luna's nanoWorks Division in Danville, VA, have been developing a portfolio of new candidates based on antioxidant nanomaterials which could lead to a platform technology for treating a wide range of diseases. "One of our new nanomedicine prototypes, after only two weeks of treatment, was found to increase the number of hair follicles fourfold in mice which are born genetically hairless," said Robert Lenk, President of Luna's nanoWorks Division.

Hair growth is a process that normally depends on the regeneration of tiny hair follicles. Hairless mice have a mutation that results in atrophy of hair follicles a few weeks after birth. The hair does not regenerate. The gene responsible for the mutation in the hairless mice has been identified, however the biological processes that cause the follicle to atrophy are not well understood.

Luna is working with scientists at The Hamner Institutes for Health Sciences to further pursue their discovery in the hope of identifying a therapeutic aide to potentially treat male pattern baldness. In addition to hair loss due to heredity, Luna's discovery may also aid in hair regeneration for loss due to other medical conditions.

Follicle Buds
Follicles

These photographs, taken through a microscope at 10 X magnification, are of thin slices of skin revealing mouse hair follicles. The figure to the left is from a hairless mouse treated with a placebo (the control). The figure to the right treated with Luna's prototype nanomedicine shows there are more follicle buds and the buds are more developed. After only two weeks of treatment, the photo to the right shows that the number of hair follicles in the mice treated with Luna's prototype nanomedicine is four fold greater than that compared to the untreated mice (control photo to the left).

"What we have uncovered thus far is extremely exciting because it sheds new insights into the underlying processes responsible for keeping hair follicles healthy," said Lenk. "We know that hair follicles cycle between growth and atrophy naturally. These new results reveal that the balance can be tipped towards promoting follicle growth in hairless mice. Our hope is this discovery may eventually translate into a new class of medicines promoting hair growth in people who are balding."

Luna's program in nanomedicine is focused on using proprietary antioxidant technology to identify therapeutic candidates that are targeted with nanometer-scale precision to sites where pathogenic free radicals are produced. Luna is developing a portfolio of new therapeutic candidates that may address a number of diseases which are caused by free radicals.

"This is an example of how Luna's innovative business model can help to identify candidates for potential products that we hope will some day improve people's lives," said Kent Murphy, Chairman and CEO of Luna Innovations. "The discovery that Luna's nanomedicine candidate can potentially promote hair growth, an unexpected result of other research being performed at Luna, indicates that hair follicle atrophy can be reversed. We believe this may be the beginning of a generation of nanomedicines aimed at changing outcomes in intractable diseases."

For more information on Luna Innovations, see http://www.lunainnovations.com.

### **About Luna Innovations:**

Luna Innovations Incorporated develops and manufactures new-generation products for the healthcare, telecommunications, energy and defense markets. Luna's products are used to measure, monitor, protect and improve critical processes in the markets we serve. Luna nanoWorks is a division of Luna Innovations. With a world-class nanomaterial manufacturing facility in Danville, Virginia, the nanoWorks Division is developing products empowered by nanomaterials with applications in diagnostics, therapeutics, and organic solar cells. For more information visit <a href="http://www.lunananoworks.com">http://www.lunananoworks.com</a>.

## About The Hamner Institutes for Health Sciences:

Located on a 56-acre campus in Research Triangle Park, North Carolina, The Hamner Institutes for Health Sciences (<a href="http://www.thehamner.org">http://www.thehamner.org</a>) is an independent, nonprofit organization that unites academia, the private sector and government to conduct translational research to improve public health and expedite the development of new medicines. With the ultimate goal of preventing and curing disease, The Hamner offers an open, collaborative and cross-disciplinary approach to strengthen the research investment in biomedical sciences.

### Forward Looking / Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995:

This press release includes information that constitutes "forward-looking statements" made pursuant to the safe harbor provision of the Private Securities Litigation Reform Act of 1995, including but not limited to Luna Innovation's and its nanoWorks division's expected development of potential products with respect to hair follicle growth, antioxidant nanomaterials, and/or hair regeneration for loss due to medical conditions, diseases caused by free radicals and intractable diseases or other conditions. The company attempts, whenever possible, to identify forward-looking statements by words such as "intends," "will," "plans," "anticipates," "expects," "may," "estimates," "believes," "should," "projects," or "continue," or the negative of those words and other comparable words. Similarly, statements that describe the company's business strategy, goals, prospects, opportunities, outlook, objectives, plans or intentions are also forward-looking statements. Actual events or results may differ materially from the expectations expressed in

such forward-looking statements as a result of various factors, including risks and uncertainties, many of which are beyond the company's control. Factors that could cause actual results to differ materially from the expectations expressed in such forward-looking statements include, but are not limited to: the company's ability to successfully identify market needs for new products; the potential adverse effects of nanotechnology, whether real or perceived; and the potential limitations of regulatory requirements in obtaining clearance by the U.S. Food and Drug Administration or other regulatory agencies for the company's products. Additional factors that may affect the future results of the company are set forth in the company's quarterly and annual reports on Form 10-Q and Form 10-K, respectively, and other filings with the Securities and Exchange Commission ("SEC"), which are available at the SEC's website at <a href="http://www.lunainnovations.com">http://www.lunainnovations.com</a>. These risk factors are updated from time to time through the filing of periodic reports with the SEC. The statements made in this press release are based on information available to the company as of the date of this release and Luna Innovations undertakes no obligation to update any of the forward-looking statements herein after the date of this press release.

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