

Pages 1 through 42 redacted for the following reasons:

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November 24, 2010

Mr. Colin M. FitzSimons
Associate Vice President for Technology Development
Executive Director, Intellectual Property Management Office
University of Oklahoma
Three Partners Place, Suite 120
201 David L. Boren Boulevard
Norman, OK 73019-5710

Re: Amendment and partial reconsideration of a Waiver of Preference for United States Industry
EIR Titles: Novel Kinetic Properties of Hyaluronic Synthases (1524003-01-0014)
Group C Hyaluronan Synthase Gene and Uses Thereof (1524003-01-0018)
Streptococcus Equisimilis Hyaluronan Synthase Gene and Expression Thereof in *Bacillus*
Subtilis (1524003-01-0013) **

Inventors' Names: Kshama Kumari and Paul Weigel

Dear Mr. FitzSimons:

This letter is in response to a request by the University of Oklahoma ("Grantee") of July 27, 2010, requesting a reconsideration of conditions attached to a Grant of a Waiver of the Preference for United States Industry as outlined in a letter from this office dated April 22, 2010. That letter, while granting the waiver; attached conditions that the Grantee wishes NIH to reconsider and amend. In addition, the Grantee's request for reconsideration expanded the scope of the Intellectual Property to be covered by the waiver by incorporating additional Subject Inventions as listed above and related Patents. We understand that these were inadvertently omitted from the previous request.

Below is a summary of the commercialization review of the Subject Inventions that are the subject of this Waiver reconsideration. This Office concurs with the review and also agrees that it is in accord with the terms and conditions of the funding agreements under which it was made.

Commercialization Analysis

This case involves a request to manufacture hyaluronic acid (HA) products in a new manufacturing facility to be constructed outside of the United States. The inventors have discovered a means of expressing this protein using a harmless bacterium, *Bacillus subtilis*. The FDA has designated the use of recombinant *B. subtilis* for large-scale bioreactor fermentations as "Generally Recognized as Safe."

The previous manufacturing waiver approval contained an incorrect limitation to the use of an existing facility in Denmark which could be adapted to the manufacture of recombinant HA (rHA).

The principal justification for the current expanded waiver request is that the differential in the labor cost between the U.S. and Bulgaria and/or China is sufficient to make the investment in building a new facility in those locations cost-effective, whereas retrofitting or constructing a facility in the United States or Denmark would not be.

The University of Oklahoma also indicated that its licensee, Hyalose, attempted and failed to license the technology within the United States, hiring a contractor to search for all companies with the capacity to manufacture rHA. They detected eleven such companies (most were foreign); the University of Oklahoma reached out to them to offer licenses, and none expressed an interest in the technology.

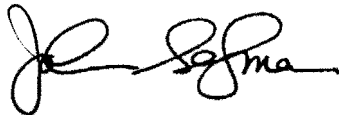
It is apparent that requiring either the construction of the new facility or the retrofit of an existing facility in the United States will unnecessarily delay the introduction of rHA made using the patented technology until after the patents expire. While granting this waiver of the Preference for United States Industry (35 USC 204 and 37 CFR 401.14(i)) will not directly benefit the economy of the United States, this outcome will be outweighed by the public health benefit through the rapid introduction of new, better products, and more vibrant competition for existing products.

As the University of Oklahoma has demonstrated in its request both that requiring U.S. manufacture is not commercially feasible and that the University of Oklahoma has made reasonable but unsuccessful efforts to license within the United States, the waiver is approved for a single new facility in either Bulgaria or China.

Based on the information you have provided about the current circumstances for this technology, your request for a manufacturing waiver has been approved. By each 3rd year anniversary of the date of this letter, you will need to keep our office apprised of what good faith efforts were continuing to be made to consider substantially manufacturing in the US for this technology during each applicable 3 year period. If we do not timely receive this information for each period, then this approval may need to be revisited.

Please feel free to contact us should you have any additional questions regarding this issue.

Sincerely,



John Salzman
Assistant Extramural Inventions Policy Officer
Division of Extramural Inventions and Technology Resources
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** (EIR 1524003-01-0013 was the subject of a previous U.S. Manufacturing Waiver and is partially amended and superseded by this approval)

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