Susan Ano, Ph.D.
NINDS Technology Transfer
31 Center Drive, Suite 8A52, MS2540
Bethesda, MD 20892
Telephone: (301) 435-5515;
Via Email: anos@mail.nih.gov.

April 10, 2016

Dear Dr. Susan Ano,

This is a letter requesting information about the *"Prospective grant of Start-up exclusive License: Therapeutics for Multiple Sclerosis, Amyotrophic Lateral Sclerosis and Certain other CNS Disorders to Great Lakes Neuroscience, Inc.."*

KEI also opposes the grant of exclusive license in this case unless

(1) the NIH conducts sufficient analysis and limits the terms and scope of the license as required under 404.7(a)(1)(ii-iii),
(2) the license contains sufficient safeguards regarding the affordability of the products developed under the patent licenses, and
(3) unless the license requires transparent reporting on drug development costs, royalties and revenues.

The specific request for comments we are referring to is the following:

> Document Citation: 81 FR 19213, Page: 19213 -19214 (2 pages)
> Document Number: 2016-07496
> Shorter URL: https://federalregister.gov/a/2016-07496
>
> http://www.google.com/patents/US8597660

According to the Federal Register notice, the field of use may include

> therapeutics for Multiple sclerosis, Acute Disseminated Encephalomyelitis (ADEM), Balo's disease, Clinically Isolated Syndrome, HTLV-1 Associated Myelopathy (HAM),

> Neuromyelitis optica and NMO spectrum disorder, Schilder's disease, Traverse myelitis, amyotrophic lateral sclerosis and other motor neuron diseases as follows: progressive bulbar palsy, primary lateral sclerosis, progressive muscular atrophy, spinal muscular atrophy, Kennedy's disease, and post polio syndrome.

As noted in the Federal Register notice, the licenses are expected to comply with the public safeguards found in 35 U.S.C. 209 and 37 CFR part 404.7.

Specifically, we are concerned about the obligations in 35 U.S.C. 209 (a)

> **§209. Licensing federally owned inventions**
>
> (a) Authority.—A Federal agency may grant an exclusive or partially exclusive license on a federally owned invention under section 207(a)(2) only if—
>
> (1) granting the license is a reasonable and necessary incentive to—
>
> (A) call forth the investment capital and expenditures needed to bring the invention to practical application; or
> (B) otherwise promote the invention's utilization by the public;
>
> (2) the Federal agency finds that the public will be served by the granting of the license, as indicated by the applicant's intentions, plans, and ability to bring the invention to practical application or otherwise promote the invention's utilization by the public, and that the proposed scope of exclusivity is not greater than reasonably necessary to provide the incentive for bringing the invention to practical application, as proposed by the applicant, or otherwise to promote the invention's utilization by the public;
>
> (3) the applicant makes a commitment to achieve practical application of the invention within a reasonable time, which time may be extended by the agency upon the applicant's request and the applicant's demonstration that the refusal of such extension would be unreasonable;
>
> (4) granting the license will not tend to substantially lessen competition or create or maintain a violation of the Federal antitrust laws; and
>
> (5) in the case of an invention covered by a foreign patent application or patent, the interests of the Federal Government or United States industry in foreign commerce will be enhanced.

We also note that the term “practical application” is defined by 35 U.S.C. 201(f) as follows:

> (f) The term “practical application” means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that ***its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms.*** [emphasis added]

We note the company, Great Lakes Neuroscience, Inc..”, benefited from a competition, specifically for invention 2 (http://www.neurostartupchallenge.org/invention-2.html) of the **Neuro Startup Challenge**, where the principals of Great Lakes Neuroscience, Inc. were runners up to the winners from another U.S. University, and that the contestants were advised to consider the NIH model licensing agreement as a basis for negotiations:

http://www.ott.nih.gov/sites/default/files/documents/pdfs/nih-patent-license-exclusive-model-102005.pdf

We are also aware that other options may be available to the Great Lakes Neuroscience, Inc., such as those described hre: http://www.ott.nih.gov/nih-start-exclusive-license-agreements

We have reviewed the NIH model licensing agreement, Model 10-2005 (updated 8-2012), and we note it requires the license holders to make the benefits of the invention “available to the public on reasonable terms.” We are concerned that many companies selling products developed with federal funds do not make products available on reasonable terms. For example, see: Tedmund Wan, “*Survey of drug prices for 14 drugs with US government rights in patents listed in the FDA Orange Book*,” *KEI Research Note 2011:2,* or more recently the data on the pricing of the prostate drug Xtandi, available at http://keionline.org/xtandi.

We ask the NIH to provide additional assurances that the products developed under this license be made available to the public at prices that are reasonable and affordable. Among other things, this can include a provision in the license that states:

> The NIH will normally expect the licensee to make products available to the public in the United States at prices no higher than the median price changed in the seven countries with the largest GDP, that have per capita incomes of at least half that of the United States.

If the geographic area includes worldwide rights, the products should be made available at affordable prices in developing countries.

The NIH should also have the option of providing a non-exclusive license to the Medicines Patent Pool (MPP) to permit competitive supply by generic drug manufacturers, for use in developing countries. Here we note that GSK has recently announced it has begun negotiations with the MPP to license the patents for its oncology products. Certainly the NIH

can be at least as sensitive to the health needs of patients living in developing countries as is the big pharma company GSK.

KEI is also asking for more transparency regarding the costs of developing new products, and the pricing, sales and royalty payments on products.

We object to any license that is not made public. Moreover, all reports specified in the license, including those described in the license appendices, should be public. If the NIH insists on transparency (as was common practice and acceptable in earlier years), Great Lakes Neuroscience would agree. The company is getting the license before making any significant investments, and the NIH's invention may be worth several billion dollars.

We also ask the NIH to create a requirement for **annual** reports on R&D outlays, including an obligation that the company reports the following for each clinical trial that tests products covered by the patents:

1. ClinicalTrials.Gov identifier
2. Phase
3. Conditions:
4. Interventions:
5. Title Acronym/Titles:
6. Outcome Measures:
7. Sponsor/Collaborators:
8. Other Study IDs:
9. Expenditure: (for that year)

With regard to sales prices, we request an **annual** report that provide data on the following variables:

1. Units of sales, by country
2. Revenue for sales, by country

With regard to government subsidies for research, we request a report that provides data for the following, by year:

1. Grants and research contracts from government agencies, with data on the funding agency, the identifier of the grant or contract, and the amount of the grant or contact.
2. Tax credits associated with R&D for the product, including the U.S. orphan drug tax credit, broken out by the type of credit and the expenditure the credit was associated with (such as a specific trial).
3. Other government R&D subsidies.

Finally, since the statute requires that the "scope of exclusivity is not greater than reasonably necessary to provide the incentive for bringing the invention to practical application" we request a copy of any analysis, if any, that was done to consider how many years of exclusive rights were necessary to bring the invention to practical application. We also propose the following terms for the contract:

> The exclusive rights will extend to five years from the first sale of a product receiving approval by the U.S. FDA, or until the license holder recovers at least $1 billion in global sales from the product, whichever is shorter, and thereafter, the license will become non-exclusive. After the first five years of exclusivity, the NIH can extend the exclusivity by another 3 years, upon a showing that such extension is reasonable in light on the risk adjusted R&D costs to bring the product market, and the net revenues from sales.

KEI notes that the 5 year period, with possible extensions, follows NIH practice, prior to 1984, and other NIH licenses have had terms shorter than the life of patent. For example, in October 2001, the NIH exercised an option to make the licenses for the AIDS drug DDI non-exclusive, ten years after the initial FDA registration (see: Videx® Expanding Possibilities: A Case Study, NIH, National Institutes of Health Office of Technology Transfer, September 2003) in order to expand access to the drug, and to obtain lower cost supplies for federal programs. The NIH could consider different time periods for exclusivity, but if the answer is always life of patent, no matter what the facts are, then the NIH is no longer meeting the requirements of 35 U.S.C. 209 to ensure that the "scope of exclusivity is not greater than reasonably necessary."

Sincerely,

James Packard Love
Knowledge Ecology International
1621 Connecticut Avenue, Suite 500
Washington, DC 20009
http://keionline.org
Work: +1.202.332.2670; Mobile: +1.202.361.3040
james.love@keionline.org