Office of the President
April 22, 2008

Members, Board of Trustees:

PATENT ASSIGNMENT REPORT

Recommendation: that the Board of Trustees accept the patent assignment report for the period ending March 31, 2008.

Background: At its March 4, 1997 meeting, the Board of Trustees authorized the University of Kentucky Research Foundation to conduct all future copyright and patent filings and prosecutions. Quarterly reports on patent and copyright applications are to be submitted to the Finance Committee of the Board.

Action taken: ☑ Approved   ☐ Disapproved   ☐ Other ________________
The following assignments on behalf of the Board of Trustees of the University of Kentucky Research Foundation have been executed:

1. **U.S. Patent Application Serial Number: (to be assigned)**
   **Filed:** November 17, 2007
   **Title:** “Nornicotine for the Treatment of Pain”
   **Inventors:** Drs. Joseph Holtman and Elzbieta Wala (Anesthesiology), Drs. Peter Crooks and Linda Dwoskin (Pharmaceutical Sciences)
   **Technical Description:** The present invention relates to the use of nornicotine for the treatment of pain.
   **Summary:** The treatment of pain is an important goal in medicine. However, the most common treatments have undesirable side effects, such as addiction. The inventors have discovered that nornicotine, a known compound, is useful in the treatment of pain but is not highly addictive.

2. **U.S. Patent Application Serial Number: (to be assigned)**
   **Filed:** February 22, 2008
   **Title:** “Reducing Explosive Potential of Ammonium Nitrate”
   **Inventors:** Dr. Darrell Taulbee (Center for Applied Energy Research).
   **Technical Description:** The present invention relates to a method for reducing the explosive potential of ammonium nitrate. In particular, the invention relates to reducing explosive potential of ammonium nitrate by coating with by-products of coal combustion.
   **Summary:** Ammonium nitrate is used in agriculture as a fertilizer; however, it is also a common ingredient in explosives. The ready availability of ammonium nitrate causes concern that it can be misused by terrorists. The inventor has discovered a treatment for ammonium nitrate that reduces its usefulness in explosives, but preserves its utility in agriculture.

3. **U.S. Patent Application Serial Number: (to be assigned)**
   **Filed:** February 14, 2008
   **Title:** “Withanolides, Probes and Binding Targets and Methods of Use Thereof”
   **Inventors:** Drs. Royce Mohan, Paola Bargagna-Mohan (Ophthalmology) and Kyung Bo Kim (Pharmaceutical Sciences)
   **Technical Description:** The present invention relates to compounds for targeting disease states characterized by aberrant expression of type-III intermediate filament proteins, methods and compounds for detecting type-III intermediate filament proteins, compounds for use in screening small molecules that target intermediate filament proteins, and methods for treating diseases using small molecules that target the type-III intermediate filament.
Summary: Withanolides are active compounds found in natural products that have anti-cancer activity. The inventors have discovered compounds that are useful in studying the biological activity of withanolides and in designing anti-cancer drugs that act like withanolides.

Patent Activities
Fiscal year to date as of March 31, 2008

Number of Patent Applications  9
Number of Patents Issued  9
Patent Income  $1,136,234