

FCR 5

Office of the President
March 4, 2008

Members, Board of Trustees:

PATENT ASSIGNMENT REPORT

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

Background: The March 4, 1997 meeting of 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 _____

PATENT ASSIGNMENT
QUARTERLY FOR THE PERIOD NOVEMBER 1, 2007 THROUGH
JANUARY 31, 2008

Patents

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: October 10, 2007
Title: "Compositions and methods for treating *Yersinia pestis* infections"
Inventors: Drs. Susan Straley, Brian Murphy, Stanislav Forman, Christine Wulff-Strobel and Robert D. Perry (Microbiology and Immunology)
Technical Description: The present invention relates to compositions and methods for preventing and/or treating plague, including compositions and methods for preventing and/or treating infection by *Yersinia pestis*.
Summary: *Yersinia pestis* is the bacterium that causes bubonic plague, which is lethal, in humans and some animals. As such, it is a candidate for an agent of bioterrorism. Therefore, methods of treating plague are useful in counteracting the threat of terrorism. The inventors have developed a peptide that enhances a person's or animal's immune protection against plague, thereby reducing its lethality.
- 2. U.S. Patent Application Serial Number: (to be assigned)**
Filed: October 18, 2007
Title: "Enhancing transdermal delivery of opiod antagonists and agonists"
Inventors: Drs. Audra Stinchcomb, Peter Crooks, Mohamed Hamad and Paul Kiptoo (Pharmaceutical Sciences)
Technical Description: The present invention relates to novel codrugs, and more particularly to novel codrugs comprising bupropion or hydroxybupropion and an opiod antagonist or an opiod agonist joined by chemical bonding. The codrugs possess increased bioavailability as compared to the parent drugs.
Summary: Opiod drugs are important in the treatment of maladies such as pain and addiction. Current common modes of administering opiod drugs include oral delivery and injections. These modes have undesirable side effects such as abdominal upset and physical injury. Delivering opiod drugs through the skin via a drug patch would avoid these side effects. The inventors have developed a formulation for opiod drugs that makes delivery through the skin possible.

3. **U.S. Patent Application Serial Number: (to be assigned)**

Filed: January 10, 2008

Title: “Substituted arylidenamino guanidines for use as selective NMDA receptor inhibitory modulators”

Inventors: Drs. Peter Crooks, John Ring, and Sundar Neelakantan (Pharmaceutical Sciences) and John Littleton (Kentucky Tobacco Research and Development Center)

Technical Description: The present invention relates to arylidenamino guanidine compounds that modulate the NMDA receptor complex. The invention also relates to methods of treating NMDA-related neurological diseases by administering such compounds.

Summary: NMDA antagonists are a category of drugs used in treating pain resulting from damage to the nervous system. Unfortunately, such drugs currently produce undesirable side effects, such as dizziness, headache, and hallucinations. The inventors have designed better NMDA antagonists that produce fewer and milder side effects.

Patent Activities

Fiscal year to date as of January 31, 2008

Number of Patent Applications	6
Number of Patents Issued	7
Patent Income	\$752,203