

# FCR 4

Office of the President  
February 23, 2018

Members, Board of Trustees:

## PATENT ASSIGNMENT REPORT

Recommendation: that the Board of Trustees accept the patent assignment report for the period October 1, 2017 to December 31, 2017.

Background: At its March 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.

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Action taken:

Approved

Disapproved

Other \_\_\_\_\_

## PATENT ASSIGNMENTS

FOR THE PERIOD October 1, 2017, TO December 31, 2017

### 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:** 15/730,428  
**Filed:** October 11, 2017  
**Title:** REVERSIBLY REDUCIBLE MATERIALS AND USE THEREOF  
**Inventors:** John Anthony and Susan Odom (College of Arts and Sciences)  
**Technical Description:** This application provides highly soluble, stable, reversibly reducible materials, and methods of use in redox-flow batteries.  
**Summary:** Redox-flow batteries, which function by storing electrochemical energy in liquid electrolyte formulation, are promising technologies for energy storage on medium to large scales. This invention provides organic non-aqueous electrolytes for use in redox-flow batteries.  
**Application:** Redox-flow batteries
  
2. **U.S. Patent Application Serial Number:** 15/836,675  
**Filed:** December 8, 2017  
**Title:** ANTIFUNGAL COMPOUNDS  
**Inventors:** Sylvie Garneau-Tsodikova, Sanjib Shrestha, Atefeh Garzan, and Nishad Chandrika (College of Pharmacy)  
**Technical Description:** This application provides compounds and compositions with antifungal activity and a novel method of action.  
**Summary:** This application provides compounds and compositions with antifungal activity and methods of using the antifungal compounds and compositions, including use for treating fungal infections.  
**Application:** Treatment of fungal infections
  
3. **U.S. Patent Application Serial Number:** 15/849,256  
**Filed:** December 20, 2017  
**Title:** GUIDING SHEATH SYSTEM AND METHOD OF DELIVERING AN ENDOVASCULAR DEVICE USING THE SAME  
**Inventor:** David Minion (College of Medicine)  
**Technical Description:** This application provides a guiding sheath system with a tethered connection at the end of the sheath, which directs and firmly maintains the end of the sheath in a vector that is different than that of the remainder of the sheath.  
**Summary:** Guiding sheaths, or guiding catheters, are tube-like devices designed to be placed with the distal end of the sheath positioned within the vasculature, and the proximal end of the sheath kept extracorporeal, thereby allowing the introduction of endoluminal devices into the vasculature through the sheath.  
**Application:** Vascular surgery

4. **U.S. Patent Application Serial Number:** 15/849,329  
**Filed:** December 20, 2017  
**Title:** ENDOLUMINAL GRAFT SYSTEM AND METHOD OF IMPLANTING THE SAME  
**Inventor:** David Minion (College of Medicine)  
**Technical Description:** This application provides a system and method in which scallops are formed *in-situ* during the delivery and deployment of an endoluminal graft.  
**Summary:** This endoluminal graft system and method of implanting the same ensures proper alignment of the scallop with the branching vasculature, obviating the need for custom manufacturing of grafts with preformed scallops.  
**Application:** Endoluminal grafts
  
5. **U.S. Patent Application Serial Number:** 15/849,460  
**Filed:** December 20, 2017  
**Title:** COMPOSITIONS AND METHODS FOR TREATING ISCHEMIA  
**Inventors:** Gregory Bix and Kathleen Salmeron (College of Medicine)  
**Technical Description:** This application provides methods for preventing and/or treating ischemia in a subject, and include administering an effective amount of interleukin-1 alpha (IL-1 $\alpha$ ), thereby treating the ischemia.  
**Summary:** This application provides methods of treating cerebral ischemia, reducing infarcts, and enhancing neuroprotection by the administration of IL-1 $\alpha$ .  
**Application:** Treatment of cerebral ischemia, reducing infarcts and enhancing neuroprotection

**Patent Activities**

**Fiscal year to date as of December 31, 2017**

	Q1	Q2	Q3	Q4	Total
Full Patent Applications	14	5			19
Provisional Patent Applications	5	14			19
Patents Issued	5	3			8
License Income	\$906,686	\$211,168			\$1,117,855

**Patent Summary Table**

Inventors	College(s)	Title	Brief description
<b>Biomedical</b>			
Sylvia-Garneau-Tsodikova, Sanjib Shrestha, Atefeh Garzan, Nishad Chandrika	Pharmacy	Antifungal compounds	New compounds and compositions for treating antifungal infections
David Minion	Medicine	Guiding sheath system and method of delivering an endovascular device	Tethered connection to direct and maintain sheaths in vascular surgery
David Minion	Medicine	Endoluminal graft system and method of implanting the same	New method to deploy endoluminal grafts that enables scallop formation to align with the branching vasculature
Gregory Bix, Kathleen Salmeron	Medicine	Compositions and methods for treating ischemia	Use of interleukin-1 alpha to prevent and/or treat cerebral ischemia and enhance neuroprotection
<b>Chemistry</b>			
John Anthony, Susan Odom	Chemistry	Reversibly reducible materials and use thereof	Provides organic non-aqueous electrolytes for use in redox-flow batteries