

Technology Transfer & Intellectual Property News

From the University of Kansas Office
Technology Transfer & Intellectual Property.

April 2002
Vol. 1, Issue 7

Recently Issued Patent

University of Kansas Medical Center

Method for Inhibiting Angiogenesis and Tumors with the Isolated NC1 ? 3 Chain Monomer of Type IV Collagen.

Billy G. Hudson, Ph.D., Michael P. Sarras, Jr., Ph.D.

This invention provides methods and kits in inhibiting angiogenesis, tumor growth and metastasis, and endothelial cell interactions with the extracellular matrix, involving contacting the tumor or animal tissue with at least one isolated type IV collagen NC1 ? chain monomer. In a specific embodiment of the invention, the isolated domain of type IV collagen comprises the NC1 (? 1), (? 2), (? 3), or (? 6) chain monomer, or protein constructs having substantially the same structure as the NC1 (? 1), (? 2), (? 3), or (? 6) chain monomer.

New Licenses/Options

University of Kansas Medical Center

A License has recently been negotiated with one of the world's leading medical device companies in the remaining fields of use for the hot tip catheter technology. This medical device company is dedicated to less-invasive therapies and its products and technologies are designed to reduce risk, trauma, cost, procedure time and the need for aftercare. The company's products and technologies are used for preventing heart attack and stroke, bringing relief to cancer patients, mapping electrical problems in the heart, preventing blood clots in the lungs and treating urological, renal, cerebrovascular and gastrointestinal diseases.

University of Kansas at Lawrence

An Option Agreement has been executed for the Thin Film Hg-based Superconductors, Thermoelectric Materials and Methods of Fabrication technology. The company is an industry leader in the development, manufacturing and marketing of high performance wireless telecommunications products. Their products maximize the performance of wireless networks by improving the quality of uplink and downlink signals between mobile wireless devices and network base stations. Their premium products work in concert to meet the growing demand of the wireless communications market for improved capacity utilization, reduced interference, and greater coverage.

KU Lawrence Highlighted Start-up Company

CritiTech, Inc., reports that its nano-formulation of paclitaxel is more effective than the conventional paclitaxel in a mouse model of ovarian cancer. CritiTech reported on the first animal data studying its proprietary and novel nano-particle preparation of paclitaxel in a presentation at the American Society of Clinical Pharmacology Therapeutics Annual Meeting in Atlanta, Georgian, March 24, 27, 2002. Dr. Kathy Roby, Research Associate Professor of the Department of Anatomy and Cell Biology, and an Associate Director of Anatomy and Cell Tissue Culture Core at the Center for Reproductive Sciences, at KUMC, reported on enhances survival in mice treated with CritiTech's nanopaclitaxel versus those treated with conventional

paclitaxel. CritiTech's nanoparticulate paclitaxel significantly increased survival compared to control and paclitaxel treated mice. Control mice survived 87 days and paclitaxel treated mice survived 105 days. Significantly, up to 50% of the mice in the nanoparticulate paclitaxel groups were surviving at 162 days. Furthermore, the mice treated with the nanoparticulate paclitaxel exhibited no apparent toxicity to the highest dose. Treatment with nanoparticulate paclitaxel resulted in increased survival and reduced treatment-related toxicity in a mouse model of ovarian cancer.

Paclitaxel has shown promise in the treatment of ovarian cancer. However, toxicity, in part due to the insoluble nature of paclitaxel, remains a limitation to its use. The studies were undertaken to assess the effectiveness of a novel preparation of nanoparticulate paclitaxel in a mouse model of ovarian cancer. These preliminary data suggest that CritiTech's proprietary nanopaclitaxel formulation may have both safety and efficacy advantages over conventional paclitaxel.

Executive Director's Corner

It's here! The new "One University" Technology Transfer website has been completed. I wish to take this opportunity to thank Jack Hope at the KU Center For Research and Cody Tully at the KUMC Research Institute for their assistance. Jack was instrumental in the layout and design of the website and Cody Tully assisted with the transfer of the necessary data from the existing KUMCRI Technology Transfer website. The website will always be a work in progress, with new information and data being added as is appropriate. For example, the website now has copies of Technology Transfer Newsletters, brief descriptions of KU start-up companies, local business resources, staff contacts, patent resources, licensable technologies from both campuses, the University of Kansas Innovation Brochure, etc. On the [Inventor Information](#) link, you will find a copy of the *Guide for the Inventor* and the *Invention Questionnaire*. In the coming months we will be adding other information, such as a *Checklist* to guide faculty who wish to start a company around university technology as well as a *Frequently Asked Questions (FAQ)* document. We are hopeful these guidance documents will serve to both educate and assist faculty as they consider forming a start-up company. We also welcome your comments and suggestions on how the site can be more useful to you and others who are either engaged in the technology transfer process or wish to know more about it. The new website can be viewed at <http://www.research.ku.edu/techtran/>

James G. Baxendale, MS, MBA
Executive Director
jbaxenda@kumc.edu

KU Medical Center Campus

Tele: (913)-588-1495

Fax: (913)-588-8214

KU Lawrence Campus

Tele: (785) 864-7783

Fax: (785) 864-5738