

Technology Transfer & Intellectual Property News

From the University of Kansas
Technology Transfer & Intellectual Property.

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Recently Issued Patents

University of Kansas Medical Center

Method for Inhibiting Angiogenesis and Tumors with the Isolated NCI $\alpha 1$ Chain Monomer of Type IV Collagen.

(Patent # 6,419,924) Issued: July 16, 2002.

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

The instant invention demonstrates that the 7S domain of type IV collagen disrupts cell aggregation and tissue development. Structural changes in mesoglea, inhibition of cell proliferation, and changes in cell differentiation patterns accompanies the blockage of cell aggregates which indicate that blockage may be due to alterations in mesoglea (extracellular matrix) structure with accompanying effects on cell behavior. Type IV collagen has a critical role in the initial formation of mesoglea and that perturbation of mesoglea formation affects cell division, cell differentiation, and morphogenesis. This technology is licensed to Biostratum, a University of Kansas Medical Center start-up company.

University of Kansas Lawrence Campus

Amino Acid-Derived Cyclic Phosphonamides and Methods of Synthesizing the Same

(U.S. Patent No.: 6,420,586) Issued July 16, 2002.

Kevin T. Sprott and Paul R. Hanson,

New phosphonamide compounds and methods of forming those compounds are provided. In one embodiment, the inventive methods comprise subjecting an opened-ring phosphonamide template to a ring-closing metathesis reaction in the presence of a ring-closing catalyst (e.g., a Grubbs catalyst) to yield a phosphonamide. In another embodiment, the inventive methods comprise reacting a template structure with a phosphorus (III) compound to yield the phosphonamide. Advantageously, in either embodiment, the template structures can be provided with a wide array of functional groups (e.g., amino acid side chains, peptides) chosen to provide particular properties to the compound. A License Agreement for this technology is under negotiation with a West Coast firm engaged in developing technology platforms for the production of Chiral building blocks, intermediates and active pharmaceuticals.

KU Lawrence Highlighted Start-Up Company

TESA Therapeutics is a new start-up company whose goal is to develop treatments and drug delivery platforms based on cadherin binding peptides. The company's technology was

developed in Dr. Teruna Siahaan's laboratory in the Department of Pharmaceutical Chemistry. The company's intellectual property provides proprietary technology for modulating cell-cell adhesion in the intercellular junctions as well as in tumor invasion and metastasis. The proprietary molecules may provide a novel way of enhancing the delivery of large and hydrophilic drugs such as peptides and proteins through the intestinal mucosa and the blood-brain barrier. In addition, these molecules might be utilized to block tumor invasion and metastasis.

Executive Director's Corner

On June 26th and 27th, representatives from the University of Kansas and the Lawrence Chamber of Commerce attended a University Region Economic Development Consortium Summer Roundtable held at Purdue Research Park in West Lafayette, Indiana. Attending from the University of Kansas were James Baxendale, Keith Braman, Charles Decedue, Tim Johnson and James Roberts. Kate Michaelis was the representative from the Economic Development division of the Lawrence Chamber of Commerce. Major university cities included Ann Arbor, Michigan; Bloomington, Indiana; Norman Oklahoma; Lawrence, Kansas; Lexington, Kentucky; Louisville, Kentucky; Champaign Urbana, Illinois; West Lafayette, Indiana; and Iowa City, Iowa.

The first day featured an orientation to the greater Lafayette area, the Purdue Research Park, and the three regional incubators. Attendees also learned about the region's Economic Development/University partnership for business retention, expansion and business attraction. The first day ended with a networking dinner.

On the second day, each participating group had the opportunity to share their marketing materials used to promote their university and regional resources. Each group also made a 10 minute roundtable presentation on how they market themselves as Technology Centers. This Consortium has agreed to meet two times per year, one being a one-day planning session and the other a two-day event at a University Research Park.

A special thank you to Cynthia Beall, Jennifer Hsieh and Elaine Spielbusch for their contributions to this Newsletter.

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