Technology Transfer & Intellectual Property News

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Recently Issued Patents

University of Kansas Medical Center

Preparation, Storage and Activation of Large Populations of Immotile Sperm
Inventors: Joseph S. Tash, Ph.D., Geracimo E. Bracho, Ph.D.

Artificial insemination is a commonly used breeding technique for a variety of animals. However, in some animals, such as turkeys, the sperm cannot be frozen for extended use. Likewise sperm from boar and stallions have relatively limited viability.

Drs. Tash and Bracho have developed a method to collect, treat and store sperm, which increases longevity of the sperm for a number of species. The collected sperm is treated with a solution, which prevents activation. The sperm can then be frozen for storage and then reactivated to normal viability by mixing it with an activator when needed for insemination.

University of Kansas at Lawrence

Synthesis of Epothilones
Inventors: Gunda Georg, Ph.D., Emily Reiff, John T. Henri, Ph.D.

The inventors have collaborated to develop commercially feasible methods for synthesizing various epothilones precursors needed for the preparation of final epothilones. The epothilones represent a class of promising anti-tumor agents, and have been found to be potent against various cancer cell lines, including breast cancer cell lines. Other potential applications of the epothilones could be in the treatment of Alzheimer's disease, malaria, cancers and arthritis.

University of Kansas Highlighted Start-Up Company

BioStratum Incorporated. BioStratum is a worldwide leader in drug development based on basal lamina research and is developing a pipeline of drugs based on the basal lamina's central role in many diseases. BioStratum's two lead drug candidates have produced promising results in preclinical and clinical trials. Pyridorin™, which targets diabetic kidney disease, has successfully completed Phase I clinical trials and is currently advancing through Phase II trials. Angiocol™, a proprietary anti-angiogenesis agent, dramatically inhibits the growth of tumors in animal studies and will soon begin clinical trials.

BioStratum's pipeline products include other cancer agents, among them MetaStrain™, a diagnostic tool for metastic cancers, and MetaTret™, a therapeutic oncology product. BioStratum is also the first company to develop and manufacture recombinant basal lamina molecules, a promising new class of regenerative medicines. In addition, the Company's research programs in autoimmune and kidney disease have identified novel therapeutic targets and drug candidates that are currently in preclinical development.

Headquartered in Research Triangle Park, North Carolina, BioStratum's research and development operations are further extended through multiple collaborations with leading basal lamina research centers

Executive Director's Corner

Why patent an invention for the University of Kansas System?

If intellectual property is handled properly, significant benefits are available to inventors and their research groups, the university, our national and local economies, and the public. This can be accomplished when each creator of intellectual property in the University of Kansas (KU) is aware of certain critical legal issues, procedures and policies. **Patents are an effective means of deriving economic value from research advancements and for enhancing support of research activity**. A number of KU inventors and their research programs currently benefit financially from their patented and licensed technologies.

Patents are often the best means of developing and disseminating a technology for the widest good. Unless a patent exists it is unlikely that industry will make investments in the process of developing and commercializing a product. Without patent protection many inventions will simply "sit on the shelf" benefiting no one. Experience over the last several years indicates that patents are typically essential as a basis for starting companies based on university inventions and discoveries.

These companies create jobs as well as financial return to inventors and their research institutions. The process of obtaining a patent, marketing that patent and licensing it to industry provides a highly effective means of developing meaningful interaction between KU and industry, including the enhancement of research support opportunities and improved employment opportunities for graduate students.

The benefits of patenting inventions are so widely held that the Federal Government and most industrial sponsors of research now, in most cases, require that patents on inventions made with their funding be pursued whenever feasible. Where governmental or industrial funding is involved, there are usually reporting and patenting requirements that must be met. Universities have legal, policy and contractual requirements to pursue patent protection for inventions conceived using federal and corporate funds. For inventors, there may be a financial reward to them personally and their research programs if their invention achieves market success. Frequently, patents are licensed to a company in return for research support so the inventor can benefit even if the patents themselves ultimately do not lead to a commercial product. Patents are an ideal means of constructing effective collaboration with industry and allow the Office of Technology Transfer & Intellectual Property to ensure that industry will pursue development of the University's technology

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