

Best Wishes for a Happy Holiday Season!

In this Issue...

We highlight animal models of infection that Noble Life Sciences has optimized for preclinical studies.

- Neutropenic Mouse Thigh Model for Antimicrobial Testing
- Sepsis Model using Cecal Slurries for Drug Screening
- Cotton Rat Model for Studies of RSV and Influenza – Coming Soon

Neutropenic Thigh Model

The neutropenic thigh model provides a platform to screen novel antibacterial compounds for efficacy in the treatment of bacterial infections and sepsis. The model has been extensively used to determine the pharmacokinetic – pharmacodynamic index, a predictor of antibiotic efficacy. Because the index is reduced by the presence of neutrophils, the intrinsic activity of antibiotics in animals must be determined without the influence of the immune system. Therefore, animals are commonly rendered neutropenic prior to testing with cytotoxic agents like cyclophosphamide. [Learn More](#)

Sepsis Model Using Cecal Slurries

In this model, cecal slurries are used to induce septic peritonitis resulting in systemic bacteremia, organ infection and eventual systemic release of cytokines. Because infection is poly-microbial, involving both gram-negative and gram-positive bacteria, a wide range of pattern recognition receptors such as Toll-Like Receptors are activated on a variety of immune cells, mimicking sepsis. The model is highly reproducible, easy to monitor by a variety of endpoints and closely mimics clinical settings of abdominal sepsis in small animals. Because the inflammatory response is similar whether induced by inflammation or by trauma, the model is useful for diagnostic and therapeutic studies of sepsis induced by pathogens, sterile sepsis or by trauma. [Learn More](#)

Coming Soon! Cotton Rat Model of Infectious Disease

Cotton rats are an attractive animal model to study infectious diseases because of their susceptibility to human pathogens. Moreover, cotton rats exhibit a disease response that is similar to that exhibited by humans as measured by a number of important parameters. The model is now in final stages of development for preclinical studies with RSV and influenza. For more information contact us: info@noblelifesci.com.

About Noble Life Sciences

Noble Life Sciences is a contract research organization (CRO) that provides integrated *in vitro* and *in vivo* preclinical services designed to accelerate drug development. With deep expertise in drug development, the company offers access to their top scientists who work collaboratively with researchers to expedite preclinical and clinical therapeutic development. Our years of extensive experience together with a focus in oncology, inflammation, autoimmune, and infectious diseases allow us to bring strong scientific insight to your discovery programs. For more information:

Visit: www.noblelifesci.com
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Noble Receives AAALAC Accreditation

AAALAC accreditation recognizes Noble Life Sciences' dedication to responsible animal research and its commitment to the highest quality in animal care. [Learn More](#)

Meet Noble's Director of Scientific Affairs

Dr. Srujana Cherukuri
Dr. Cherukuri has been trained in diverse areas of Biology and has 12+ years of research experience in oncology and stem cell biology. She received a Ph.D. in Biology from Cleveland State University/Cleveland Clinic Foundation. Dr. Cherukuri has held positions at the National Cancer Institute and University of Maryland before joining Noble Life Sciences as the Director of Scientific Affairs.

"We are very pleased with the work Noble has carried out on this project. Srujana has been an excellent liaison."

Josh Bryson
CSO
Techulon

Ask About Our Total Program Management

Leverage our years of successful drug development experience and strong scientific expertise to help design a drug development strategy and implement the preclinical development program. [Learn More](#)