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Customized for your requirements

DESIGN. INTEGRITY. RELIABILITY.

CUSTOMIZED

The early use of jackets for laboratory animals began in the late 1940s through to the 1960s and was centered mainly on early space flights. The use of jackets covers many varied research disciplines, in particular intravenous infusion. In the past few years several factors have combined to enable new technologies to be adopted within the lab animal field including:

Housing in group or social settings

The miniaturization of devices

Increased computing power giving us light weight devices capable of all types of physiological measurements

The continued developments of behavioral management programs now include acclimation of animals to jackets and equipment. Functional textiles, new materials and fasteners mean designs keep pace with these latest advances and may be quickly adapted for best practices.

CUSTOM LABORATORY ANIMAL JACKETS

Years of design and manufacturing experience have earned LOMIR an international reputation for our laboratory animal jackets. As such, LOMIR is the number one choice for Custom Made Jackets.

Whether it's a simple special size pocket or a completely unique design we will work with you to develop the best jacket for both your animals and your scientific objectives



Should you have any questions or need more information please contact our Customer Service Department toll free in North America at 1-877-425-3604 or send an e-mail to info@lomir.com.

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LARGE ANIMAL JACKETS

Recent advances in textiles have given us undershirts for various species, using spandex and moisturewicking fabrics from sportswear:

- Worn under mesh jacket to secure and support ECG leads; respiration bands etc for telemetry
- Worn on their own to secure devices
- Worn on their own to protect dermal application sites.

BEHAVIORAL OBSERVATIONS

Behavioral observations have become more common in lab animal research with the development of a number of systems designed to monitor and record all types of motion and movement. These systems also enable the data to be quantifiable and reproducible, and there is often a need for remote monitoring to reduce outside influence on behaviors.

These varied applications require some of the most innovative jacket designs such as different colored jackets so a video tracking system (i.e. EthioVision XT) can separate the activity of individual animals in a group setting. This scenario necessitates a fabric with a matt finish and distinct colors to allow the software to distinguish the wavelengths of the color and therefore separates data for individual animals.

Another application includes the use of motion trackers and features a matt black jacket or suit with reflective markers at given points on the body.



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— AMBULATORY INFUSION

Ambulatory infusion describes a system where the animal carries a portable infusion pump and the fluid delivery bags or cassettes in pockets located on a jacket, catheters pass through the underside of the pockets to the surgical implantation site and allows for group housing. Jacket designs feature accessories to minimize the potential for interference. A huge advantage of ambulatory infusion is that the animals are freely moving and able to exhibit natural behaviors. The latest pumps have further refined the model by utilizing remote monitoring with easy to use functions, Blue Tooth, Wi-Fi and other systems to transmit data from individual animals on separate frequencies and comply with specific regulations.

— EXTERNAL TELEMETRY

The development of external telemetry systems allow for cardiovascular and other physiological parameters to be recorded in conscious freely moving animals. International regulations for pre-clinical research include consideration of cardiovascular parameters as part of the safety pharmacology requirements. For these systems the animal wears a tightly fitting spandex undershirt to secure ECG leads and respiration bands in place and the outer jacket which includes a pocket to hold the telemetry device. Real-time data is transmitted using Blue Tooth or Wi-Fi and powerful computing systems analyze that data. Having freely moving trained animals wearing jackets combined with the precision of the telemetry devices allows for even very subtle changes in parameters to be highlighted.

— THE FUTURE

As wearable technology becomes more available one can expect jacket systems to incorporate monitoring capabilities into their manufacture and could include electrodes, LED sensors amongst others. The combination of jacket design and using the latest technologies provides us with refined capabilities and opens doors to very precise investigations in lab animals.

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