LABORATORY OF EXPERIMENTAL INTENSIVE CARE MEDICINE

BIOMEDICAL CENTER

ABOUT US

The mission is the study of the mechanisms of acute (multi)organ dysfunction and injury, identification and testing of emerging treatment targets and molecules, evaluation of the efficacy, safety and mechnisms of novel methods of organ replacement. The strategic areas include: Dynamic Modeling of Acute Illness; Fundamental cell and molecular biological studies of the basis for organ dysfunction; Organ protection and regeneration; Extracorporeal organ support and replacement; New Biological Markers The multi-disciplinary team comprises basic science and clinical researchers, bioengineering and biomaterials experts, and experts in complex systems modeling.

MEMBERS

- Prof. Martin Matějovič, M.D., Ph.D. – Research Group Leader
- Assoc. Prof. Jan Beneš, M.D., Ph.D.
- Jiří Chvojka, M.D., Ph.D.
- Vojtěch Danihel, M.D.
- Lenka Karlíková
- Thomas Karvunidis, M.D.
- Jaroslav Raděj, M.D.
- Lenka Valešová, M.D.

WE OFFER

- Independent testing of the efficacy and safety of novel candidate molecules.
- Independent evaluation of the efficacy and safety of novel extracorporeal methods of organ support and replacement.
- Rapid and comprehensive reporting of high quality proof–of-concept results, including statistical analyses and data interpretation.
- Advice prior to initiation of a study and experimental design helping.
- Consultation in the development of models.
- Confidential data that are the sole property of the client International reputation with more than 15 years of experience in experimental research.
- Long-term policy of bilateral cooperation.

SELECTED PUBLICATIONS

- Searching for mechanisms that matter in early septic acute kidney injury: an experimental study. Crit Care, 2011, vol. 15, no. 5, p. R256.
- High versus standard-volume haemofiltration in hyperdynamic porcine peritonitis: effects beyond haemodynamics? Intensive Care Med, 2009, vol.35, p.371-380
- Coupled plasma filtration adsorption in experimental peritonitis-induced septic shock. Shock, 2009, vol 31, no. 5, p. 473-480
- Regional cooling of the extracorporeal blood circuit: a novel anticoagulation approach for renal replacement therapy? Intensive Care Med, 2009, vol. 35, no. 2, p. 364-370
- Renal hemodynamic, microcirculatory, metabolic and histopatological responses to peritonitis-induced septic shock in pigs. Crit Care, 2008, vol. 12, no. 6, p. R164
- Selective inducible nitric oxide synthase inhibition during long-term hyperdynamic porcine bacteremia. Shock, 2004, vol. 21, no. 5, p. 458-465.

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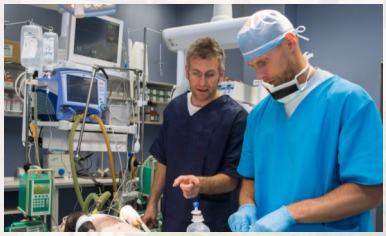

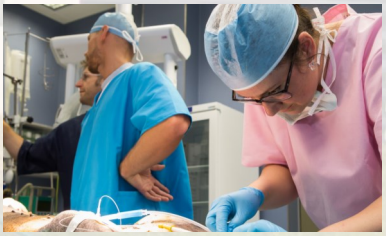

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