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Research profile

My main research focus is gene therapy at the blood-brain barrier to enable transport/secretion of therapeutic proteins into the brain parenchyma as a strategy for treatning neurodegenerative diseases like Niemann Pick Disease or Alzheimers Disease

Research outputs

Activation of glial cells induces proinflammatory properties in brain capillary endothelial cells in vitro
Burkhart, A., Helgudóttir, S. S., Mahamed, Y. A., Fruergaard, M. B., Holm-Jacobsen, J. N., Haraldsdóttir, H., Dahl, S. E., Pretzmann, F., Routhe, L. G., Lambertsen, K., Moos, T. & Thomsen, M. S., 4 Nov 2024, In: Scientific Reports. 14, 1, 26580.

Normalization of Fetal Cerebral and Hepatic Iron by Parental Iron Therapy to Pregnant Rats with Systemic Iron Deficiency without Anemia
Burkhart, A., Johnsen, K. B., Skjørringe, T., Nielsen, A. H., Routhe, L. J., Hertz, S., Møller, L. B., Thomsen, L. L. & Moos, T., Oct 2024, In: Nutrients. 16, 19, 3264.

Normalization of Fetal Cerebral and Hepatic Iron by Parental Iron Therapy to Pregnant Rats with Systemic Iron Deficiency without Anemia
Burkhart, A., Johnsen, K. B., Skjørringe, T., Nielsen, A. H., Routhe, L. G., Hertz, S., Møller, L. B., Thomsen, L. L. & Moos, T., 9 Aug 2024, Preprints.org, 20 p.

Circulating ECVs prevent neurodegeneration and preserve neuronal function in a model of preclinical intracerebral hemorrhage
Burkhart, A. & Moos, T., 13 Jun 2023, In: Molecular Therapy - Nucleic Acids. 32, p. 668-670 3 p.

Transfection of primary brain capillary endothelial cells for protein synthesis and secretion of recombinant erythropoietin: a strategy to enable protein delivery to the brain
Larsen, A. B., Andresen, T. L., Aigner, A., Thomsen, L. B. & Moos, T., 2017, In: Cellular and Molecular Life Sciences. 74, 13, p. 2467-2485

Expression of iron-related proteins at the neurovascular unit supports reduction and reoxidation of iron for transport through the blood-brain barrier
Burkhart, A., Skjørringe, T., Johnsen, K. B., Siupka, P., Thomsen, L. B., Nielsen, M. S., Thomsen, L. L. & Moos, T., 2016, In: Molecular Neurobiology. 53, 10, p. 7237-7253

Gene delivery of the therapeutic polypeptide erythropoietin to primary brain capillary endothelial cells for protein secretion
Larsen, A. B. & Moos, T., 2016, *Final Programme, 19th International Symposium on Signal Transduction at the Blood-Brain Barriers, 14-16 September 2016, Copenhagen, Denmark.* University of Copenhagen, p. 25 O-5

Transfection of brain capillary endothelial cells in primary culture with defined blood-brain barrier properties
Larsen, A. B., Thomsen, L. B., Thomsen, M. S., Lichota, J., Fazakas, C., Krizbai, I. & Moos, T., 2015, In: Fluids and Barriers of the CNS. 12, 1, 14 p., 19.

Accessing targeted nanoparticles to the brain: the vascular route
Burkhart, A., Azizi, M., Thomsen, M. S., Thomsen, L. B. & Moos, T., 2014, In: Current Medicinal Chemistry. 21, 36, p. 4092-4099

Gene delivery of therapeutic polypeptides to brain capillary endothelial cells for protein secretion
Larsen, A. B., Thomsen, L. B. & Moos, T., 2014.

Iron uptake and transport at the blood-brain barrier
Larsen, A. B., Thomsen, L. B. & Moos, T., 2014.

The blood-brain barrier in vitro using primary culture: Implications for studies of therapeutic gene expression and iron transport
Larsen, A. B., 2014, River Publishers. 136 p.

The blood-brain barrier in vitro using primary culture: implications for studies of therapeutic gene expression and iron transport
Larsen, A. B., 2014

Transfection of rat brain endothelium in a primary culture model of the blood-brain barrier at different states of barrier maturity
Larsen, A. B., Thomsen, L. B., Lichota, J. & Moos, T., 2013.

Gene delivery into primary brain capillary endothelial cells for protein secretion: a novel strategy for drug delivery to the brain
Larsen, A. B., Thomsen, L. B., Lichota, J. & Moos, T., 2012.

Gene delivery of therapeutic polypeptides into brain capillary endothelial cells for protein secretion
Larsen, A. B., Thomsen, L. B., Moos, T. & Lichota, J., 2011.