



ESTS Biology Club Fellowship 2024

Centre: University Hospital, Zurich, Switzerland

“IMPACT – Improved diagnosis and personalized treatment of patients with chronic thromboembolic pulmonary hypertension”.

Technical refinement of pulmonary endarterectomy (PEA) procedure in a preclinical porcine model

Initially, a previously described CTEPH porcine preclinical model will be established by ligating the left pulmonary artery followed by a weekly embolization of the right lower lobe artery for 5 weeks. The model will be used for the technical refinement of PEA procedure to test if the implementation of deep hypothermia and circulatory arrest could be reduced to moderate hypothermia. To this end, the pigs will be randomly assigned for PEA either with: a) DHCA (cooling to 18-20°C) or b) MHCA (cooling to 28°C) with antegrade cerebral perfusion (ACP). The primary endpoint will be the degree of bloodless surgical field.

We would like to apply for protected research time of the MD PhD candidate involved in the project.

Contact:

Isabelle Schmitt-Opitz, Prof. Dr. med.

Director of Department
Department of Thoracic Surgery
University Hospital Zurich
Rämistrasse 100
8091 Zürich, Switzerland

Direct +41 44 255 88 01

Office +41 44 255 88 04

isabelle.schmitt-opitz@usz.ch www.usz.ch – www.en.thorax.usz.ch