

Master of Science Research Projects

* **↓ Importance of blood-brain barrier on transfers between blood and tissue in cerebral microcirculation**

Keywords : Biofluid Mechanics, Microcirculation, Biomimetic systems, Transport in Porous Media, Advection/Diffusion

Academic supervisors : Sylvie Lorthois, Directeur de Recherches and Yohan Davit, Chargé de Recherches CNRS (IMFT).

* **↓ Modeling the transient adhesion of leucocytes into brain capillary vessels and its impact on cerebral blood flow in Alzheimer's disease**

Keywords : Biofluid Mechanics, Microcirculation, Bio-adhésion, Networks, Pore-Network Modeling

Academic supervisors : Sylvie Lorthois, Directeur de Recherches and Yohan Davit, Chargé de Recherches CNRS (IMFT).

* **↓ Diameter heterogeneity in cerebral capillary networks in health and disease**

Keywords : Biofluid Mechanics, Microcirculation, Vascular morphogenesis and remodelling, Capillary networks

Academic supervisors : Amy Smith, Post-doc CNRS (IMFT) and Sylvie Lorthois, Directeur de Recherche CNRS (IMFT).