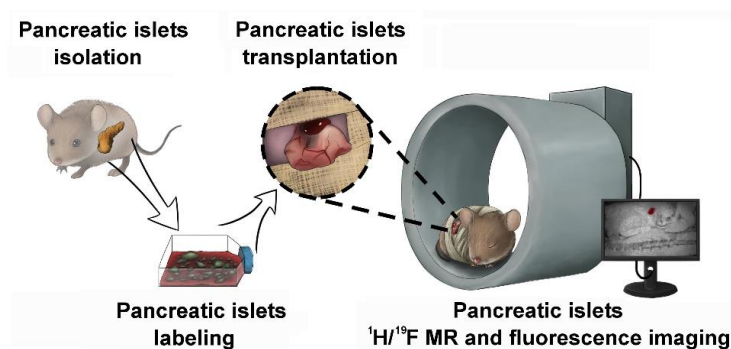


Looking for Ms. or Ph.D. students

Ms/PhD position (preclinical models of diabetes)

We are looking for a PhD student into our team for a new project related to the visualization of transplanted cells. This project aims to evaluate the survival and function of transplanted islets of Langerhans at new transplant sites that need to be considered for use in human medicine. These are transplants into the greater omentum and further subperitoneally in the area of the psoas muscle; these transplantation sites and the therapeutic efficacy of transplanted islets at these sites will be compared in animal models with pancreatic islet transplantation into the liver, which is standardly used in clinical practice and experimental medicine. Accurate non-invasive diagnostic methods are necessary to quantitatively evaluate the transplantation outcome, enabling the precise monitoring of transplanted tissue. An emerging fluorine magnetic resonance imaging method and very sensitive optical imaging will be used as optimal techniques in this respect. New multimodal contrast agents based on watersoluble biocompatible fluoropolymers will be developed and employed to specifically label the pancreatic islets and monitor their fate after transplantation. The efficacy and safety of new transplant sites and polymer tracers will be tested in preclinical models of diabetes.



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