KRESCENT – November 2010 Workshop

Knowledge Application Module (KAM)

Session: Basic Research Interactive workshop
Lecture: THE MACROPHAGE IN TRANSPLANTATION: YOURS TO DISCOVER!
Content Expert: Jean-François Cailhier

Objectives
By the end of this module, the trainee will be able to:

- Understand the origin of the Macrophages.
- Discuss on the different phenotypes that Macrophages can adopt.
- Translate the transplantation process into research opportunities
- Manipulate Macrophage biology to study its importance in renal transplantation

Key Learning Points
- Resident tissue Macrophages are important gate-keepers
- Macrophages can be pro-inflammatory, regulatory or pro-repair phagocytes.
- Phenotype transition is possible and can be manipulated.
- Renal transplantation is a stimulating setting to study Macrophage biology.

Assignment
Macrophages can be important in the various phases of renal transplantation, before, during and after the transplantation per se (4 possible phases associated with a specific clinical context found in renal transplantation). Provide an overview of the different phenotypes that the macrophages could have at each stage. Design an experimental protocol to assess the impact of macrophages in one of these clinical opportunities.

References