JULIEN ARINO, University of Manitoba
A metapopulation model for tuberculosis

Tuberculosis (TB) remains one of the diseases that kills the most people annually. It infects large numbers of individuals every year and is estimated to be present in about one third of human beings. Tuberculosis is a disease of poverty, with overcrowding and poor sanitary conditions of housing being important factors in its transmission. As a consequence, TB is a disease of contrasts, with poor countries bearing the majority of the weight of the disease and rich countries having very few non-imported cases. In the world of today, the increasing number of migrants and travellers makes it difficult to ignore the interconnections that exist between countries and regions. I will present a simple metapopulation model for the spread of TB that incorporates spatial heterogeneity and mobility. This is joint work with my PhD student, Iman Soliman.