Role of the viral accessory gene vpx in transduction of primary human monocytes

Research project summary

For efficient transduction of primary cells of the myeloid lineage by HIV-2 or SIVsmmPBj vectors, the viral accessory gene vpx is essential. We hypothesize that in monocytes a cellular inhibition factor of lentivirus infection is present which is counteracted by Vpx, or that Vpx induces a cellular factor necessary for infection but lacking in those cells. We aim to enlighten the role of Vpx by searching for genes which are induced or inhibited by Vpx, and by analysing the role of cellular binding partners of Vpx.