



FluNanoAir: Design of Human Influenza vaccines using multifunctional micelles harnessing innate immunity.

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“The objective of FluNanoAir is to develop a cross-reactive influenza vaccine, able to induce both mucosal and systemic responses”

Influenza viruses remain a substantial public health burden with seasonal epidemics resulting in significant morbidity, mortality and economic loss. Vaccination is the main method of prophylaxis but requires regular annual updating of seasonal influenza vaccine strains to match the circulating viruses and a major limitation of current vaccines is failure to protect against new emerging strains.

The objective of FluNanoAir is to develop a cross-reactive influenza vaccine, able to induce both mucosal and systemic responses, using multifunctional micelles harnessing innate immunity. The project will design and evaluate micelles based vaccine candidates. Hydrophobic innate immunity ligands encapsulated in the micelles core will amplify and redirect immune responses to the site of viral entry in mucosal compartment.

