

Erasmus MC



Viroscience lab

WHERE SKILLS MEET TO STUDY & PROTECT

Highly pathogenic avian influenza virus genesis and emergence

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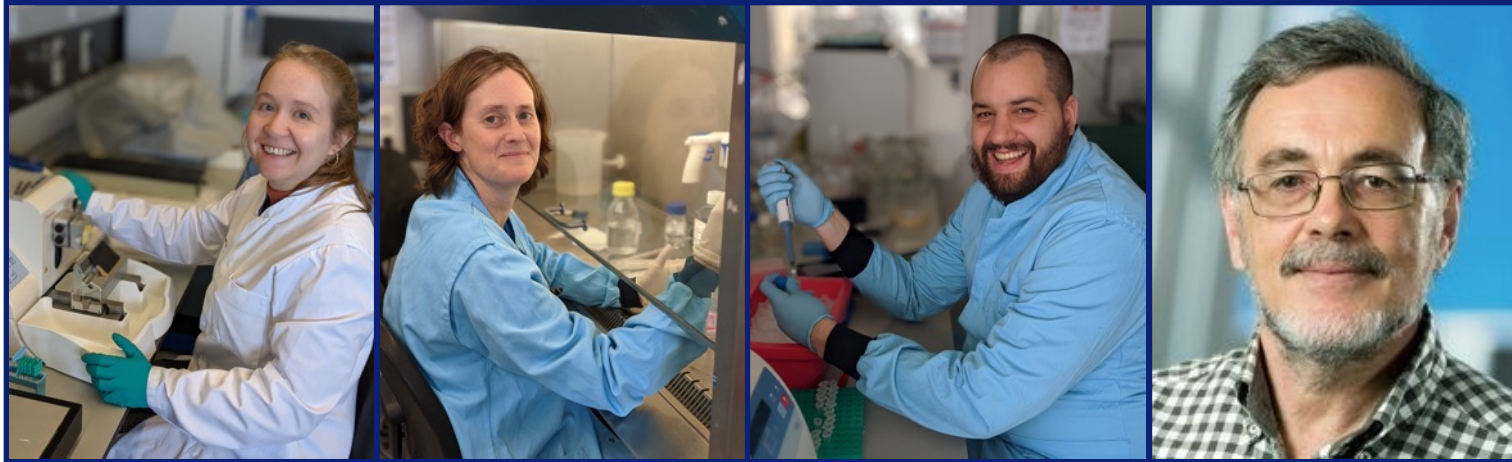
HPAIV genesis: take home messages

- Loop sequence is a key determinant driving insertions at the hemagglutinin cleavage site
- Combination of an indel-prone sequence (long adenine/purine stretch) and the formation of transient RNA structures that promote duplications and MBCS acquisition
- Natural H5 and H7 cleavage site sequences are only a few nucleotide substitutions away from indel-prone sequences
- Species specific HPAIV emergence might result from different selection pressures in chickens/ducks due to different viral tropism and pathogenesis

Acknowledgments

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