PE1574/D

Dear Sigrid Robinson,

I would like to demonstrate my support for the presentation which will be made by Freda Birrell on October 27th 2015 concerning the safety of HPV vaccines.

My area of expertise is aluminium. My research group is widely acknowledged as worldleading in understanding the interface between aluminium and living things and especially human exposure to aluminium.* As part of the latter we have been researching the role of aluminium adjuvants in vaccines and immunotherapy for about 10 years now and we are both trying to understand why aluminium adjuvants are so effective and consequently how and why they have also been strongly linked to adverse events following vaccinations.

Aluminium adjuvants are extremely immunoreactive and this potency is excellent in terms of the efficacy of vaccines but it is also something which we should be wary of and most probably in some individuals who may react adversely to any challenge by aluminium, not only as an adjuvant.

Our most recent research has now identified a pathway whereby aluminium adjuvant can be transported directly to the brain from the site of a vaccination. This recent breakthrough in our research now begins to explain why it is possible for some individuals to respond so badly to aluminium adjuvants and it may well be that in the future we will need to screen vaccine recipients for sensitivity to aluminium before we can be confident that an aluminium adjuvant is 'safe and effective' for them.

The global nature of the HPV vaccine programme means that we will find many of such individuals who are sensitive to aluminium and we cannot be sure how adversely they will react to the aluminium adjuvant. This means that the thousands of individuals who have responded adversely to HPV vaccines while only making up a very small percentage of the total number vaccinated may well be suffering adverse reactions to the aluminium adjuvant. These reactions can range from a stiff arm to being fatal and they require our attention.

Freda Birrell is to be congratulated for bringing this very real possibility to the attention of vaccine manufacturers, health professionals and Government and I fully support and endorse her efforts in this respect.

Please feel free to contact me should you require to discuss this any further.

Best wishes

Chris Exley

Christopher Exley PhD Professor in Bioinorganic Chemistry Aluminium and Silicon Research Group The Birchall Centre, Lennard-Jones Laboratories, Keele University, Staffordshire, ST5 5BG, UK Honorary Professor, University of the Highlands and Islands *http://pubs.rsc.org/en/content/articlelanding/2013/em/c3em00374d#divAbstract