

# Taking neuroimaging into the home: Brain and behaviour associations in neonates

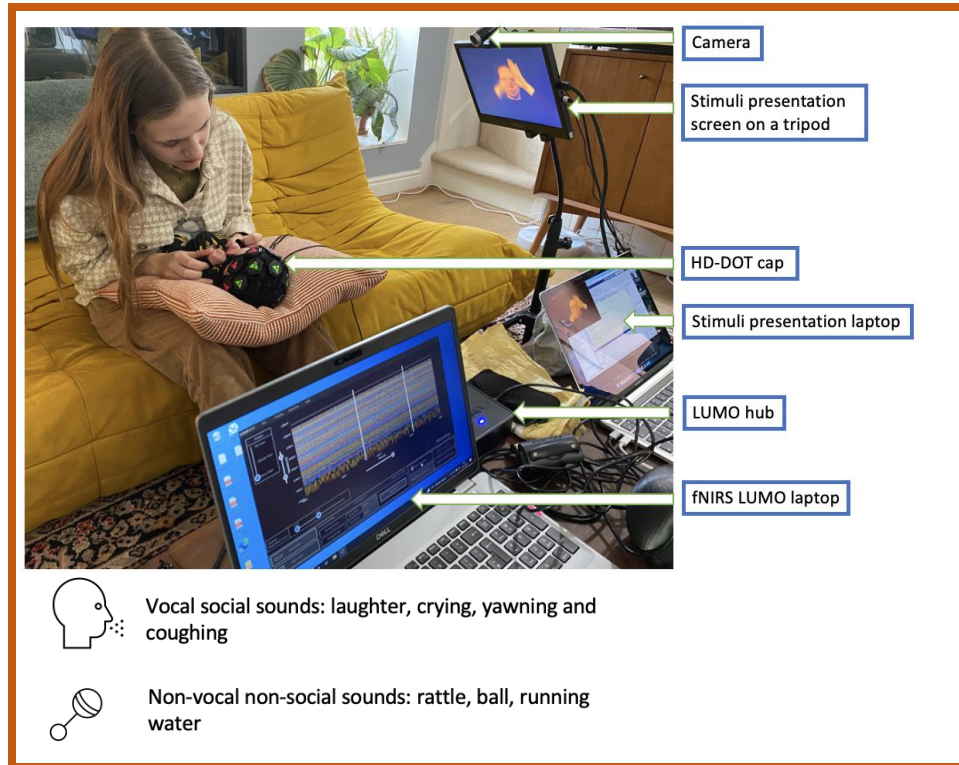
Ilyka, D. <sup>a</sup>, Blanco, B. <sup>a</sup>, Carnevali, L. <sup>b</sup>, Weiss, S.M. <sup>a</sup>, Rozhko, M. <sup>a</sup>, Clackson, K. <sup>c</sup>, Greenhalgh, I. <sup>a</sup>,  
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Can high-quality neuroimaging data be recorded at home longitudinally?

Are there changes in how newborns process vocal and non-vocal auditory stimuli in the first month of life?

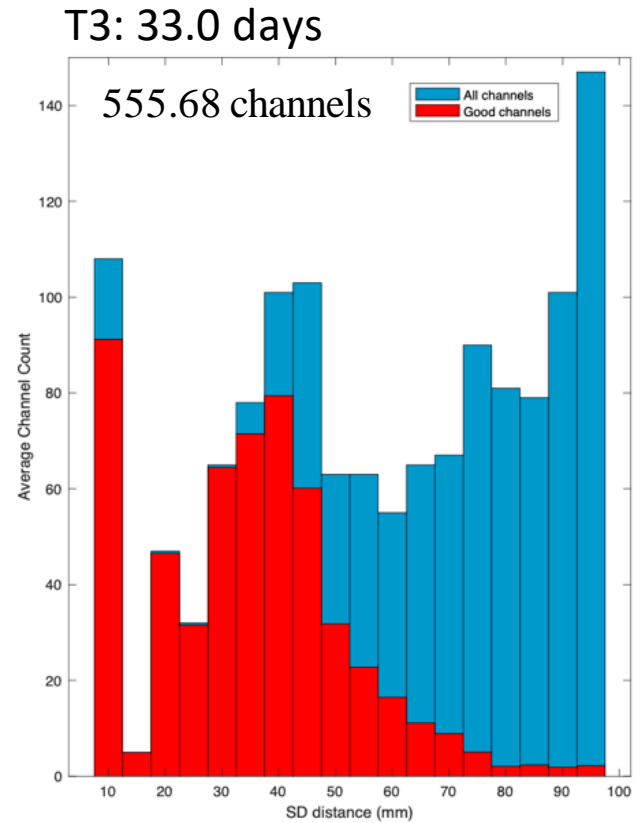
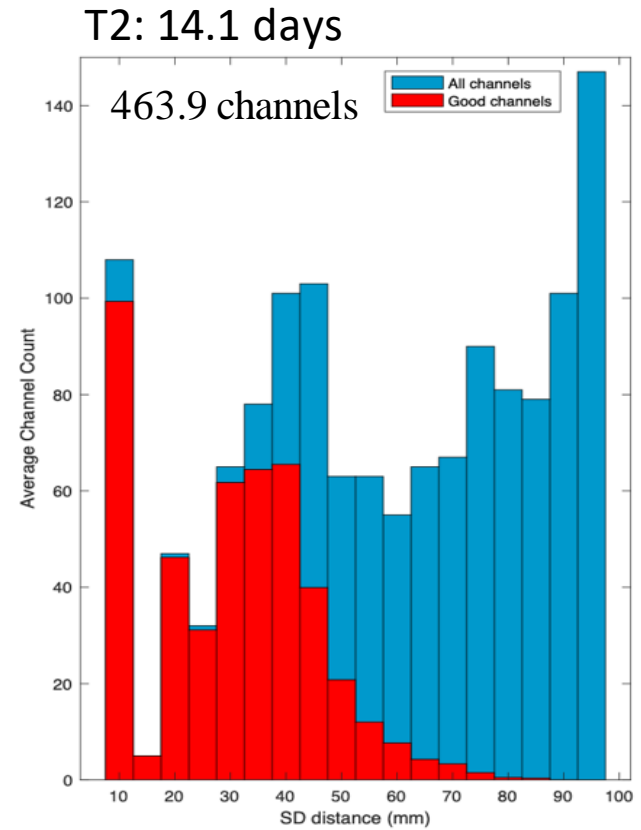
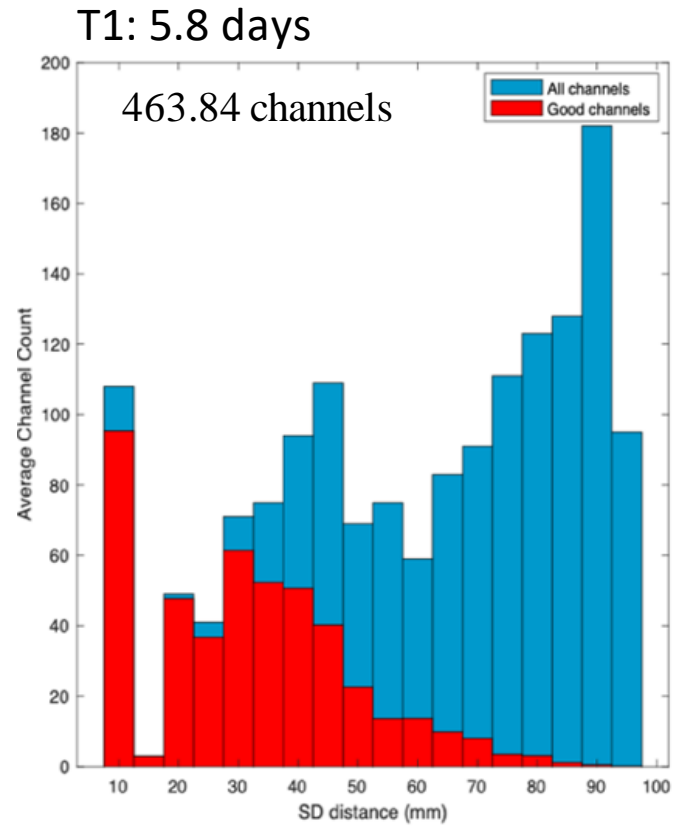
Does newborn processing of sounds relate to their early behaviour?



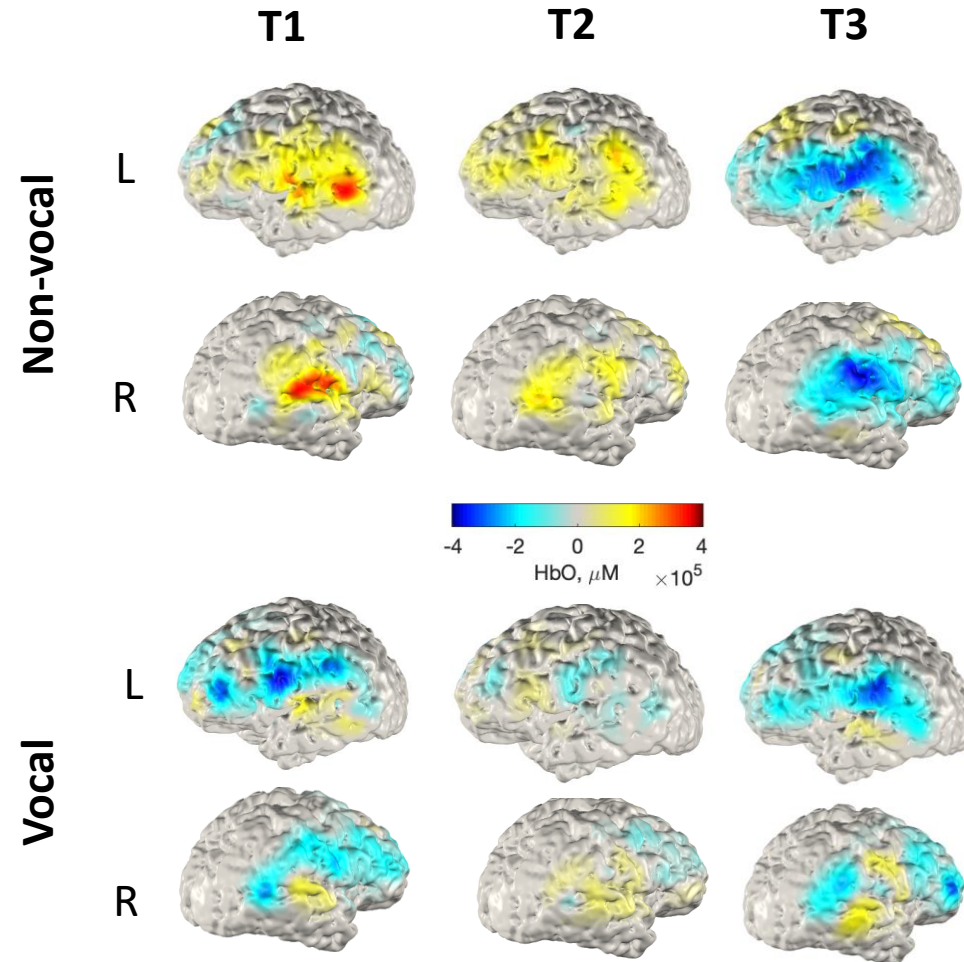
Max 1728 channels

Pregnancy			Postnatal period							
<i>weeks</i>			<i>days</i>			<i>months</i>				
20-26	32	34	0-7	7-14	1	2	3	4	5	9

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Are there changes in how newborns process vocal and non-vocal auditory stimuli in the first month of life? ✓

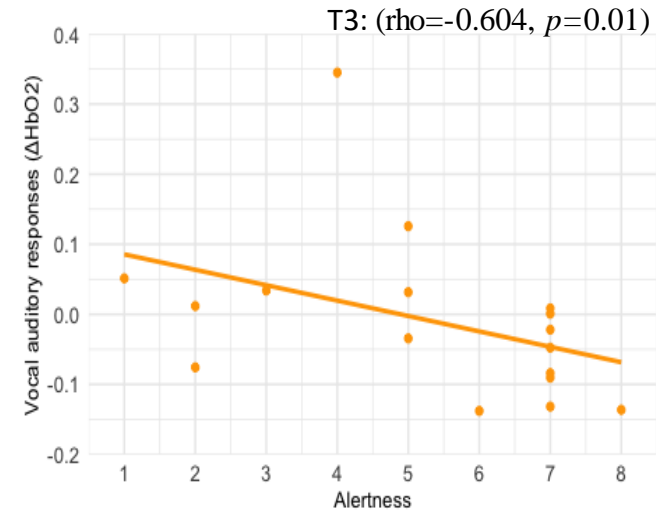
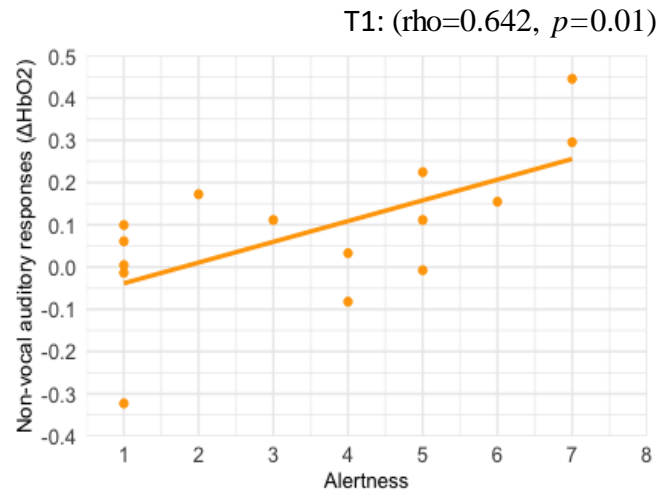
See the poster for more info ...



Vocal social sounds: laughter, crying, yawning and coughing



Non-vocal non-social sounds: rattle, ball, running water



Does newborn processing of sounds relate to their early behaviour? ✓



## Acknowledgements



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