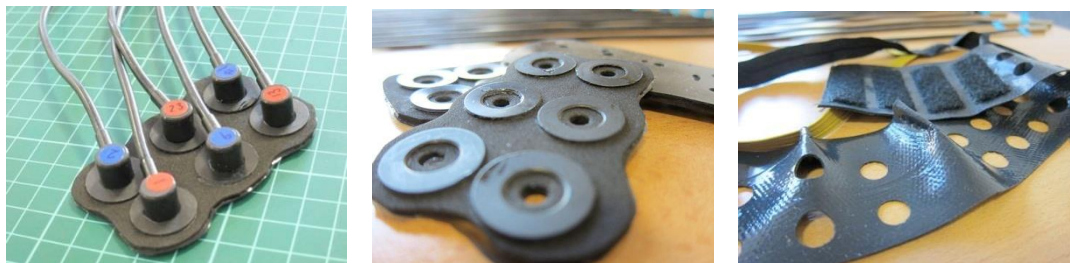


CBCD fNIRS PLUG-IN HEADGEAR



Our standard fee provides one set of infant fNIRS headgear

- The size and design of the headgear is flexible and is adjusted to each individual user.
- We have over ten years' worth of experience running fNIRS studies in infants (0-14 months of age) and have recently begun optimising the headgear for children of 2-3 years of age.
- We provide advice about the most reliable cortical regions for measurement and the most appropriate headgear design for your research specialty.
- Each piece of headgear comes with a spare set of components.
- More headgear can be provided at a supplementary cost.



We have written a review article on fNIRS infant research, which provides an overview of the advantages and disadvantages of different headgear designs:

Lloyd-Fox, S., Blasi, A. & Elwell, C.E. (2010) *Illuminating the developing brain: The past, present and future of functional near infrared spectroscopy. Neuroscience and Biobehavioural Reviews, 34(3), 269-284.*

Our expertise in fNIRS infant research is reflected in the number of publications that the CBCD has produced (see below) and is testament to the long-standing collaboration between the CBCD, Birkbeck and the Department of Medical Physics and Biomedical Engineering, UCL.

1. Lloyd-Fox, S., Széplaki-Köllöd, B., Yin, J. & Csibra, G. (in press) Are you talking to me? Neural activations in 6-month-old infants in response to being addressed during natural interactions. *Cortex*.
2. Begus, K., Lloyd-Fox, S., Halliday, D., Papademetriou, M., Darboe, M.K., Prentice, A.M., Moore, S.E. & Elwell, C.E. (in press) Using fNIRS to study working memory of infants in rural Africa. *Advances in Experimental Medicine and Biology*.
3. Lloyd-Fox, S., Wu, R., Richards, J.E., Elwell, C.E. & Johnson, M.H. (2015) Cortical Activation to Action Perception is associated with action production abilities in young infants. *Cerebral Cortex, 25(2), 289-297*.
4. Lloyd-Fox, S., Richards, J.E., Blasi, A., Murphy, D.G.M., Elwell, C.E. & Johnson, M.H. (2014) Co-registering fNIRS with underlying cortical areas in infants. *Neurophotonics, 1(2), 025006*.
5. Lloyd-Fox, S., Blasi, A., Elwell, C.E. & Johnson, M.H. (2014) Test-retest reliability of fNIRS in infants. *Neurophotonics, 1(2), 025005*. (* Lloyd-Fox and Blasi are joint first authors.)
6. Lloyd-Fox, S., Papademetriou, M., Darboe, M.K., Everdell, N.L., Wegmuller, R., Prentice, A.M., Moore, S.E. & Elwell, C.E. (2014) Functional near infrared spectroscopy (fNIRS) to assess cognitive function in infants in rural Africa. *Nature Scientific Reports, 4, 4740*.
7. Fillippetti, M.L., Johnson, M.H., Lloyd-Fox, S., Dragovic, D. & Farroni, T. (2013) Body perception in newborns. *Current Biology, 23, 2413-2416*.
8. Grossmann, T., Lloyd-Fox, S. & Johnson, M.H. (2013) Brain responses reveal young infants' sensitivity to when a social partner follows their gaze. *Developmental Cognitive Neuroscience, 6, 155-161*.
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10. Southgate, V., Begus, K., Lloyd-Fox, S. & Hamilton, A. (2014) Goal representation in the infant brain. *NeuroImage, 85, 294-301*.
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12. Cristia, A., Dupoux, E., Hakuna, Y., Lloyd-Fox, S., Schuetze, M., Kivits, J., Bergvelt, T., van Gelder, M., Filippin, M., Charron, S., and Minagawa-Kawai, Y. (2012). An online database of infant functional Near InfraRed Spectroscopy studies: A community-augmented systematic review. *PLoS One, 8, e58906*.
13. Papademetriou, M.D., Richards, J., Correia, T., Blasi, A., Murphy, D.G., Lloyd-Fox, S., Johnson, M. & Elwell, C.E. (2012) Cortical Mapping of 3D Optical Topography in Infants. *Advances in Experimental Medicine and Biology, 985*.
14. Correia, T., Lloyd-Fox, S., Everdell, N., Blasi, A., Elwell, C.E., Hebden, J. & Gibson, A. (2012) Three-dimensional optical topography of brain activity in infants watching videos of human movement. *Physics in Medicine & Biology, 57, 1135*.
15. Lloyd-Fox, S., Blasi, A., Mercure, E., Elwell, C.E. & Johnson, M.H. (2012) The emergence of cerebral specialisation for the human voice over the first months of life. *Social Neuroscience, 7, 317-330*. doi: 10.1080/17470919.2011.614696
16. Lloyd-Fox, S., Blasi, A., Everdell, N., Elwell, C.E., & Johnson, M.H. (2011) Selective cortical mapping of biological motion processing in young infants. *Journal of Cognitive Neuroscience, 23, 2521-2532*. doi: 10.1162/jocn.2010.21598.
17. Gervain, J., Mehler, J., Werker, J.F., Nelson, C.A., Csibra, G., Lloyd-Fox, S., Shukla, M. & Aslin, R.A. (2011) Near infrared spectroscopy: A report from the McDonnell Infant Methodology Consortium. *Developmental Cognitive Neuroscience, 1, 22-46*. doi: 10.1016/j.dcn.2010.07.004
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20. Lloyd-Fox, S., Blasi, A., Volein, A., Everdell, N., Elwell, C.E. & Johnson, M.H. (2009) Social Perception in Infancy: A near infrared spectroscopy study. *Child Development, 80, 986-999*.
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