# Cyril Pernet
## Curriculum Vitae

*Date of Birth*: 17-06-1976
*Birthplace*:     Dunkerque, France
*Prof Address*:  Brain Research Imaging Center,
                 Department of Clinical Neurosciences
                 University of Edinburgh
                 Western General Hospital
                 Crewe Road
                 Edinburgh
                 EH4 2XU
                 Scotland, UK

## Education
- PhD in Neuropsychology with Honors, Toulouse 2 university, 2004 (Title: Discrimination and categorization in central and parafoveal vision in normal and dyslexics subjects: a neurofunctional and cognitive approach of the lateral masking effect).
- Practical English university diploma (DULAP), Toulouse 3 university, 2003
- Profesional certificate in neuropsychology, 2001 (décret n°90.255)
- National master (DEA) of neuropsychology, Toulouse 3 university, 2001
- M.Sc. (Maîtrise) of psychology, Toulouse 2 university, 2000
- Licence and DEUG of psychology, Lille 3 university, 1996/1999
- Baccalauréat D (A level in mathematics and biology), 1994

## Employment
- 2010-present: Academic Fellow, BRIC
- 2007-2010: fMRI manager at BRIC, University of Edinburgh & fMRI lead for SINAPSE (Scottish Imaging Network: A Platform for Scientific Excellence)
- 2006-2007: Post-doctoral research assistant, University of Glasgow, Department of Psychology (Pr Pascal Belin)
- 2005: Post-doctoral visiting fellow, Helsinki University of Technology, Brain Research Unit, Low Temperature Laboratory, (Pr Riitta Salmelin)

## Affiliations
Member of Organization for Human Brain Mapping since 2004
Member of the Centre for Clinical Brain Sciences (University of Edinburgh) since 2008
Member of the Centre for Cognitive and Neural Systems (University of Edinburgh) since 2008

## Awards/Grants
**2013** Royal Society Travel Grant Pernet, C., Delorme, A. A generative model for Independent Component and Statistical Analyses of EEG £2.5K
**2013** BBSRC Pernet, C. Rousselet, G. Statistical analysis tool for time/frequency state

spaces £102K

## Publications

*Per review Articles*

1. **Pernet C**., Basan, S., Doyon, B., Cardebat, D, Démonet, J-F. and Celsis, P. **(2003).** Neural Timing of visual implicit categorization. *Cognitive Brain Research, 17,* 327-338.
2. **Pernet, C.,** Francerie, X., Basan, S., Cassol, E., Démonet, J-F. & Celsis, P**. (2004).** Anatomy and time course of discrimination and categorization processes in vision: an fMRI study. *Neuroimage, 22,* 1563-1577.
3. Péran, P., Démonet, J-F., **Pernet, C.** and Cardebat, D. **(2004).** Verb and Noun Generation Tasks in Huntington's Disease. *Movement Disorder, 19*, 565-571.
4. **Pernet. C.** (2004). The constraints of neuroimaging findings on cognitive theories of visual object categorization. *Current Psychology of Cognition, 22*, 565-610
5. Demonet J-F., **Pernet C.,** Kouider S., & Musso M**. (2005).** The dynamics of language related brain images. *Neurocase, 11,* 148-50.
6. **Pernet, C.,** Celsis, P. & Démonet, J.F **(2005).** Selective response to letter categorization within the left fusiform gyrus. *NeuroImage, 15,* 738-744.
7. **Pernet, C**., Valdois, S., Celsis, P. & Démonet, J-F. **(2006).** Lateral masking, levels of processing and stimulus category: A comparative study between normal and dyslexic readers. *Neuropsychologia, 44,* 2374-2385.
8. **Pernet, C,** Schyns, P. & Demonet, J.F. **(2007).** Specific, selective or preferential: Comments on category-specificity in neuroimaging. *NeuroImage, 35, 991-997.*
9. **Pernet, C,** Uusvuori, J., & Salmelin, R. **(2007).** Parafoveal-on-foveal and foveal word priming are different processes: Behavioral and neurophysiological evidence. *NeuroImage, 321-330.*
10. Smith, F.W., Muckli, L., Brennan, D., **Pernet, C.**, Smith, M.L., Belin, P., Gosselin, F., Hadley, D.M., Cavanagh, J., & Schyns, P.G. **(2008).** Classification Images Reveal the Information Sensitivity of Brain Voxels in fMRI. *NeuroImage, 40, 1643-1654.*
12. Levy, J., **Pernet, C.**, Treserras, S., Boulanouar, K., Berry, I., Aubry, F., Demonet, JF. & Celsis, P. **(2008)** Piecemeal recruitment of left-lateralized brain areas during reading: A spatio-functional account. *NeuroImage, 43, 581-591.*
13. Rousselet, G.A., **Pernet, C. R.,** Bennet, P.J., Sekuler, A.B. **(2008).** Parametric study of EEG sensitivity to phase noise during face processing. *BMC Neurosience, 9, 98-120.*
14. **Pernet, C**., Andersson, J., Paulesu, E. & Demonet, J.F**. (2009).** When all hypotheses are right: a multifocal account of dyslexia. *Human Brain Mapping, 30,  2278-2292*
15. **Pernet, C.R.,** Poline, JB, Demonet JF, Rousselet, GA. **(2009).** Brain classification

reveals the right cerebellum as the best biomarker of dyslexia. *BMC Neuroscience, 10, 67*

16. Rousselet, G.A, Husk, J.S., **Pernet, C.R.**, Gaspar, C.M., Bennett, P.J., and Sekuler, A.B. **(2009).** Age-related delay in information accrual for faces: Evidence from a parametric, single-trial EEG approach *BMC Neuroscience, 10: 114*

17. Charest I, **Pernet C.R**, Rousselet GA, Quiñones I, Latinus M, Fillion-Bilodeau S, Chartrand JP, & Belin P. (**2009**). Electrophysiological evidence for an early processing of human voices. *BMC Neuroscience, 10:127.*

18. Levy, J., **Pernet, C.,** Treserras, S., Boulanouar, K., Aubry, F., Demonet, JF., and Celsis, P. **(2009).** Testing for the dual-route cascade reading model in the brain: An fMRI effective connectivity account of an efficient reading style. *PlosOne, 4, e6675*

19. Rousselet, G.A., Gaspar, C.M., **Pernet, C.R.,** Husk, J.S., Bennet, P.J. & Sekuler, A.S. (**2010**). Healthy aging delays scalp EEG sensitivity to noise in a face discrimination task. *Frontiers in psychology 1, 19.*

20. **Pernet, C.R**., Chauveau, N., Gaspar, C., Rousselet, G.A. **(2011).** LIMO EEG: a toolbox for hierarchical LInear MOdeling of ElectroEncephaloGraphic data. *Computational Intelligence and Neuroscience, Volume 2011, Article ID 831409, 11 pages, doi:10.1155/2011/831409*

21. Rousselet, G.A., Gaspar,C.N., Wieczorek, K.P. & ,**Pernet**, **C.R (2011).** Modeling single-trial ERP reveals modulation of bottom-up face visual processing by top-down task constraints (in some subjects). *Front. Psychology 2*:137.

22 . Rousselet, G.A., **Pernet**, **C.R.**, **(2011).** Quantifying the time course of visual object processing using ERPs: it's time to up the game *Front. Psychology 2*:107.

23 . Gaspar, C.M., Rousselet, G.A., **Pernet**, **C.R. (2011).** Reliability of ERP and single-trial analyses. *NeuroImage, 58*, 620-629

24. Logie, R. H., **Pernet, C. R.,** Buonocore, A., Dela Sala, S. **(2011).** Low and high imagers activate networks differentially in mental rotation. *Neuropsychologia, 9,* 3071-3077.

25. **Pernet, C.R.,** Sajda, P. & Rousselet, G.A. (**2011**). Single-trial analyses: why bother? *Front. Psychology* **2**:322.

26. **Pernet, C.R**., Dufor, O. & Demonet, J.F. (2011). Re-defining dyslexia: Accounting for variability. Escritos de Psicología, 4, 17-24.

27. Rousselet, G.A., **Pernet, C.R.,** Caldara, R., & Schyns, P.G. (2011). Visual object categorization in the brain: what can we really learn from ERP peaks? *Front. Hum. Neurosci.* **5:**156.

28. **Pernet, C.R.** & Belin, P. The role of pitch and timbre in voice gender categorization *Front. Psychology*, **3**, 23

29. Peyrin, C., Lallier, M., Démonet, JF., **Pernet, C.,** Baciu, M. Le Bas, JF & Valdois, S. (2012). Neural dissociation of phonological and visual attention span disorders in developmental dyslexia: FMRI evidence from two case reports. *Brain and Language*, 120, 381-394

30. Rousselet, G. & **Pernet, C.R.** (2012) Improving standards in brain-behaviour correlation analyses. *Front. Hum. Neurosci., 6, 119*

31. Wardlaw JM, Brindle W, Casado AM, Shuler K, Henderson M, Thomas B, Macfarlane J, Muñoz Maniega S, Lymer K, Morris Z, **Pernet C**, Nailon W, Ahearn T, Mumuni AN, Mugruza C, McLean J, Chakirova G, Tao YT, Simpson J, Stanfield AC, Johnston H, Parikh J, Royle NA, De Wilde J, Bastin ME, Weir N, Farrall A, Valdes

Hernandez MC; SINAPSE Collaborative Group. (2012). A systematic review of the utility of 1.5 versus 3 Tesla magnetic resonance brain imaging in clinical practice and research. *Eur Radiol.* 22, 2295-2303.

32. Gorgolewski KJ, Storkey AJ, Bastin ME, **Pernet C.R**. (2012). Adaptive thresholding for reliable topological inference in single subject fMRI analysis. Front Hum Neurosci. 6:245.

33. Bieniek MM, **Pernet CR**, Rousselet GA. (2012). Early ERPs to faces and objects are driven by phase, not amplitude spectrum information: evidence from parametric, test-retest, single-subject analyses. *Journal of Vision, 12*, 12.

*33.* **Pernet, C.R,** Wilcox, R.R, & Rousselet, G.A (2013). Robust correlation analyses: false positive and power validation using a new open source Matlab toolbox. *Frontiers in psychology*, 3, 606

*34*. Gorgolewski, KJ., Storkey, A., Bastin, ME., Whittle, IR., Wardlaw, JM., **Pernet, CR.** (2013) A test-retest functional MRI dataset for motor, language and spatial attention functions. GigaScience Database http://dx.doi.org/10.5524/100051

*35*. Charest, I., **Pernet, C.,** Latinus, M., Crabbe, F. & Belin, P. (2013*).* Cerebral processing of voice gender studied using a continuous carry-over fMRI design. *Cerebral Cortex, 23, 958-966.*

*36.* Gorgolewski KJ, Storkey AJ, Bastin ME, Whittle, I., **Pernet C.R**. (2013). Single subject fMRI test-retest reliability metrics and confounding factors. NeuroImage, *69, 231-243.*

*37.* **Pernet, C.R.**, Belin, P. & Jones, A. (2014). Behavioral evidence of a dissociation between voice gender categorization and phoneme categorization using auditory morphed stimuli. *Front. Psychol.* **4**:1018.

38. **Pernet, C.R.** (2014). Misconceptions in the use of the General Linear Model applied to functional MRI: a tutorial for junior neuro-imagers. *Front. Neurosci*. **8**:1.

*39.* Buchanan, C.R., **Pernet, C.R**., Gorgolewski, K.J., Storkey, A.J. & Bastin, M.E. (2014). Test-retest reliability of structural brain networks from diffusion MRI. NeuroImage, 86, 231-243.

*Letters (Editorial approval only)*
1. Rousselet, G.A & **Pernet, C.R.** (2011). Robust statistics show no evidence for a relationship between fiber density and memory performance. PN*AS, 108:E598 - doi:10.1073/pnas.1109188108*

2. Rousselet GA, **Pernet RC.** (2011). Robust statistics show no evidence for a relationship between methylation and several variables [electronic response to Ursini G et al. Stress-Related Methylation of the Catechol-O-Methyltransferase Val158 Allele Predicts Human Prefrontal Cognition and Activity]. J Neuroscience, 31(18):6692-6698 - doi:10.1523/JNEUROSCI.6631-10.2011

*Books*
**Pernet, C.R.** & Démonet, J-F. **(2012).** A multifactorial approach to dyslexia. In "*Developmental Dyslexia: Early Precursors, Neurobehavioral Markers and Biological Substrates.*" Benasich, A. & Fitch, R.H (Eds). Brookes Publishing Co., Baltimore, MD.

*Oral communications*

1. **Pernet, C.,** Basan, S. & Celsis, P. **(2003).** Spatial and temporal characteristics of the cerebral network activated by visual discrimination and categorization: a new combined fMRI and EEG data driven approach at the individual level. *4$^{th}$ international symposium on non-invasive functional source imaging (NFSI) within the human heart and brain, Chiety, Italy*, Contributed paper

2. **Pernet, C.,** Franceries, X., Basan, S., Cassol, E., Démonet, J-F and Celsis P. **(2004).** Differential time courses of neural activities in two tasks of visual object processing: an fMRI study. *First congress of the European neuropsychological societies, Modena, Italy,* Contributed paper

3. **Pernet, C. (2005**). Developmental dyslexia, vision and reading. *Seminar series* from the « Laboratoire Psychologie et neurocognition », UMR5105 CNRS, Université Pierre Mendes France, Grenoble, France, Invited speaker

4. **Pernet, C. (2005).** The visual word form area: selective responses to letter categorization. *French neuropsychological society, Toulouse, France*, Invited speaker

5. **Pernet, C (2006).** New approaches in language and neuroimaging. *Science of Aphasia, Alghero Italy*, Invited speaker

6. **Pernet, C (2006**). Dyslexia: the categorization perspective. Behavioral and Neuroimaging evidence for visual and auditory deficits. *Dyslexia as a challenge: genetics, neuroscience and psychology of dyslexia. European International workshop, Helsinki*. Invited speaker

7. **Pernet, C. (2007).** When all hypotheses are right: A comparative VBM
 study of adult normal and dyslexic readers *Science of Aphasia, Monopoli, Italy*, Contributed paper

8. **Pernet, C. (2010).** Toward a multi-factorial explanation of behavioural deficits in dyslexia. *Developmental dyslexia: early precursors, neurobehavioral markers and biological substrates: 12$^{th}$ extraordinary brain symposium of The dyslexia Foundation, Ashford Castle, Cong, Ireland.* Invited speaker

9. **Pernet, C. (2011).** Hierarchical Linear Models of MEEG. *12$^{th}$ EEGLAB symposium, Aspet, France*. Invited speaker

10. Pernet, C. (2013). Dissociating voice from speech perception. Behavioural and NeuroPyshological evidences. University of Friburgh, Switzerland. Invited speaker


**Teaching**
*2007-present* MSc Neuropsycholgy Edinburgh,
                e-learning MSc NeuroImaging Edinburgh

Others:  External SPM course (Edinburgh, UK)
         Doctoral training (Matlab/Stats), University of Fribourg, Switzerland
         Matlab GLM MSc NeuroImaging University of Glasgow, UK


**Reviewing**

NeuroImage, Human Brain Mapping, Plos One, Journal of Neuroscience methods, Behavioural Brain Research, Brain and Language, Stroke, Psychonomic Bulletin and Review, Frontiers in Psychology

**Editorial work**
Editorial Board Member of Dataset Papers in Biology
Co-editor special topic on Single trial analyses for Frontiers in Perception Science