

Investigator

Personal Information

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 Data of birth: December 16, 1952

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Bio-sketch

Bernard MAZOYER graduated in Mathematics from Ecole Normale Supérieure in 1976, later receiving his PhD in Biomathematics and his MD from Paris University. He spent two years as a postdoctoral fellow at Lawrence Berkeley Laboratory working on advanced methods for PET and MRI. Hired by the CEA, he pioneered functional brain mapping with PET, and created the first laboratory for cognitive neuroimaging in France. Elected Professor at Paris 7 University, he has contributed to the advent and development of the cognitive neuroimaging research domain, organizing the 1st conference on Brain Mapping in 1995, being further elected as the 1st chairman of the Organization for Human Brain Mapping. In 1996, he moved to Caen to take the lead of Cyceron imaging center, which developed under his leadership as a multimodal neuroimaging research platform. In 2002, he was elected as a Senior Member of the Institut Universitaire de France. In 2011, he moved to Bordeaux University medical school, where he is currently Professor of Radiology and Medical Imaging and Director of the Neurofunctional Imaging Group, a team jointly funded by CNRS and CEA. His current research topic is the identification of factors affecting human brain structural and functional variability using population neuroimaging. Since 2006, he is a member of the European Research Council (SH4 panel). He has published over 220 articles that received over 15,000 citations (ISI-H factor at 58). He was awarded the Seymour Cray Prize in supercomputing and the Dagnan Bouveret Prize from the French National Academy.

Education

YEAR(s)	INSTITUTION AND LOCATION	DEGREE
1972	ENS Cachan Mathématiques (Cachan, France)	MSc
1983	University of Paris 7 (Paris, France)	PhD
1984-1985	University of California (Berkeley, USA)	Post-Doc
1985	University of Paris 6 (Paris, France)	MD
1989	University of Paris 11 (Paris, France)	Habilitation

Current Position

Since 2012 Professor of Radiology, Bordeaux University Medical School
 Since 2011 Director "Groupe d'imagerie neurofonctionnelle", CNRS CEA UMR 5296, Université de Bordeaux
 Since 2011 Co-investigator i-Share cohort of excellence (ww.ishare.fr)

Consulting / Scientific and Editorial Boards

Since 2008 ERC-Advanced grant SH4 panel member (
 Since 2010 Scientific Advisory Board, International Aging and Plasticity Imaging Centre Zurich
 Since 2007 Board of Directors, « Ecole des Neurosciences de Paris » (RTRA),
 Since 2008 Scientific Advisory Board, Doctoral school « Cerveau, Cognition Comportement » UPMC
 Since 2007 Scientific advisor, Life Sciences Division CEA
 Since 2009 Journal of Neuroscience Methods editorial board
 2005-2010 Neuroinformatics editorial board
 1995-2001 Neuroimage editorial board
 Since 1999 Human Brain Mapping editorial board

Past Positions

2008-2011 Director UMR6232 CNRS-CEA, Université de Caen Basse-Normandie, Université Paris Descartes
 2005-2007 Director UMR 6185 CNRS Université de Caen
 2004-2007 Director UMR6194 CNRS-CEA, Université de Caen, Université Paris 5
 2003-2011 Director Groupement d'Intérêt Public Cyceron, plateforme d'imagerie IBISA
 2000-2003 Director UMR 6095, CNRS-CEA, Université de Caen, Université Paris 5
 1197-2012 Professor of Radiology Caen University medical school – Unité IRM
 1996-1999 Director UPRES2127 CEA-LRC13V Université de Caen
 1996-2002 Scientific Director Groupement d'Intérêt Public Cyceron
 1990-1995 Director Groupe d'Imagerie Neurofonctionnelle (CEA-Orsay, EA1551)
 1990-1997 Professor of Biostatistics Université Paris 7, Head of Medical Informatics (Hop. R. Debré)
 1986-1990 Staff scientist CEA, Head of Instrumentation and Computer Science (SHFJ-Orsay))

1984-1985	Post-doctoral fellow (Lawrence Berkeley Laboratory, UC Berkeley)
1979-1983	Assisatnt-professor in Biophysics Paris 7 university
1977-1979	Teacher in mathématiques (CNEFASES, Beaumont sur Oise)
1976-1977	Military Service (Instructor at Centre Ecole de l'Aéronavale, Rochefort)

Professional Memberships

1995-present	Member, Société des Neurosciences (France)
1997-present	Member, Société Française de radiologie
1991-present	Member, Society For Neuroscience (USA)
1997-present	Organization for Human Brain Mapping

Awards

2007-2016	Scientific excellence award
2012	Neuroimage Best paper award (for Neuroimage, 59:3194-3200)
Since 2011	Honorary member Institut Universitaire de France
2010-2012	Scientific excellence award (2010-2012)
2007	Treasurer Organization for Human Brain Mapping
2003	Dagnan-Bouveret Prize Académie des Sciences Morales et Politiques
2001-2011	Senior Member Institut Universitaire de France
1997	1er Chairman Organization for Human Brain Mapping
1993	Seymour CRAY Prize

Key bibliometric numbers

Top 1% of most cited neuroscientists (Isi Web of Knowledge)

Publications: 220 - H factor: 58 – 15,000 cites

Selection of papers:

1. Fadili MJ, Ruan S, Bloyet D, [Mazoyer B](#) (2000) Unsupervised fuzzy clustering of fMRI time series: method, validation and evaluation. **Human Brain Mapping**, 10:160-178.
2. Mellet E, Kosslyn S, Tzourio-Mazoyer N, Denis M, [Mazoyer B](#)(2000) Functional anatomy of high resolution mental imagery. **Journal of Cognitive Neuroscience** 12:98-109.
3. Mellet E, Bricogne S, Tzourio-Mazoyer N, Ghaem O, Petit L, Zago L, Etard O, Berthoz A, [Mazoyer B](#), Denis M (2000) Neural correlates of topographic mental exploration : the impact of route versus survey perspective learning. **NeuroImage**, 12:588-600.
4. Moretti B, Fadili J, Ruan S, Bloyet D, [Mazoyer B](#) (2000) Phantom based performance evaluation of a cooperative method for brain segmentation from magnetic resonance images. **Medical Image Analysis**, 4:303-316
5. Fadili Mj, Ruan S, Bloyet D, [Mazoyer B](#) (2001) On the number of clusters and the fuzziness index for Unsupervised FCA: applications to BOLD fMRI time series. **Medical Image Analysis**, 5:55-67.
6. Houdé O, Zago L, Mellet E, Moutier S, Pineau A, [Mazoyer B](#), Tzourio-Mazoyer N (2001) Access to deductive logic depends on a right ventromedial prefrontal area devoted to emotion and feeling : evidence from a training paradigm. **Neuroimage**, 14:1486-1492.
7. [Mazoyer B](#), Zago L, Mellet E, Bricogne S, Etard O, Houdé O, Crivello F, Joliot M, Petit L, Tzourio-Mazoyer N (2001) Cortical networks for working memory and executive functions sustain the conscious resting state in man. **Brain Research Bulletin**. 54:287-298.
8. Mazziotta J, Toga A, Evans A, Fox P, Lancaster J, Zilles K, Woods R, Paus T, Simpson G, Pike B, Holmes C, Collins L, Thompson P, MacDonald D, Iacoboni M, Schormann T, Amunts K, Palomero-Gallagher N, Geyer S, Parsons L, Narr K, Kabani N, Le Goualher G, Boomsma D, Cannon T, Kawashima R, [Mazoyer B](#) (2001) A probabilistic atlas and reference system for the human brain: International Consortium for Brain Mapping (ICBM). **Philosophical Transactions of the Royal Society London series B Biological Sciences** 356:1293-322.
9. Mazziotta J, Toga A, Evans A, Fox P, Lancaster J, Zilles K, Woods R, Paus T, Simpson G, Pike B, Holmes C, Collins L, Thompson P, MacDonald D, Iacoboni M, Schormann T, Amunts K, Palomero-Gallagher N, Geyer S, Parsons L, Narr K, Kabani N, Le Goualher G, Feidler J, Smith K, Boomsma D, Pol HH, Cannon T, Kawashima R, [Mazoyer B](#) (2001). A four-dimensional probabilistic atlas of the human brain. **Journal of the American Medical Informatics Association**, 8:401-30.
10. Pesenti M, Zago L, Crivello F, Mellet E, Samson D, Duroux B, Seron X, [Mazoyer B](#), Tzourio-Mazoyer N (2001) Mental calculation expertise in a prodigy is sustained by right prefrontal and medial-temporal areas. **Nature Neuroscience**, 4:103-107.
11. Zago L, Pesenti M, Mellet E, Crivello F, [Mazoyer B](#), Tzourio-Mazoyer N (2001) Neural correlates of simple and complex mental calculation. **NeuroImage**, 13:314-327.
12. Tzourio-Mazoyer N, Landeau B, Crivello F, Etard O, Delcroix N, [Mazoyer B](#), Joliot M (2002) Automated anatomical labeling of activations in SPM using a parcellation of the MNI single subject brain. **Neuroimage** 15 :273-289.
13. Tzourio-Mazoyer N, De Schonen S, Crivello F, Reutter B, Aujard Y, [Mazoyer B](#) (2002) Neural correlates of woman face processing by 2-month-old infants. **Neuroimage**, 15:454-61.
14. Mazard A, [Mazoyer B](#), Etard O, Tzourio-Mazoyer N, Kosslyn S, Mellet E (2002) Impact of fMRI acoustic noise on the functional anatomy of visual mental imagery. **Journal of Cognitive Neuroscience**, 14:172-186.
15. Crivello F, Schormann T, Tzourio-Mazoyer N, Roland P, Zilles K, [Mazoyer B](#) (2002) A comparison of spatial normalization procedures and their impact on functional maps. **Human Brain Mapping**, 16:228-251.
16. [Mazoyer B](#), Tzourio-Mazoyer N, Mazard An Denis M, Mellet E (2002) Neural bases of image and language interactions. **International Journal of Psychology** 37 :204-208.

17. Mellet E, Bricogne S, Crivello F, Mazoyer B, Denis M, Tzourio-Mazoyer N (2002) Neural basis of mental scanning of a topographic representation built from a text. **Cerebral Cortex** 12:1322-30.
18. Houdé O, Mazoyer B (2003) The roots of cognitive science: American, yes, but European too. **Trends in Cognitive Sciences**, 7:283-284.
19. Josse G, Crivello F, Mazoyer B, Tzourio-Mazoyer N (2003) Left planum temporale: an anatomical marker of left hemispheric specialization for language comprehension. **Cognitive brain research** 18:1-14.
20. Mazard A, Tzourio-Mazoyer N, Crivello F, Mazoyer BM, Mellet E (2004) A PET meta-analysis of object and spatial mental imagery. **European Journal of Cognitive Psychology** 16: 673-695.
21. Mazoyer B, Tzourio-Mazoyer N (2004) Planum temporale asymmetry and models of dominance for language: a reappraisal. **NeuroReport** 15(6):1057-1059
22. Tzourio-Mazoyer N, Josse G, Crivello F, Mazoyer B (2004) Interindividual variability in the hemispheric organization for speech. **Neuroimage** 21:422-435.
23. Vigneau M, Jobard G, Mazoyer B, Tzourio-Mazoyer N (2005). Word and non-word reading: what role for the Visual Word Form Area? **Neuroimage** 27:694-705.
24. Lemaitre H, Crivello F, Grassiot B, Alperovitch A, Tzourio C, Mazoyer B (2005). Age- and sex-related effects on the neuroanatomy of healthy elderly. **Neuroimage** 26:900-911.
25. Dollfus S, Razafimandimby A, Delamillieure P, Brazo P, Joliot M, Mazoyer B, Tzourio-Mazoyer N (2005). Atypical hemispheric specialization for language in right-handed schizophrenia patients. **Biological Psychiatry** 7:1020-8.
26. Herve PY, Mazoyer B, Crivello F, Perchey G, Tzourio-Mazoyer N (2005). Finger tapping, handedness and grey matter amount in the Rolando's genu area. **Neuroimage** 5:1133-45.
27. Lemaitre H, Crivello F, Dufouil C, Grassiot B, Tzourio C, Alperovitch A, Mazoyer B (2005). No epsilon4 gene dose effect on hippocampal atrophy in a large MRI database of healthy elderly subjects. **Neuroimage** 24:1205-13.
28. Vigneau M, Beaucousin V, Herve PY, Duffau H, Crivello F, Houde O, Mazoyer B, Tzourio-Mazoyer N (2006). Meta-analyzing left hemisphere language areas: Phonology, semantics, and sentence processing. **Neuroimage** 30:1414-1432.
29. Leroux G, Joliot M, Dubal S, Mazoyer B, Tzourio-Mazoyer N, Houde O (2006). Cognitive inhibition of number/length interference in a Piaget-like task in young adults: Evidence from ERPs and fMRI. **Human Brain Mapping** 27:498-509.
30. Josse G, Herve PY, Crivello F, Mazoyer B, Tzourio-Mazoyer N (2006). Hemispheric specialization for language: Brain volume matters. **Brain Research** 1068:184-93.
31. Herve PY, Crivello F, Perchey G, Mazoyer B, Tzourio-Mazoyer N (2006). Handedness and cerebral anatomical asymmetries in young adult males. **Neuroimage**. 29:1066-79.
32. Mellet E, Houde O, Brazo P, Mazoyer B, Tzourio-Mazoyer N, Dollfus S (2006) When a schizophrenic deficit becomes a reasoning advantage. **Schizophrenia Research** 84:359-64.
33. Beaucousin V, Lacheret A, Turbelin MR, Morel M, Mazoyer B, Tzourio-Mazoyer N (2007) FMRI Study of Emotional Speech Comprehension. **Cerebral Cortex** 84:359-364.
34. Jobard G, Vigneau M, Mazoyer B, Tzourio-Mazoyer N (2007) Impact of modality and linguistic complexity during reading and listening tasks. **Neuroimage** 34:784-800.
35. Tzourio-Mazoyer N, Herve PY, Mazoyer B (2007) Neuroanatomy: Tool for functional localization, key to brain organization. **Neuroimage** 37:1059-1060.
36. Maillard P, Delcroix N, Crivello F, Dufouil C, Gicquel S, Joliot M, Tzourio-Mazoyer N, Alperovitch A, Tzourio C and Mazoyer B (2008) An automated procedure for the assessment of white matter hyperintensities by multispectral (T1, T2, PD) MRI and an evaluation of its between-centre reproducibility based on two large community databases. **Neuroradiology** 50:31-42.
37. Mazoyer B (2008) Jean Talairach (1911-2007): a life in stereotaxy. **Human Brain Mapping** 29:250-252.
38. Joliot M, Leroux G, Dubal S, Tzourio-Mazoyer N, Houdé O, Petit L, Mazoyer B (2009) Cognitive inhibition of number/length interference in a Piaget-like task: Evidence by combining EEG and MEG. **Clinical Neurophysiology** 120:1501-1513.
39. Maillard P, Crivello F, Dufouil C, Tzourio-Mazoyer N, Tzourio C, Mazoyer B (2009) Longitudinal follow-up of individual white matter hyperintensities in a large cohort of elderly. **Neuroradiology** 54:209-220.
40. Mazoyer B, Houdé O, Joliot M, Mellet E, Tzourio-Mazoyer N (2009) Regional cerebral blood flow increases during wakeful rest following cognitive training. **Brain Research Bulletin** 80:133-138.
41. Petit L, Zago L, Vigneau M, Andersson F, Mazoyer B, Mellet E, Tzourio-Mazoyer N (2009) Functional asymmetries revealed in visually guided saccades: an FMRI study. **Journal of Neurophysiology** 102:2994-3003.
42. Crivello F, Lemaitre H, Dufouil C, Grassiot B, Delcroix N, Tzourio-Mazoyer N, Tzourio C, Mazoyer B (2010). Effects of ApoE-ε4 allele load and age on the rates of grey matter and hippocampal volumes loss in a longitudinal cohort of 1,186 healthy elderly persons. **Neuroimage** 53:1064-1069.
43. Delamillieure P, Doucet G, Mazoyer B, Turbelin MR, Delcroix N, Mellet E, Zago L, Crivello F, Petit L, Tzourio-Mazoyer N, Joliot M (2010) The resting state questionnaire: an introspective questionnaire for the evaluation of the Resting state mental content. **Brain Research Bulletin** 81:565-573.
44. Mellet E, Laou L, Zago L, Petit L, Mazoyer B, Tzourio-Mazoyer N (2010) Impact of the virtual reality on the neural representation of an environment. **Human Brain Mapping** 31:1065-1075.
45. Tzourio-Mazoyer N, Simon G, Crivello F, Jobard G, Zago L, Perchey G, Herve PY, Joliot M, Petit L, Mellet E, Mazoyer B (2010) Effect of familial sinistrality on planum temporale surface and brain tissue asymmetries. **Cerebral Cortex** 20:1476-1485.
46. Tzourio-Mazoyer N, Petit L, Razafimandimby Crivello F, Zago L, Jobard G, Joliot M, Mellet E, Mazoyer B (2010) Familial sinistrality, manual preference strength, and brain size, modulate language hemispheric lateralization in right-handers. **Journal of Neuroscience** 30:13314-13318.
47. Zago L, Petit L, Mellet E, Joliot M, Mazoyer B, Tzourio-Mazoyer N (2010) The neural correlates of counting large numerosities (2010) **ZDM Mathematics Education** 42:569-577.
48. Doucet G, Naveau M, Petit L, Delcroix N, Zago L, Crivello F, Jobard G, Tzourio-Mazoyer N, Mazoyer B, Mellet E, and Joliot M (2010) Brain activity at rest: A multi-scale hierarchical functional organization. **Journal of Neurophysiology** 105:2753-2763.

49. Vigneau M, Beaucois V, Hervé PY, Jobard G, Petit L, Crivello F, Mellet E, Zago L, [Mazoyer B](#), Tzourio-Mazoyer N (2011) What is right hemisphere contribution to phonological, lexico-semantic and sentence processing? Insights from a meta-analysis. **Neuroimage**. 54:577-593.
50. Bis JC, Decarli C, Smith AV, van der Lijn F, Crivello F, Fornage M, Debette S, Shulman JM, Schmidt H, Srikanth V, Schuur M, Yu L, Choi SH, Sigurdsson S, Verhaaren BF, Destefano AL, Lambert JC, Jack CR Jr, Struchalin M, Stankovich J, Ibrahim-Verbaas CA, Fleischman D, Zijdenbos A, den Heijer T, [Mazoyer B](#), Coker LH, Enzinger C, Danoy P, Amin N, Arfanakis K, van Buchem MA, de Bruijn RF, Beiser A, Dufouil C, Huang J, Cavalleri M, Thomson R, Niessen WJ, Chibnik LB, Gislason GK, Hofman A, Pikula A, Amouyel P, Freeman KB, Phan TG, Oostra BA, Stein JL, Medland SE, Vasquez AA, Hibar DP, Wright MJ, Franke B, Martin NG, Thompson PM; the Cohorts for Heart and Aging Research in Genomic Epidemiology (CHARGE) Consortium, Nalls MA, Uitterlinden AG, Au R, Elbaz A, Beare RJ, van Swieten JC, Lopez OL, Harris TB, Chouraki V, Breteler MM, De Jager PL, Becker JT, Vernooij MW, Knopman D, Fazekas F, Wolf PA, van der Lugt A, Gudnason V, Longstreth WT Jr, Brown MA, Bennett DA, van Duijn CM, Mosley TH, Schmidt R, Tzourio C, Launer LJ, Ikram MA, Seshadri S. (2012). Common variants at 12q14 and 12q24 are associated with hippocampal volume. **Nature Genetics** 54 5:545-551
51. Doucet G, Naveau M, Petit L, Zago L, Crivello F, Jobard G, Mellet E, Tzourio-Mazoyer N, [Mazoyer B](#), and Joliot M (2012) Patterns of hemodynamic low-frequency oscillations in the brain are modulated by the nature of free thoughts during rest. **Neuroimage** 59:3194-3200. (2012 **Neuroimage Best paper award**)
52. Hervé PY, Razafimandimby A, Vigneau M, [Mazoyer B](#), Tzourio-Mazoyer N (2012) Disentangling the Brain Networks Supporting Affective Speech Comprehension. **Neuroimage** 61 :1255-1267.
53. Naveau M, Doucet G, Delcroix N, Petit L, Zago L, Crivello F, Jobard G, Mellet E, Tzourio-Mazoyer N, [Mazoyer B](#), and Joliot M (2012) A novel group ICA approach based on multi-scale individual component clustering. Application to a large sample of fMRI data. **Neuroinformatics** 10:269-285.
54. Pró-Sistiaga P, Lambertson F, Boraud T, Saulnier R, Young AR, Bioulac B, Gross C, [Mazoyer B](#) (2012) High resolution 3T fMRI in anesthetized monkeys. **Journal of Neuroscience Methods** 205:86-95.
55. Hervé PY, Zago L, Jobard G, Mazoyer B, Tzourio-Mazoyer N (2013) Revisiting human hemispheric specialization with neuroimaging. **Trends in Cognitive Sciences** 17:69-80.
56. Crivello F, Tzourio-Mazoyer N, Grassiot B, Tzourio C, [Mazoyer B](#) (2014). Sex and age effects on grey matter rate of atrophy: longitudinal MRI study of a cohort of 1,179 healthy elderly. **PLOS One** 9(12):e114478.
57. Duriez Q, Crivello F, [Mazoyer B](#) (2014) Sex-related and tissue-specific effects of tobacco smoking on brain atrophy: assessment in a large longitudinal cohort of healthy elderly. **Frontiers in Aging Neuroscience** 6:299. doi: 10.3389/fnagi.2014.00299.
58. [Mazoyer B](#), Zago L, Jobard G, Petit L, Crivello F, Mellet E, Joliot M, Tzourio-Mazoyer N (2014) Revisiting the association between handedness and lateralization for language. **PLOS One** 9(6):e101165.
59. Mellet E, Jobard G, Zago L, Crivello F, Petit L, Joliot M, [Mazoyer B](#), Tzourio Mazoyer N (2014) Effect of hand laterality on verbal and spatial skills in 436 healthy adults balanced for handedness. **Laterality** 19:4 383-404.
60. Mellet E, Zago L, Jobard G, Crivello F, Petit L, Joliot M, [Mazoyer B](#), Tzourio Mazoyer N (2014) A weak language lateralization affects both verbal and spatial skills: an fMRI study in 297 subjects. **Neuropsychologia** 65 :56-62.
61. Schilling S, Tzourio C, Dufouil C, Zhu Y, Berr C, Alperovitch A, Crivello F, [Mazoyer B](#), Debette S (2014) Plasmalipids and cerebral small vessel disease. **Neurology** 83:1844-1852.
62. Hibar DP, Stein JL, Rentier ME, Arias-Vasquez A, Desrivieres S, Jahanshad N, Toro R, Wittfeld K, Abramovic L, Andersson M, Aribisala BS, Armstrong NJ, Bernard M, Bohlken MM, Boks MP, Bralten J, Brown AA, Chakravarty MM, Chen Q, Ching CR, Cuellar-Partida G, den Braber A, Giddaluru S, Goldman AL, Grimm O, Guadalupe T, Hass J, Woldehawariat G, Holmes AJ, Hoogman M, Janowitz D, Jia T, Kim S, Klein M, Kraemer B, Lee PH, Olde Loohuis LM, Luciano M, Macare C, Mather KA, Mattheisen M, Milanese Y, Nho K, Papmeyer M, Ramasamy A, Risacher SL, Roiz-Santiañez R, Rose EJ, Salami A, Sämann PG, Schmaal L, Schork AJ, Shin J, Strike LT, Teumer A, van Donkelaar MM, van Eijk KR, Walters RK, Westlye LT, Whelan CD, Winkler AM, Zwiers MP, Alhusaini S, Athanasiu L, Ehrlich S, Hakobjan MM, Hartberg CB, Haukvik UK, Heister AJ, Hoehn D, Kasperaviciute D, Liewald DC, Lopez LM, Makkinje RR, Matarin M, Naber MA, McKay DR, Needham M, Nugent AC, Pütz B, Royle NA, Shen L, Sprooten E, Trabzuni D, van der Marel SS, van Hulzen KJ, Walton E, Wolf C, Almasy L, Ames D, Arepalli S, Assareh AA, Bastin ME, Brodaty H, Bulayeva KB, Carless MA, Cichon S, Corvin A, Curran JE, Czisch M, de Zubicaray GI, Dillman A, Duggirala R, Dyer TD, Erk S, Fedko IO, Ferrucci L, Foroud TM, Fox PT, Fukunaga M, Gibbs JR, Göring HH, Green RC, Guelfi S, Hansell NK, Hartman CA, Hegenscheid K, Heinz A, Hernandez DG, Heslenfeld DJ, Hoekstra PJ, Holsboer F, Homuth G, Hottenga JJ, Ikeda M, Jack CR Jr, Jenkinson M, Johnson R, Kanai R, Keil M, Kent JW Jr, Kochunov P, Kwok JB, Lawrie SM, Liu X, Longo DL, McMahon KL, Meisenzahl E, Melle I, Mohrke S, Montgomery GW, Mostert JC, Mühleisen TW, Nalls MA, Nichols TE, Nilsson LG, Nöthen MM, Ohi K, Olvera RL, Perez-Iglesias R, Pike GB, Potkin SG, Reinvang I, Reppermund S, Rietschel M, Romanczuk-Seiferth N, Rosen GD, Rujescu D, Schnell K, Schofield PR, Smith C, Steen VM, Sussmann JE, Thalamuthu A, Toga AW, Traynor BJ, Troncoso J, Turner JA, Valdés Hernández MC, van 't Ent D, van der Brug M, van der Wee NJ, van Tol MJ, Veltman DJ, Wassink TH, Westman E, Zielke RH, Zonderman AB, Ashbrook DG, Hager R, Lu L, McMahon FJ, Morris DW, Williams RW, Brunner HG, Buckner RL, Buitelaar JK, Cahn W, Calhoun VD, Cavalleri GL, Crespo-Facorro B, Dale AM, Davies GE, Delanty N, Depondt C, Djurovic S, Drevets WC, Espeseth T, Gollub RL, Ho BC, Hoffmann W, Hosten N, Kahn RS, Le Hellard S, Meyer-Lindenberg A, Müller-Myhsok B, Nauck M, Nyberg L, Pandolfo M, Penninx BW, Roffman JL, Sisodiya SM, Smoller JW, van Bokhoven H, van Haren NE, Völzke H, Walter H, Weiner MW, Wen W, White T, Agartz I, Andreassen OA, Blangero J, Boomsma DI, Brouwer RM, Cannon DM, Cookson MR, de Geus EJ, Deary IJ, Donohoe G, Fernández G, Fisher SE, Francks C, Glahn DC, Grabe HJ, Gruber O, Hardy J, Hashimoto R, Hulshoff Pol HE, Jönsson EG, Kloszewska I, Lovestone S, Mattay VS, Mecocci P, McDonald C, McIntosh AM, Ophoff RA, Paus T, Pausova Z, Ryten M, Sachdev PS, Saykin AJ, Simmons A, Singleton A, Soininen H, Wardlaw JM, Weale ME, Weinberger DR, Adams HH, Launer LJ, Seiler S, Schmidt R, Chauhan G, Satizabal CL, Becker JT, Yanek L, van der Lee SJ, Ebling M, Fischl B, Longstreth WT Jr, Greve D, Schmidt H, Nyquist P, Vinke LN, van Duijn CM, Xue L, [Mazoyer B](#), Bis JC, Gudnason V, Seshadri S, Ikram MA; Alzheimer's Disease Neuroimaging Initiative; CHARGE Consortium; EPIGEN; IMAGEN; SYS, Martin NG, Wright MJ, Schumann G, Franke B,

- Thompson PM, Medland SE (2015) Common genetic variants influence human subcortical brain structures. **Nature** 520 (7546):224-229.
63. Mazoyer B, Mellet E, Perchey G, Zago L, Crivello F, Jobard G, Delcroix N¹, Vigneau M², Leroux G, Petit L, Joliot M, Tzourio-Mazoyer N (2015) BIL&GIN: a neuroimaging, cognitive, behavioral, and genetic database for the study of human brain lateralization. **Neuroimage** Epub april 7. DOI: 10.1016/j.neuroimage.2015.02.071
64. Marie D, Jobard G, Crivello F, Petit L, Perchey G, Mellet E, Joliot M, Zago L, Mazoyer B, Tzourio-Mazoyer N (2015) Descriptive anatomy of Heschl's gyrus in 430 healthy volunteers including 198 left-handers. **Brain Structure and Function** 220:729-743 (epub December 6 2013)
65. Petit, L, Zago L, Mellet E, Jobard G, Crivello F, Joliot M, Mazoyer B, Tzourio Mazoyer N (2015) Strong rightward lateralization of the dorsal attentional network in left-handers with right sighting-eye: an evolutionary advantage. **Human Brain Mapping** 36 :1151-1164. doi: 10.1002/hbm.22693, epub november 19.
66. Tzourio-Mazoyer N, Marie D, Zago L, Perchey G, Leroux G, Mellet E, Jobard G, Joliot M, Crivello F, Petit L, Mazoyer B (2015) Between hand difference in ipsilateral deactivation is associated with hand lateralization: fMRI mapping of 284 volunteers balanced for handedness. **Frontiers in Human Neuroscience** 9:5. doi: 10.3389/fnhum.2015.00005
67. Tzourio-Mazoyer N, Marie D, Zago L, Perchey G, Leroux G, Mellet E, Jobard G, Joliot M, Crivello F, Petit L, Mazoyer B (2014) Heschl's gyrification pattern is related to speech listening hemispheric lateralization fMRI investigation in 281 healthy volunteers. **Brain Structure and Function** 220:1585-1599.

Invited seminars (limited to 2010 - 2015)

1. Neuroimaging in large cohorts of elderly: SWOT analysis. **INAPIC kick-off meeting, Zurich**, 4 mai 2010.
2. The brain default mode : physiology, neural networks, mental content. **Master européen de neurosciences, ENS Lyon**, 27 mai 2010.
3. Sémantique des images fonctionnelles cérébrales. **Colloque de neuroéthique, Lisbonne**, 1^{er} juin 2010.
4. Brain imaging in large cohorts of healthy elderly: the EVA/3C experiences. Workshop « **Population imaging in Europe. Challenge and Opportunities** », Erasmus MC-Sophia, **Rotterdam** Netherlands, 5 novembre 2010.
5. Brain imaging in large cohorts of elderly. **Centre for Cognitive ageing and cognitive epidemiology seminars, University of Edinburgh**, UK, 15 février 2011.
6. Neuroimagerie et cognition. **Regards croisés sur la différence des sexes : recherche et idéologie**. Collège doctoral du PRES de Lyon, **Saint Etienne**, 21-22 mars 2012.
7. PET for neurological research and diagnostics. **PET in Research and Diagnostics, Varsovie**, Poland, 18 mai 2012.
8. The brain-mind saga: historial perspective and current technological challenges. TECNUN, Université de Navarre, **San Sebastian**, Spain, October 2012.
9. Imagerie par resonance magnétique fonctionnelle et spectroscopie dans le proche infrarouge pour l'étude de l'architecture du cerveau humain. **Inauguration du réserau BIPSA, Talence**, décembre 2012.
10. Revisiting hemispheric specialization with neuroimaging. **Basque Center for Cognition, Bran and Language. San Sebastian**, Spain, march 2013.
11. Neuroimagerie des processus cognitifs: défis actuels. **Séminaire "Problèmes inverses", IMB-LABRI. Bordeaux**, Mars 2013.
12. Neuroimaging genetics. **MPI for Psycholinguistics. Nijmegen**, NL, 13 mai 2013.
13. Factors affecting neuroanatomical aging. Insights from population neuroimaging. **Peking Union Medical College Hospital, Beijing**, China, 24 mai 2013.
14. "Trans-Pyrenees workshop on oscillations, BOLD and fluctuations of neural excitability in task-related and resting state networks." **Basque Center for Cognition, Bran and Language. San Sebastian**, Spain, October 2013.
15. Imagerie cérébrale. Conférences neurosciences de la **Médiathèque Jacques Ellul. Pessac** 18 janvier 2014.
16. Le décodage du cerveau. Forum Européen de Bioéthique. **Strasbourg**, 24 janvier 2014.
17. Bases physiques de l'IRM de diffusion. **Club des Utilisateurs des techniques avancées. Grenoble**, 24 Mars 2014.
18. Neuroimagerie: défis et enjeux. **Colloque CNRS Imagerie Bio-Santé, Paris, 17 juillet 2014**.
19. GIN current and 'emerging' brain image banks and atlases **Development of Brain Image Banks and Age-Specific Normative Human Brain Atlases. The Royal Society of Edinburgh**, UK. 28-29 August 2014.
20. BIL&GIN database : Investigating asymmetries. **Summer school on Connectomics 2014. The wiring diagram of the human brain. Bordeaux**, 22-26 September 2014.
21. Historical perspective and neurophysiological underpinnings of brain intrinsic activity and connectivity. **Summer school on Connectomics 2014. The wiring diagram of the human brain. Bordeaux**, 22-26 September 2014.
22. Revisiting human hemispheric specialization with neuroimaging. **Workshop on Mapping the brain, an international collaboration. Marseille**, 6-8 October 2014.
23. BIL&GIN : a database for Investigating behavioral, morphological and functional brain asymmetries. **Imaging genetics Institute, USC, Los Angeles, USA**, November 6, 2014.
24. Imagerie fonctionnelle cérébrale. **Colloque « Chimie et Cerveau ». Maison de la Chimie, Paris**. 12 novembre 2014.
25. Phénotypes du vieillissement neuroanatomique : volumétrie tissulaire dans des cohortes de sujets âgés. **Club des Utilisateurs des techniques avancées en IRM. Grenoble**, 20 Mars 2015.
26. Mapping intrinsic connectivity with resting state fMRI. **ConnectBrain, Trento**, Italy, April 23-26 2015.
27. Structural connectivity mapping with diffusion MRI. **ConnectBrain, Trento**, Italy, April 23-26 2015.
28. Is there a dominant hemisphere ? **ConnectBrain, Trento**, Italy, April 23-26 2015.
29. Novel MRI methods to measure white matter integrity and connectivity. , **Bordeaux**, May 7, 2015. **Transatlantic Network of Excellence on the Pathogenesis of Small Vessel Disease of the Brain, Bordeaux**, May 7, 2015.
30. Dominant and non-dominant hemisphere. **European Low Grade Glioma Neuroscience meeting, Paris**, June 27 2015.

Other invitations (PhD and Habilitation committees)

1. Luc BIDAULT. Doctorat en Sciences Appliquées de l'Université de Liège, Septembre 1992 (Rapporteur).

2. Emmanuelle CANET. Thèse de Biologie, Université Lyon I, Septembre 1994. (Examineur)
3. Edouard PARAF. Thèse de Physique, Université J. Fourier, Grenoble, Octobre 1994 (Rapporteur).
4. Jean-Luc MARTINOT. HDR Université Paris 11, Mars 1994, (Président).
5. Djilali ANNANE. Thèse de Pharmacologie, Université Paris 5, Septembre 1995 (Rapporteur).
6. Marie-Joëlle ANTOINE. Thèse d'Informatique, Université de Caen, Octobre 1996 (Président).
7. Pascal BIHOUEE. Doctorat de Génie Biologique et Médical, Université de Tours, Mars 1997.(Rapporteur)
8. Isabelle FAILLENOT. Doctorat de Neurosciences, Université de Lyon 1, Octobre 1997.(Rapporteur)
9. Nicolas ROYACKKERS. Thèse d'Informatique, Université. De Caen,- Novembre 1997. (Président)
10. Olivier ROUSSET. Thèse de Génie Biologique et Médical, Université. Lyon 1, Janvier 1998. (Rapporteur)
11. Pascal MERLET. HDR Université Paris 12, Janvier 1997. (Examineur)
12. Uwe PIETRZYK. HDR Max Planck Institute, Cologne, Octobre 1997. (Rapporteur)
13. Sylvain BAILLET. Thèse de traitement du Signal, Université Paris 6. Juillet 1998. (Rapporteur)
14. Olivier COULON. Thèse de Docteur de l'ENST, Octobre 1998. (Rapporteur)
15. Jean-François LECONTE. Thèse d'Informatique, Université de Caen, Octobre 1998. (Président)
16. Cyrille JAGGI. Thèse d'Informatique, Université de Caen, Décembre 1998. (Président)
17. Simon ROUSSEL. HDR Université de Caen. Juin 1998. (Rapporteur)
18. Marc JOLIOT. HDR Université de Caen. Juin 1999. (Président)
19. Mohamed SEGHIER. Thèse de Physique. Université de Grenoble I. Mars 2000. (Rapporteur)
20. Denis FIZE. Thèse de Sciences Cognitives. Université de Toulouse. Mars 2000. (Rapporteur)
21. Pascal BELIN. HDR HDR Université Paris 6. Mai 2000. (Rapporteur)
22. Stéphane LEHERICY. HDR Université Paris 6. Juin 2000. (Rapporteur)
23. Franck SEMAH. HDR HDR Université Paris 5. Juin 2000. (Rapporteur)
24. Philippe GARNERIN. HDR Université de Paris 7, Septembre 2000. (Rapporteur)
25. Sue RUAN. HDR Université de Caen. Décembre 2000. (Examineur)
26. Hugues DUFFAU. HDR Université de Paris 7, Septembre 2000. (Examineur)
27. Goulven JOSSE. Thèse de neurosciences, Université de Caen, décembre 2003. (Président)
28. Laurent PETIT. HDR Université de Caen Basse-Normandie. Décembre 2003 (Président)
29. Frédéric ANDERSSON. Thèse de neurosciences, Université de Caen, décembre 2005. (Président)
30. Gaëlle LEROUX. Thèse de neurosciences, Université de Caen, décembre 2005. (Président)
31. Laetitia LAOU. Thèse de neurosciences, Université de Caen, novembre 2006. (Président)
32. Fabrice CRIVELLO. HDR Université de Caen Basse-Normandie. Décembre 2006 (Rapporteur)
33. Perrine BRAZO. HDR Université de Caen Basse-Normandie. Décembre 2006 (Président)
34. Mathieu VIGNEAU. Thèse de neurosciences, Université de Caen, novembre 2006. (Président)
35. Jeanne SPIESS. Thèse de Psychologie, Université Paris Descartes, novembre 2007 (Président)
36. Jean-Marc CONSTANS. HDR Université de Caen Basse-Normandie. Décembre 2007 (Président)
37. Damien DU CHEYRON. HDR Université de Caen Basse-Normandie. Décembre 2007 (Examineur)
38. Emilie COUSIN. Thèse de neurosciences cognitives, Université de Grenoble 2, septembre 2008 (Président).
39. Alain MANRIQUE. HDR Université de Caen Basse-Normandie. Septembre 2008 (Rapporteur)
40. Igor SIBON. HDR Université Bordeaux 2. Novembre 2008 (Rapporteur)
41. Gaëlle DOUCET. Thèse de neurosciences. Université de Caen. Décembre 2010 (examineur)
42. Virginie BELLASSEN. Thèses de neurosciences. Université Pierre et Marie Curie. Juillet 2011 (rapporteur)
43. Elise LEROUX. Thèse de Neurociences. Université de caen Basse-Normandie. Décembre 2011 (Président)
44. Thomas SAMAILLE. Thèses de neurosciences. Université Pierre et Marie Curie. Juin 2013 (rapporteur)
45. Damien MARIE. Thèse de Neurosciences. Université de Bordeaux. Décembre 2013 (examineur).
46. Guillaume HERBET. Thèses de neurosciences. Université Montpellier. Juillet 2014 (rapporteur)

Ongoing Research Support

1. 2014-2017. ANR. VASCOGENE Genetic factors of vascular risk factors (co-investigator). Amount: 30K€
2. 2014-2016. EU-JPND. HD-READY High-Dimensional Research in Alzheimer Disease (co-investigator). Amount: 50K€
3. 2014-2016. LabEx TRAIL. ABACI3 Construction of probabilistic cortical structural atlases (PI). 100K€
4. 2014-2015. LabEx TRAIL. ABACI2 Automated analysis of resting state fMRI data (PI). Amount: 65K€
5. 2014-2015. IdEx Bordeaux. Advanced statistical methods for multidimensional image analysis (co-PI). Amount: 140K€
6. 2013-2015. LabEx TRAIL. ABACI Automated Brain Anatomy for Cohort Imaging (PI). Amount: 250K€