

Pr Cécile Grandin

ETUDES ET DIPLOMES

Docteur en Médecine, Chirurgie et Accouchements : 1988, avec la plus grande distinction

Université Catholique de Louvain (UCL), Bruxelles, Belgique

Diplôme d'études spécialisées en radiodiagnostic : 1993

Université Catholique de Louvain (UCL), Bruxelles, Belgique

1988 – 1990 : Assistant en radiologie générale

1990 – 1992 : Assistant de recherche en imagerie médicale

- IRM abdominale et cardiaque
- Etudes des produits de contraste IRM destinés au foie
- TEP cardiaque

1992 - 1993: Assistant en neuroradiologie

Docteur en Sciences Médicales (PhD thesis) : 2001

Université Catholique de Louvain (UCL), Bruxelles, Belgique

- Assessment of brain vascularization with magnetic resonance imaging

Promoteurs : Prof. A.G. De Volder and Prof. G. Cosnard

Maître d'expérience pour l'expérimentation animale (certification belge) : 2007

European Certification in Neuroradiology

2008 : European Society of Neuroradiology

PARCOURS PROFESSIONNEL

Service de Radiologie

Cliniques Universitaires St Luc, Bruxelles, Belgique

Prof. B. Maldague – Prof B. Vande Berg – Prof G. Cosnard

Activités cliniques, recherche et enseignement

Titre actuel : Chef de Clinique

1993 - 2001 : Neuro-IRM (cerveau, tête & cou et rachis) et IRM cardiaque

2001 - 2003 : Neuro-IRM (cerveau, tête & cou et rachis)

2004 - actuellement : Neuro-IRM et Neuro-CT (cerveau, tête & cou et rachis)

Depuis sept 2013 : + Echographie du cou

**National Institutes of Health
Bethesda - Maryland - USA**

1996 - 1997 (1 an et 4 mois): Assistant de recherche en IRM fonctionnelle

In Vivo NMR Research Center, National Center of Research Resources (BEIP), Prof. C. Moonen

Assessment of brain perfusion with susceptibility-weighted dynamic contrast MRI brain activation with BOLD MRI

1997- 1998 (6 mois): Chercheur invité en IRM fonctionnelle

Epilepsy Research Branch, National Institute of Neurologic Disorders and Stroke, Prof. W. Theodore

Assessment of functional organization of brain areas involved in language by fMRI in normal and epileptic adults and children

NOMINATIONS ACADEMIQUES

Université Catholique de Louvain, Bruxelles

Oct 2003 : Chargé de cours cliniques

Sept 2008-2010 : Chef de l'Unité RDGN et chef du Département HIMA (faisant fonction)

2009-2010 : Représentant du pôle d'Imagerie médicale auprès de l'IREC (Institut de Recherche Expérimentale et Clinique)

Oct 2009 : Professeur clinique

2010-2012 : Co-responsable de la cellule d'imagerie au sein de l'IoNS (Institute of Neuroscience)

PRIX ET DISTINCTIONS

1995 : Bourse de la Fondation St Luc (Bruxelles)

1996 : Editor's Excellence Award for Outstanding Scientific Research published in the Journal of Computer Assisted Tomography, 1995

2002 : 6th International Lucien Appel Prize for Neuroradiology (1ier prix)

ENCADREMENT DE THESES DE DOCTORAT

2006 : Michael Andres

Number and finger interactions: from the parietal to the motor cortex

2010 : Isabel Cuevas Quezada

Effect of early visual deprivation on perception and semantic processing of odors

2011 : Denis Rommel (promoteur)

Choline imaging in oncology using PET and 1H-MRS: comparison, assessment as monitoring tool and insight into metabolism in an experimental model

Pascale Habre-Hallage (co-promoteur)

Assessment of changes in oral tactile function and osseoperception by oral endosseous implant

Placement

1ier prix "Basic research competition - EAO Glasgow 2010" pour la partie fMRI

Bernard Hanseeuw

On episodic memory encoding in patients with mild cognitive impairment: a cognitive and imaging approach

2012 : Emeline Clerget

Role of Broca'area in motor cognition

2013 : Paula Plaza Arancibia

Looking into brain activation using a sensory substitution prosthesis: seeing with sound

Stéphanie Lefebvre

Motor skill learning after stroke: exploration of neurophysiological mechanisms with functional neuroimaging and therapeutic modulation by non invasive brain stimulation

ACTIVITES POUR LA COMMUNAUTE SCIENTIFIQUE INTERNATIONALE

Est ou a été reviewer pour :

- Neuroimage
- Stroke
- Journal of Cerebral Blood Flow and Metabolism
- Journal of Neurology, Neurosurgery, and Psychiatry
- European Radiology
- Journal of Neuroradiology
- Journal of Magnetic Resonance Imaging

PUBLICATIONS with peer review

1992 :

1) B. VAN BEERS, **C. GRANDIN**, J. JAMART, R. DEMEURE, T.F. JACOBSEN, J. PRINGOT
Magnetic resonance imaging of lower abdominal and pelvic lesions: assessment of oral magnetic particles as an intestinal contrast agent.
Eur J Radiol , 1992, 14, 252-257 (IF 1.060)

2) B. VAN BEERS, J.P. TRIGAUX, **C. GRANDIN**, J. JAMART, R. DEMEURE, A. GEUBEL, R. BRENARD, M. MELANGE, A.N. DARDENNE, J. PRINGOT
Regenerative nodules in hepatic cirrhosis: Value of gradient-echo MR imaging with a surface coil.

Acta Radiol (Stockholm), 1992, 33, 3, 245-250 (IF 1.096)

1993 :

3) B. VAN BEERS, L. LALONDE, P. SOYER, **C. GRANDIN**, J.P. TRIGAUX, T. DE RONDE, C. DIVE, J. PRINGOT
Dynamic CT in pancreatic lymphoma.
J Comput Assist Tomogr, 1993, 17 , 1, 94-97 (IF 1.318)

4) B. VAN BEERS, J.P. TRIGAUX, **C. GRANDIN**, J. JAMART, R. DEMEURE, A. GEUBEL, R. BRENARD, M. MELANGE, A.N. DARDENNE, J. PRINGOT
Regenerative nodules in hepatic cirrhosis: Value of gradient-echo MR imaging with a surface coil.

Abdom Imaging, 1993, 18, 102 (IF 0.996)

5) P. SOYER, B. VAN BEERS, **C. GRANDIN**, J. PRINGOT, M. LEVESQUE

Primary lymphoma of the liver: MR findings.
Eur J Radiol, 1993, 16, 209-212 (IF 1.060)

6) P. SOYER, B. VAN BEERS, J. BARGE, F. KAZEROUNI, D. LACHEHEB, **C. GRANDIN**,
F. TEILLET-THIEBAUT, J. PRINGOT, M. LEVESQUE

Tomodensitométrie des lymphomes hépatiques.
Rev Imag Med, 1993, 5, 325-331

7) P. SOYER, B. VAN BEERS, F. TEILLET-THIEBAUT, **C. GRANDIN**, F. KAZEROUNI, J. BARGE, J.
PRINGOT, M. LEVESQUE

Hodgkin's and non-Hodgkin hepatic lymphoma: sonographic finding.
Abdom Imaging, 1993, 18, 339-343 (IF 0.996)

8) B. GALLEZ, R. DEBUYST, R. DEMEURE, F. DEJEHET, **C. GRANDIN**, B. VAN BEERS, H. TAPER,
J. PRINGOT, P. DUMONT

Evaluation of a nitroxyle fatty acid as liver contrast agent for magnetic resonance imaging.
Magn Res Med, 1993, 30, 592-599 (IF 3.313)

1994 :

9) B. VAN BEERS, **C. GRANDIN**, A. KARTHEUSER, P. HOANG, P. MAHIEU, R. DETRY, R.
VANHEUWERZWIJN, J. PRINGOT

MRI of complicated anal fistulae: Comparison with digital examination.
J Comput Assist Tomogr, 1994, 18 (1), 87-90 (IF 1.318)

10) I. MOTTET, R. DEMEURE, B. GALLEZ, **C. GRANDIN**, B. VAN BEERS, J. PRINGOT

Comparison of 31P NMR methods for the measurement of the apparent dissociation constant of
MgATP and evaluation of the influence of ionic strength.
M.A.G.M.A, 1994, 2, 101-107

11) B. VAN BEERS, **C. GRANDIN**, S. PAUWELS, I. MOTTET, J.F. GOUEMANT, M. DELOS, R.
DEMEURE, J. PRINGOT

Gd-EOB-(DTPA): Enhancement pattern of hepatocellular carcinomas in rats: comparison with Tc-99m
IDA uptake.
J Magn Reson Imaging, 1994, 4, 351-354 (IF 2.694)

12) A.G. DE VOLDER, J.F. GADISSEUX, C. MICHEL, J.M. MALOTEAUX, A. BOL, **C. GRANDIN**, T.
DUPREZ, Ph. EVRARD

Brain glucose utilization in band heterotopia: synaptic activity of the "double cortex".
Pediatr Neurol, 1994, 11, 4, 290-294 (IF 1.243)

1995 :

13) **C. GRANDIN**, B.E. VAN BEERS, A. ROBERT, J.F. GIGOT, A. GEUBEL, J. PRINGOT

Benign hepatocellular tumors: MR features after superparamagnetic iron oxide administration.
J Comput Assist Tomogr., 1995, 19, 3, 412-418 (IF 1.318)
(Editor's excellence award for outstanding scientific research)

- 14) Th. DUPREZ, **C. GRANDIN**, J. MALGHEM
MRI monitoring of an acute spinal subdural haematoma with spontaneous resolution.
Acta Neurol Belg, 1995, 95 (2), 101-103 (IF 0.714)
- 15) **C. GRANDIN**, W. WIJNS, J.A. MELIN, A. BOL, A.N. ROBERT, G.H. HEIJNDRIKX, C. MICHEL, J.L.J. VANOVERSCHELDE
Delineation of myocardial viability with PET.
J Nucl Med, 1995, 36, 1543-1452 (IF 4.899)
- 16) **C. GRANDIN**, B.E. VAN BEERS, R. DEMEURE, J.F. GOUDEMANT, I. MOTTET, J. PRINGOT
Comparison of gadolinium-DTPA and polylysine-gadolinium-DTPA-enhanced magnetic resonance imaging of hepatocarcinoma in the rat.
Invest Radiol, 1995, 30, 10, 572-581 (IF 1.990)
- 17) Th. DUPREZ, **C. GRANDIN**
Target-like and comedon-like foci as different aspects of multiple healed brain abscesses.
Acta Neurol Belg, 1995, 95 (3), 178-180 (IF 0.714)
- 18) Th. DUPREZ, **C. GRANDIN**, G. COSNARD
Reversal of multiple spinal MS lesions at MRI: an uncommon observation
Acta Neurol Belg., 1995, 95 (4), 244-246 (IF 0.714)
- 1996 :
- 19) B.E. VAN BEERS, A. KARTHEUSER, M.A. DELOS, **C. GRANDIN**, R. DETRY, J. JAMART, J. PRINGOT
MRI of the anal canal: correlation with histologic examination.
Magn Res Imaging, 1996, 14 (2), 151-156 (IF 1.420)
- 20) T.P. DUPREZ, M. GILLE, B.C. VANDE BERG, J. MALGHEM, **C.B. GRANDIN**, P. MICHEL, S. GHARIANI, B.E. MALDAGUE
MRI of the spine in cobalamin deficiency: the value of examining both spinal cord and bone marrow.
Neuroradiology, 1996, 38 (6), 511-515 (IF 1.213)
- 21) T.P.J. DUPREZ, **C.B.G. GRANDIN**, C. BONNIER, C.W. THAUVOY, J.F. GADISSEUX, J.L. DUTRIEUX, P. EVRARD
Whipple disease confined to the CNS in childhood.
AJNR Am J Neuroradiol, 1996, 17: 1589-1591 (IF 2.629)
- 22) B.E. VAN BEERS, **C. GRANDIN**, D. DE GREEF, B. LUNDBY, J. PRINGOT
Ferristene as intestinal MR contrast agent. Distribution and safety of fast ingestion procedure with oral metoclopramide.
Acta Radiol (Stockholm), 1996, 37 (5), 676-9 (IF 1.096)
- 1997 :
- 23) **C.B. GRANDIN**, B.E. VAN BEERS, S. PAUWELS, R. DEMEURE, J. JAMART, J. PRINGOT
Ferumoxides and Tc-99m sulfur colloid: comparison of the tumor-to-liver uptake in focal nodular hyperplasia.
J Magn Reson Imaging, 1997, 7, 125-129 (IF 2.694)
- 24) B. VAN BEERS, M. LACROSSE, J. JAMART, **C. GRANDIN**, J.F. GIGOT, Y. HORSMANS, R. DEMEURE, J. PRINGOT
Detection and segmental localization of malignant hepatic tumors: comparison of ferumoxides-enhanced gradient-echo and T2-weighted spin-echo MR imaging at 0.5 T.
AJR Am J Roentgenol, 1997, 168, 3, 713-718 (IF 2.474)
- 25) **C. GRANDIN**, T. DUPREZ, G. STROOBANDT, E.C. LATERRE, P. MATHURIN
Spinal dural arterio-venous fistula: an underdiagnosed disease?
Acta Neurol Belg., 1997, 97, 17-21 (IF 0.714)

- 26) B. DE COENE, C. GILLIARD, **C. GRANDIN**, J.F. NISOLLE, J.P. TRIGAUX, J. BOU LAHDOU
Unusual location of an intracranial chondroma.
AJNR Am J Neuroradiol, 1997, 18, 573-575 (IF 2.629)
- 27) T.P.J. DUPREZ, **C.B.G. GRANDIN**, M. OSSEMAN, G. COSNARD, C.J.M. SINDIC
MR monitoring of a medically treated spinal cord abscess presumptively due to *Listeria monocytogenes*.
Eur Neurol, 1997, 37, 249-251 (IF 1.042)
- 28) A.G. DE VOLDER, A. BOL, J. BLIN, P. ARNO, **C. GRANDIN**, C. MICHEL, C. VERAART
Brain energy metabolism in early blind subjects: neural activity in the visual cortex.
Brain Res., 1997, 750, 235-244 (IF 2.474)
- 29) J.R. PETRELLA, C. DECARLI, M. DAGLI, J.H. DUYN, **C.B. GRANDIN**, J.A. FRANK, E.A. HOFFMAN, W.H. THEODORE
Assessment of whole brain vasodilatory capacity with acetazolamide challenge at 1.5 T using dynamic contrast imaging with FS-BURST.
AJNR Am J Neuroradiol, 1997, 18, 1153-1161 (IF 2.629)
- 30) T. DUPREZ, **C. GRANDIN**, J.F. GADISSEUX, A.G. DE VOLDER, C. THAUVOY, A. KEYEUX, P. EVRARD
MR monitored remitting-relapsing pattern of cortical involvement in Rasmussen's syndrome: comparison of serial MR findings and PET/SPECT features.
J Comput Assist Tomogr, 1997, 21, 900-904 (IF 1.318)
- 31) G. COSNARD, T. DUPREZ, **C. GRANDIN**, P. MATHURIN
Imagerie de la myélopathie cervicarthrosique.
Rachis, 1997, 9, 269-274
- 32) T. DUPREZ, A. PEETERS, G. COSNARD, **C. GRANDIN**
Updated routine MR work-up of hyperacute stroke patients using diffusion-weighted sequences.
Acta Neurol Belg, 1997, 97, 261-263 (IF 0.714)
- 1998: 33) J.R. PETRELLA, C. DECARLI, M. DAGLI, **C.B. GRANDIN**, J.H. DUYN, J.A. FRANK, E.A. HOFFMAN, W.H. THEODORE
Age related vasodilatory response to acetazolamide challenge in healthy adult humans: a dynamic contrast-enhanced MR perfusion imaging study.
AJNR Am J Neuroradiol, 1998, 19, 39-44 (IF 2.629)
- 34) **C.B. GRANDIN**, P. MATHURIN, T. DUPREZ, G. STROOBANDT, F. HAMMER, P. GOFFETTE, G. COSNARD
Diagnosis of intracranial aneurysms: accuracy of MR angiography at 0.5 T.
AJNR Am J Neuroradiol, 1998, 19, 245-252 (IF 2.629)
- 35) J.F. GOUDEMANT, B.E. VANBEERS, R. DEMEURE, **C. GRANDIN**, M. DELOS, J. PRINGOT
Comparison of unenhanced and gadoxetate disodium-enhanced spin echo magnetic resonance imaging for the detection of experimental hepatocellular carcinoma in the rat.
Invest Radiol, 1998, 33(2), 80-84 (IF 1.990)
- 36) C.T.W. MOONEN, P. VAN GELDEREN, J.W. VAN DER VEEN, D. MADIO, **C. GRANDIN**, J.H. DUYN, J. FRANK, N. RAMSEY, D.R. WEINBERGER
Advances in 3D fMRI on a clinical instrument using PRESTO technique.
Current Progress in Functional Brain Mapping, Ed: T. Yuasa, J.W. Prichard, S. Ogawa, Nishimura/Smith Gordon, London, England, 1998, 97-101
- 37) T. DUPREZ, S. GHARIANI, **C. GRANDIN**, A.M. SMITH, J.F. GADISSEUX, P. EVRARD
Focal seizure-induced premature myelination: speculation from serial MRI.
Neuroradiology, 1998, 40, 580-582 (IF 1.213)

38) G. COSNARD, T. DUPREZ, **C. GRANDIN**, P. MATHURIN
Imagerie des espaces méningés rachidiens: applications séméiologiques.
Feuillets de radiologie, 1998, 38, 483-495

1999 :

39) G. COSNARD, T. DUPREZ, **C. GRANDIN**, A.M. SMITH, A. PEETERS
Imagerie de diffusion et de perfusion par résonance magnétique de l'encéphale.
Louvain Médical, 1999, 118, 2, 129-140

40) **C.B. GRANDIN**, G. COSNARD
La RMN fonctionnelle: une fenêtre ouverte sur le cerveau au travail.
Louvain Médical, 1999, 118, 2, 141-150

41) G. COSNARD, T. DUPREZ, **C. GRANDIN**, A.M. SMITH, T. MUNIER, A. PEETERS
Fast-FLAIR sequence for detecting major vascular abnormalities during hyperacute phase of stroke: A comparison with 3D-TOF MR angiography.
Neuroradiology, 1999, 41, 342-346 (IF 1.213)

42) K.E.HUNTER, T.A. BLAXTON, S.Y. BOOKHEIMER, C. FIGLOZZI, W.D. GAILLARD, **C. GRANDIN**, A. ANYANWU, W.H. THEODORE
¹⁵O Water Positron Emission Tomography in language localization: A study comparing PET Visual and computerized Region of Interest Analysis with the Wada test.
Ann Neurol, 1999, 45, 662-665 (IF 7.717)

2000 :

43) A.M. SMITH, **C.B. GRANDIN**, T. DUPREZ, F. MATAIGNE, G. COSNARD
Whole brain quantitative CBF and CBV measurements using MRI bolus tracking: comparison of methodologies.
Magn Reson Med, 2000, 43, 559-564 (IF 3.313)

44) G. COSNARD, T. DUPREZ, **C. GRANDIN**, S. DECHAMBRE, F. MATAIGNE, A. SMITH
Diffusion- and perfusion-weighted MR imaging during the hyperacute phase of stroke.
J Radiol, 2000, 81, 858-869 (IF 0.327)

45) G. COSNARD, T. DUPREZ, **C. GRANDIN**
Techniques d'examen IRM des tumeurs cérébrales de l'adulte.
J Neuroradiol, 2000, 27, 31-38 (IF 0.512)

46) P. VAN GELDEREN, **C. GRANDIN**, J.R. PETRELLA, C.T. MOONEN
Rapid three-dimensional MR imaging method for tracking a bolus of contrast agent through the brain.
Radiology, 2000, 216, 603-608 (IF 4.815)

47) I. GRANIER, **C.B. GRANDIN**, T. DUPREZ, A.M. SMITH, A. PEETERS, G. COSNARD
Détection d'une pénombre hémodynamique à la phase hyperaigue d'un AVC: valeur prédictive de l'angiographie 3D-TOF et de la séquence fast-FLAIR.
J. Neuroradiol., 2000, 27, 119-127 (IF 0.512)

48) A.M. SMITH, **C.B. GRANDIN**, T. DUPREZ, F. MATAIGNE, G. COSNARD
Whole brain quantitative CBF, CBV and MTT measurements using MRI bolus tracking: Implementation and application to data acquired from hyperacute stroke patients.
J Magn Reson Imaging, 2000, 12, 400-410 (IF 2.694)

49) S.D. DECHAMBRE, T. DUPREZ, **C.B. GRANDIN**, F.E. LECOUVET, A. PEETERS, G. COSNARD
High signal in cerebrospinal fluid mimicking subarachnoid hemorrhage on FLAIR following acute stroke and intravenous contrast medium.
Neuroradiology, 2000, 42, 608-611 (IF 1.213)

50) **C.B. GRANDIN**, G. COSNARD, F. HAMMER, T.P. DUPREZ, G. STROOBANDT, P. MATHURIN
Vasospasm after subarachnoid hemorrhage: diagnosis with MR angiography.
AJNR Am J Neuroradiol, 2000; 21, 1611-1617 (IF 2.629)

With an Editorial by J.E. Heiserman : « MR angiography for the diagnosis of vasospasm after subarachnoid hemorrhage. Is it accurate ? Is it safe ? » AJNR Am J Neuroradiol, 2000; 21, 1571-1572

2001 :

51) W.D. GAILLARD, **C.B. GRANDIN**, B. XU.

Developmental aspects of pediatric fMRI: Considerations for image acquisition, analysis, and interpretation.

Neuroimage, 2001, 13, 239-249 (IF 6.192)

52) W.D. GAILLARD, M. PUGLIESE, **C.B. GRANDIN**, J.R. PETRELLA, S.H. BRANIECKI, K.HUNTER, B. XU, P. KONDAPANENI, L. BALSAMO, J.R. PETRELLA, MC ARNOLD, G. BASSO

Cortical localization of reading in normal children: An fMRI language study

Neurology, 2001, 57, 47-54 (IF 5.678)

53) **C. B. GRANDIN**, T. DUPREZ, A.M. SMITH, F. MATAIGNE, A. PEETERS, C. OPPENHEIM, G. COSNARD

Usefulness of magnetic resonance-derived quantitative measurements of cerebral blood flow and volume in prediction of infarct growth in hyperacute stroke

Stroke, 2001, 32, 1147-1153 (IF 5.233)

54) C. OPPENHEIM, **C. GRANDIN**, Y. SAMSON, A. SMITH, T. DUPREZ, C. MARSAULT, G. COSNARD Is there an apparent diffusion coefficient threshold in predicting tissue viability in hyperacute stroke ?

Stroke 2001, 32 ; 2486-2491 (IF 5.233)

55) **C.B. GRANDIN**

Assesment of brain vascularization with magnetic resonance imaging

JBR-BTR, 2001, 84 ; 273-275

2002 : 56) **C. B. GRANDIN**, T.P. DUPREZ, A.M. SMITH, C. OPPENHEIM, A. PEETERS, A.R. ROBERT, G. COSNARD

Which MR-derived perfusion parameters predict infarct growth the best in hyperacute stroke ? A comparative study between relative and quantitative measurements.

Radiology, 2002, 223 (2) ; 361-370 (IF 4.899)

57) L. ANNET, T. DUPREZ, **C. GRANDIN**, G. DOOMS, A. COLLARD, G. COSNARD

Apparent diffusion coefficient measurements within intracranial epidermoid cyst in six patients

Neuroradiology, 2002, 44 (4) ; 326-328 (IF 1.213)

58) L.M. BALSAMO, B. XU, **C.B. GRANDIN**, J.R. PETRELLA, S.H. BRANIECKI, T.K. ELLIOTT, W.D. GAILLARD

A functional magnetic resonance imaging study of left hemisphere language dominance in children.

Arch Neurol Chicago, 2002, 59 (7) ; 1168-1174 (IF 4.053)

59) W.D. GAILLARD, L. BALSAMO, B. XU, **C.B. GRANDIN**, , S.H. BRANIECKI, P. PAPERIO, S. WEINSTEIN, J. CONRY, P.L. PEARL, S. SATO, B. JABBARI, L.G. VEZINA, C. FRATTALI, W.H. THEODORE

Language dominance in partial epilepsy patients identified with an fMRI reading task.

Neurology, 2002, 59 (2) ; 256-265 (IF 5.678)

60) Y. VANDERMEEREN, A. DE VOLDER, E. BASTINGS, J-L THONNARD, J. DUQUE, **C. GRANDIN**, G. SEBIRE, E. OLIVIER

Functional relevance of motor cortex reorganisation in a child with unilateral schizencephaly

Neuroreport, 2002, 13 (14) ; 1821-1824 (IF 2.503)

61) **C. GRANDIN**

Report of the Sixth Lucien Appel Prize for Neuroradiology. Assessment of brain vascularization with magnetic resonance imaging.

JBR-BTR, 2002, 85 ; 315

2003 :

62) W.D. GAILLARD, B.C. SACH, J.R. WHITNAH, Z. AHMAD, L.M. BALSAMO, J.R. PETRELLA, S.H. BRANIECKI, C.M. MCKINNEY, K. HUNTER, B. XU, **C.B. GRANDIN** Developmental aspects of language processing. FMRI of verbal fluency in children and adults
Human Brain Mapping, 2003, 18: 176-185 (IF 6.058)

63) M. BARILE, F. VAN DE WYNGAERT, J.J. ESSAMA MBIA, M. JATIVA, **C. GRANDIN**, H. ROOIJAKKERS, P. HANTSON

Intravenous magnesium sulfate administration in a patient with refractory vasospasm following subarachnoid hemorrhage

Intensive Care Medicine, 2003, 29; 1182-1185 (IF 2.971)

64) G. COSNARD, T. DUPREZ, L. MORCOS, **C. GRANDIN**

MRI of closed head injury

J Neuroradiol, 2003, 30; 146-157 (IF 0.512)

65) Y. VANDERMEEREN, G. SEBIRE, **C.B. GRANDIN**, J.L. THONNARD, X. SCHLOGEL, A.G. DE VOLDER

Functional reorganization of brain in children affected with congenital hemiplegia: fMRI study
NeuroImage, 2003, 20; 289-301 (IF 6.192)

66) **C.B. GRANDIN**

Assessment of brain perfusion with MRI: methodology and application to acute stroke

Neuroradiology, 2003, 45: 775-766 (IF 1.213)

2004 :

67) X.L. HAMOIR, **C.B. GRANDIN**, A. PEETERS, A. ROBERT, G. COSNARD, T. DUPREZ

MRI of hyperacute stroke in the AchA territory

Eur Radiol, 2004, 14: 417-24 (IF 2.364)

68) M.C. ARNOULD, **C.B. GRANDIN**, A. PEETERS, G. COSNARD, T. DUPREZ

Comparison of CT and three MR sequences for detecting and categorizing early (48 hours) hemorrhagic transformation in hyperacute ischemic stroke

AJNR Am J Neuroradiol, 2004, 25; 939-944 (IF 2.406)

2005 :

69) B. GERBER, E COCHE, A. PASQUET, E. KETELSLEGERS, D. VANCRAZENEST, **C.**

GRANDIN, B.E. VAN BEERS, J.L. VANOVERSHELDE

Coronary artery stenosis: Direct comparison of four-section multidetector row CT and 3D navigator MR imaging for detection – Initial results

Radiology 2005, 234: 98-108 (IF 5.076)

70) P. HANSTON, **C. GRANDIN**, T. DUPREZ, MC NASSOGNE, JM GUERIT

Comparison of clinical, magnetic resonance and evoked potentials data in a case of valproic-acid related hyperammonemic coma

Eur Radiol, 2005, 15: 59-64 (IF 2.364)

71) **C.B. GRANDIN**, A. BOL, A.M. SMITH, C. MICHEL, G. COSNARD

Absolute CBF and CBV measurements by MRI bolus tracking before and after acetazolamide challenge: repeatability and comparison with PET in humans

NeuroImage, 2005, 26: 525-535 (IF 4.869)

72) J. KEFER, E. COCHE, G. LEGROS, A. PASQUET, **C. GRANDIN**, B.E. VAN BEERS, J.L. VANOVERSHELDE, B.L. GERBER
Head to head comparison of three-dimensional navigator-gated magnetic resonance imaging and 16-slice computed tomography to detect coronary artery stenosis in patients
J Am Coll Cardiol, 2005; 46: 92-100 (IF 9.133)

73) M. WINTERMARK, M. SESAY, E. BARBIER, K. BORBELY, W.P. DILLON, .JD. EASTWOOD, T.C. GLENN, **C.B. GRANDIN**, S. PEDRAZA, S. SOUSTIEL, T. NAIRIAI, G. ZAHARCHUK, J.M. CAILLE, V. DOUSSET, H. YONAS.
Comparative overview of brain perfusion imaging techniques
Stroke, 2005, 36: 2032-3 - Stroke, 2005, 36: e83-99 (IF 5.748)

74) C.RAFTOPOULOS, K. VAN RIJCKEVORSEL, B. ABU SERIEH, M. DE TOURTCHANINOFF, A. IVANOIU, G. MARY, **C. GRANDIN**, T. DUPREZ
Epileptic discharges in a mammillary body of a patient with refractory epilepsy
Neuromodulation, 2005, 8 (4): 236-240 (IF 0.774)

75) M.M. BERL, L.M. BALSAMO, B. XU, E.N. MOORE, S.L. WEINSTEIN, J.A. CONRY, P.L. PEARL, B.C. SACHS, C.FRATTALI, **C.B. GRANDIN**, F.J. RITTER, S. SATO, W.H. THEODORE, W.D.GAILLARD
Seizure focus affects regional language networks assessed by fMRI
Neurology, 2005; 65: 1604-1611 (IF 5.973)

76) F.D HAMMER, V. LACROIX, T. DUPREZ, **C. GRANDIN**, R. VERHELST, A. PEETERS, G. COSNARD
Cerebral microembolization after protected carotid artery stenting in surgical high-risk patients: results of a 2-year prospective study
J Vasc Surg, 2005; 42: 847-853; discussion 853 (IF 2.730)

77) A. GOUT, N. SEIBEL, C. ROUVIERE, B. HUSSON, B. HERMANS, N. LAPORTE, H. KADHIM , **C. GRANDIN**, P. LANDRIEU, G. SEBIRE
Aphasia owing to subcortical brain infarct in childhood
J Child Neurol 2005, 20: 1003-1008 (IF 1.233)

78) M. WINTERMARK, M. SESAY, E. BARBIER, K. BORBELY, W.P. DILLON, .JD. EASTWOOD, T.C. GLENN, **C.B. GRANDIN**, S. PEDRAZA, S. SOUSTIEL, T. NAIRIAI, G. ZAHARCHUK, J.M. CAILLE, V. DOUSSET, H. YONAS.
Comparative overview of brain perfusion imaging techniques
J Neuroradiol, 2005, 32: 294-314 (IF 0.606)

2007 :

79) D. HERNALSTEEN, G. COSNARD, A. ROBERT, **C. GRANDIN**, A. VLASSENBROEK, T. DUPREZ
Suitability of helical multislice acquisition technique for routine unenhanced brain CT: an image quality study using a 16-row detector configuration
Eur. Radiol, 2007, 17: 975-982 (IF 2.554)

80) V. LACROIX, F. HAMMER, P. ASTARCI, T. DUPREZ, **C. GRANDIN**, G. COSNARD, A. PEETERS, R. VERHELST
Ischemic cerebral lesions after carotid surgery and carotid stenting.
Eur J Vascul and Endovasc Surg, 2007, 33: 430-435 (IF 2.156)

81) Y. BLEYENHEUFT, C. B. GRANDIN, G. COSNARD, E. OLIVIER, J-L. THONNARD
Corticospinal dysgenesis and upper-limb deficit in congenital hemiplegia: a diffusion tensor imaging study
Pediatrics 2007, 120: e1502-1511 (IF 5.012)

2008 :

82) G. VAZ, Y. VAN RAAJ, K. VAN RIJCKEVORSEL, M. DE TOURTCHANINOFF, **C. GRANDIN**, C. RAFTOPOULOS

Safety and efficacy of multiple subpial transections: report of a consecutive series of 30 cases
Neurochirurgie 2008, 54: 311-314 (IF 0.379)

83) T.P. DUPREZ, A. JANKOVSKI, **C. GRANDIN**, L. HERMOYE, G. COSNARD, C. RAFTOPOULOS
Intraoperative 3T M imaging for spinal cord tumor resection: feasibility, timing, and image quality using a "twin" MR-operating room suite.

AJNR Am J Neuroradiol. 2008, 29: 1991-1994 (IF 2.338)

84) F. JOURET, S. NOIRHOMME, **C. GRANDIN**, M. LONNEUX, C. GODFRAIND, M. LAMBERT, C. LEFEBVRE

Central nervous system involvement in Wegener's granulomatosis.
Rev Med Interne 2008, 29: 912-916 (IF: 0.466)

2009 :

85) B. LEONARD, M.P. DE PARTZ, **C. GRANDIN**, A. PILLON

Domain-specific reorganization of semantic processing after extensive damage to the left temporal lobe.

Neuroimage 2009, 45: 572-586 (IF : 5.739)

86) V.MONTIEL, **C. GRANDIN**, P. GOFFETTE, E. FOMEKONG, P. HANTSON

Refractory high intracranial pressure following intraventricular hemorrhage due to Moyamoya disease in a pregnant caucasian woman.

Case Reports in Neurology 2009; 1(1): 1-7

87) E. FOMEKONG, D. MAITER, **C. GRANDIN**, C. RAFTOPOULOS

Outcome of transsphenoidal surgery for Cushing's disease: a high remission rate in ACTH-secreting macroadenomas

Clin Neurol Neurosurg 2009, 111: 442-449 (IF: 1.581)

88) P. ROMBAUX, **C. GRANDIN**, T. DUPREZ

How to measure olfactory bulb volume and olfactory sulcus depth

B-ENT 2009; 5 Suppl 13: 53-60 (IF:0.394)

2010 :

89) C. MUSSOLIN, A. DE VOLDER, **C. GRANDIN**, X. SCHOLGEL, M.C. NASSOGNE, M.P. NOEL

Neural correlates of symbolic number comparison in developmental dyscalculia.

J Cogn Neurosci 2010, 22: 860-874 (IF: 5.382)

90) P. HABRE-HALLAGE, L. HERMOYE, W. GRADKOWSKI, R. JACOBS, H. REYCHLER, **C.B. GRANDIN**

A manually-controlled new device for punctuate mechanical stimulation of teeth during fMRI studies

J Clin Periodontol 2010; 37: 863-872 (IF: 3.549)

91) G. COSNARD, T. DUPREZ, **C. GRANDIN**, D. HERNALSTEEN

Moelle épinière tumorale et pseudo-tumorale

J Radiol 2010 ; 91 : 988-997 (IF: 0.567)

92) P. ROMBAUX, C. HUART., A.G. DE VOLDER, I. CUEVAS, L. RENIER, T. DUPREZ, C. GRANDIN

Increased olfactory bulb volume in early blind subjects

Neuroreport 2010; 21: 1069-1073 (IF: 1.802)

93) I. CUEVAS, B. GERARD, P. PLAZA, E. LERENS, O. COLLIGNON, C. **GRANDIN**, A.G. DE VOLDER, L. RENIER

Development of a fully automated system for delivering odors in MRI environment
Behavior Research Methods 2010; 42: 1072-1078

2011 :

94) P. ASTARCI, D. GLINEUR, J. KEFER, W. D'HOORE, J. RENKIN, J.L.VANOVERSCHELDE, G. EL KOURY, **C. GRANDIN**

Magnetic resonance imaging evaluation of cerebral embolization during percutaneous aortic valve implantation: comparison of transfemoral and trans-apical approaches using Edwards Sapiens valve.
Eur J Cardiothorac Surg 2011; 40: 475-479 (IF: 2.250)

95) B. HANSEEUW, L. DRICOT, M. KAVEC, C. GRANDIN, X. SERON, A. IVANOIU

Associative encoding deficit in amnesic mild cognitive impairment: a volumetric and functional MRI study.

NeuroImage 2011; 56: 1743-1748 (IF: 5.895)

96) B. HANSEEUW, K. VAN LEEMPUT, M. KAVEC, **C. GRANDIN**, X. SERON, A. IVANOIU

Mild cognitive impairment: differential atrophy in the hippocampal subfields. Am J Neuroradiology
AJNR, 2011; 32, 1658-1661 (IF: 2.928)

2012 :

97) P. PLAZA, I. CUEVAS, **C. GRANDIN**, A.G. DE VOLDER, L. RENIER

Looking into task-specific activation using a prosthesis substituting vision with audition
ISRN Rehabilitation, 2012, Article ID 490950, 15 pages, doi:10.5402/2012/490950

98) P. HABRE-HALLAGE, L. DRICOT, R. JACOBS, D. VAN STEENBERGHE, H. REYCHLER, **C.B. GRANDIN**

Brain plasticity and cortical correlates of osseoperception revealed by punctuate mechanical stimulation of osseointegrated oral implants during fMRI

European Journal of Oral Implantology, Summer; 5(2); 175-190 (IF:1.667)

2013 :

99) P. ASTARCI, J. PRICE, D. GLINEUR, W. D'HOORE, J. KEFER, G. EL KOURY, **C. GRANDIN**, J-L VANOVERSCHELDE

Cerebral embolization during percutaneous valve implantation does not occur during balloon inflation valvuloplasty: prospective diffusion-weighted brain MRI study.

J Heart Valve Dis. 2013; Jan 22(1):79-84 (IF: 1.071)

100) T. SMETS, A. JANKOVSKI, T.M. LAWSON, **C. GRANDIN**, C. RAFTOPOULOS

Immediate post-operative MRI suggestive of the site and timing of glioblastoma recurrence after gross total resection: a retrospective longitudinal study

Eur Radiol. 2013; Jun 23(6):1467-77 (IF: 3.548)

101) P. MAURAGE, F. JOASSIN, M. PESENTI, C. GRANDIN, A. HEEREN, P. PHILIPPOT, P. DE TIMARY

The neural network sustaining crossmodal integration is impaired in alcohol-dependance : an fMRI study

Cortex. 2013 ; Jun 49(6): 1610-26 (IF: 7.25)

102) L. RENIER, I. CUEVAS, **C.B. GRANDIN**, L. DRICOT, P. PLAZA, E. LERENS, P. ROMBAUX, A.G. DE VOLDER

Right occipital cortex activation correlates with superior odor processing performance in early blind
PLoS One 2013; 14: 8(8): e71907 (IF: 3.730)

103) E. PONZETTO, M. VINETTI, C. GRANDIN, T. DUPREZ, V. VAN PESH, N. DEGGOUJ, R. LHOMMEL, P. HANTSON
Partly reversible central auditory dysfunction induced by cerebral vasospasm after subarachnoid hemorrhage.
J Neurosurg. 2013 Aug 23. [Epub ahead of print (IF: 3.148)]

104) C. MICHEL, L. DRICOT, R. LHOMMEL, C. GRANDIN, A. IVANOIU, A. PILLON, D. SAMSON
Extensive left temporal pole damage does not impact on theory of mind abilities.
J Cognitive Neurosci. 2013; sept 18 [Epub ahead of print (IF: 4.493)]

105) C. MUSSOLIN, M.P. NOEL, M. PESSENTI, C. GRANDIN, A.G DE VOLDER
Neural correlates of numerical distance effect in children.
Front Psychol. 2013; 4: 663. doi: 10.3389/fpsyg.2013.00663

Submitted or In preparation

106) D. DISPA, **C. GRANDIN**, C. DETREMBLEUR, M. PENTA, J.L. THONNARD
Grip-lift forces and EMG measurements throughout a grip-lift task executed during fMRI at 3T
Submitted to ISRN Rehabilitation

107) P. HABRE-HALLAGE, L. DRICOT, L. HERMOYE, H. REYCHLER, D. VAN STEENBERGHE, R. JACOBS, **C.B. GRANDIN**
Cortical activation resulting from the stimulation of periodontal mechanoreceptors measured by functional magnetic resonance imaging
Submitted to Clinical Oral Investigation

108) P. PLAZA, L. RENIER, I. CUEVAS, C. GRANDIN, A. DE VOLDER
Perceiving sound encoded schematic faces activates the fusiform face area in blindfolded humans
In preparation

109) A. IVANOIU, L. DRICOT, N. GILLIS, C. GRANDIN, R. LHOMMEL, L. QUENON, B. HANSEEUW
The classification of non demented patients attending a Memory Clinic according to the NIA&AA guidelines on Alzheimer's disease related biomarkers.
In preparation