

4. Publications, transfert et animation

I Publications

- **publications originales dans des revues à comité de lecture et autres articles référencés dans Pubmed,**

dont 2 en révision, 46 référencés dans Pubmed

- J18-1 Amdouni E, **Gibaud B.** Towards a Standard Ontology of Surgical Process Models Imaging Biomarker Ontology (IBO): a biomedical ontology to annotate and share imaging biomarker data. *J of Data Semantics* (en révision).
- J18-2 **Gibaud B.**, Forestier G, Feldmann C, Ferrigno G, Gonçalves P, Haidegger T, Julliard C, Katic D, Kenngott H, Maier-Hein L, März K, de Momi E, Nagy DA, Nakawala H, Neumann J, Neumuth T, Rojas Balderrama J, Speidel S, Wagner M and Jannin P. Towards a standard ontology of Surgical Process Models. *Int J Computer Assisted Radiology and Surgery* (accepted)
- J18-3 Finet P, **Gibaud B.**, Dameron O, Le Bouquin Jeannès R. Interoperable infrastructure and implementation of a health data model for remote monitoring of chronic diseases with comorbidities. *IRBM* 39(2018)151–159.
- J16-1 Finet P, **Gibaud B.**, Dameron O, Le Bouquin Jeannès R. Relevance of Health Level 7 Clinical Document Architecture and Integrating the Healthcare Enterprise cross-enterprise document sharing profile for managing chronic wounds in a telemedicine context. *Healthcare Technology Letters* (2016), pp. 1–5. doi: 10.1049/htl.2015.0053.
- J16-2 Le Reste PJ, Haegelen C, **Gibaud B.**, Moreau T, Morandi X. Connections of the dorsolateral prefrontal cortex with the thalamus: a probabilistic tractography study. *Surg Radiol Anat.* 2016 Aug;38(6):705-10. doi: 10.1007/s00276-015-1603-8.
- J15-1 Moreau T, **Gibaud B.** Ontology-based approach for in vivo human connectomics: the medial Brodmann area 6 case study. *Frontiers in Neuroinformatics*. doi: 10.3389/fninf.2015.00009. eCollection 2015.
- J15-2 Katic D, Julliard C, Wekerle AL, Kenngott H, Müller-Stich BP, Dillmann R, Speidel S, Jannin P, **Gibaud B.** LapOntoSPM - An Ontology for Laparoscopic Surgeries and its Application to Surgical Phase Recognition. *Int J Computer Assisted Radiology and Surgery* 2015 Sep;10(9):1427-34. doi: 10.1007/s11548-015-1222-1.
- J15-3 Batrancourt B, Dojat M, **Gibaud B.**, Kassel G. A multilayer ontology of instruments for neurological, behavioural and cognitive assessments. *Neuroinformatics* 13:93-110, 2015.
- J15-4 Finet P, Le Bouquin Jeannès R, Dameron O, **Gibaud B.** Review of current telemedicine applications for chronic diseases. Toward a more integrated system. *Innovation and Research in Biomedical Engineering* (2015), 36(3). DOI:10.1016/j.irbm.2015.01.009
- J14-1 **Gibaud B.**, Forestier G, Benoit-Cattin H, Cervenansky F, Clarysse P, Friboulet D, Gaignard A, Hugonnard P, Lartizien C, Liebgott H, Montagnat J, Tabary J, Glatard T. OntoVIP: an ontology for the annotation of object models used for medical image simulation. *Journal of Biomedical Informatics* (2014) 52:279-92.
- J14-2 Gaignard A, Montagnat J, **Gibaud B.**, Forestier G, Glatard T. Domain-specific summarisation of Life-Science e-experiments from provenance traces. *Journal of Web Semantics* (2014) 29:19-30.
- J14-3 Magro E, Moreau T, Seizeur R, Zemmoura I, **Gibaud B.**, Morandi X. Connectivity within the primary motor cortex: a DTI tractography study. *Surg Radiol Anat.* 2014 Mar;36(2):125-35.
- J13-1 Glatard T, Lartizien C, **Gibaud B.**, da Silva RF, Forestier G, Cervenansky F, Alessandrini M, Benoit-Cattin H, Bernard O, Camarasu-Pop S, Cerezo N, Clarysse P, Gaignard A, Hugonnard P, Liebgott H, Marache S, Marion A, Montagnat J, Tabary J, Friboulet D. A virtual imaging platform for multi-modality medical image simulation. *IEEE Trans Med Imaging.* 2013 Jan;32(1):110-8. doi: 10.1109/TMI.2012.2220154.
- J12-1 Magro E, Moreau T, Seizeur R, **Gibaud B.**, Morandi X. Characterization of short white matter fiber bundles in the central area from diffusion tensor MRI. *Neuroradiology.* 2012;54(11):1275-85. doi: 10.1007/s00234-012-1073-1.
- J11-1 **Gibaud B.**, Kassel G, Dojat M, Batrancourt B, Michel F, Gaignard A, Montagnat J. NeuroLOG : Sharing neuroimaging data using an ontology-based federated approach. Annual Symposium proceedings

electronic resource / AMIA Symposium. AMIA Symposium, 2011, pp. 472-80.

- J10-1 **Gibaud B.** Semantic web: key technologies for bridging imaging and translational medicine. *Imaging in Medicine*, December 2010, Vol. 2, No. 6, 609-611.
pas indexé dans pubmed
- J10-2 Haegelen C, Garcia-Lorenzo D, Le Jeune F, Peron J, **Gibaud B**, Riffaud L, Brassier G, Barillot C, Verin M, Morandi X. SPECT and PET analysis of subthalamic stimulation in Parkinson's disease: analysis using a manual segmentation. *J Neurol* 2010;257(3):375-82.
- J09-1 Mechouche A, Golbreich C, Morandi X, **Gibaud B**. A hybrid system using symbolic and numeric knowledge for the semantic annotation of sulco-gyral anatomy in brain MRI images. *IEEE Trans Med Imaging* ;28(8):1165-78.
- J08-1 Mechouche A, Golbreich C, Morandi X, **Gibaud B**. Ontology-based annotation of brain MRI images. *AMIA Annu Symp Proc*. 2008 Nov 6:460-4. ([.pdf](#))
- J08-2 Mechouche A, Morandi X, Golbreich C, **Gibaud B**. A hybrid system for the semantic annotation of sulco-gyral anatomy in MRI images. *Med Image Comput Comput Assist Interv*. 2008;11(Pt 1):807-14. ([.pdf](#))
- J08-3 Temal L, Dojat M, Kassel G, **Gibaud B**. Towards an ontology for sharing medical images and regions of interest in neuroimaging. *J Biomed Inform*. 2008 Oct;41(5):766-78. Epub 2008 Mar 17. ([.pdf](#))
- J07-1 Dameron O, Musen MA, **Gibaud B**. Using semantic dependencies for consistency management of an ontology of brain-cortex anatomy. *Artif Intell Med*. 2007 Mar;39(3):217-25. Epub 2007 Jan 24. PMID: 17254759 [[PubMed - indexed for MEDLINE](#)]
- J06-1 Barillot C, Benali H, Dojat M, Gaignard A, **Gibaud B**, Kinkingnöhun S, Matsumoto JP, Pélégrini-Issac M, Simon E, Temal L. Federating distributed and heterogeneous information sources in neuroimaging: the NeuroBase Project. *Stud Health Technol Inform*. 2006;120:3-13. PMID: 16823118 [[PubMed - indexed for MEDLINE](#)]
- J05-1 Haegelen C, Verin M, Broche BA, Prigent F, Jannin P, **Gibaud B**, Morandi X. Does subthalamic nucleus stimulation affect the frontal limbic areas ? A single-photon emission computed tomography study using a manual anatomical segmentation method. *Surg Radiol Anat*. 2005 Dec;27(5):389-94. Epub 2005 Sep 14. PMID: 16160830 [[PubMed - indexed for MEDLINE](#)]
- J05-2 Grova C, Jannin P, Buvat I, Benali H, Bansard JY, Biraben A, **Gibaud B**. From anatomic standardization analysis of perfusion SPECT data to perfusion pattern modeling: evidence of functional networks in healthy subjects and temporal lobe epilepsy patients. *Acad Radiol*. 2005 May;12(5):554-65. PMID: 15866127 [[PubMed - indexed for MEDLINE](#)]
- J05-3 Aubert-Broche B, Jannin P, Biraben A, Bernard AM, Haegelen C, Le Jeune FP, **Gibaud B**. Evaluation of methods to detect interhemispheric asymmetry on cerebral perfusion SPECT: application to epilepsy. *J Nucl Med*. 2005 Apr;46(4):707-13.
- J04-1 Dameron O, **Gibaud B**, Morandi X. Numeric and symbolic knowledge representation of cerebral cortex anatomy: methods and preliminary results. *Surg Radiol Anat*. 2004 Jun;26(3):191-7. Epub 2004 Apr 30. PMID: 15118839 [[PubMed - indexed for MEDLINE](#)]
- J03-1 Jannin P, Rimbault M, Morandi X, Riffaud L, **Gibaud B**. Model of surgical procedures for multimodal image-guided neurosurgery. *Comput Aided Surg*. 2003;8(2):98-106. PMID: 15015723 [[PubMed - indexed for MEDLINE](#)]
- J03-2 Grova C, Jannin P, Biraben A, Buvat I, Benali H, Bernard AM, Scarabin JM, **Gibaud B**. A methodology for generating normal and pathological brain perfusion SPECT images for evaluation of MRI/SPECT fusion methods: application in epilepsy. *Phys Med Biol*. 2003 Dec 21;48(24):4023-43. PMID: 14727749 [[PubMed - indexed for MEDLINE](#)]
- J03-3 **Gibaud B**, Dameron O, Morandi X. Re-use of a multi-purpose knowledge corpus on cortex anatomy for educational purposes. *Stud Health Technol Inform*. 2003;95:439-44. PMID: 14664026 [[PubMed - indexed for MEDLINE](#)]
- J03-4 Dameron O, Burgun A, Morandi X, **Gibaud B**. Modelling dependencies between relations to ensure consistency of a cerebral cortex anatomy knowledge base. *Stud Health Technol Inform*. 2003;95:403-8. PMID: 14664020 [[PubMed - indexed for MEDLINE](#)]
- J03-5 Cordonnier E, Croci S, Laurent JF, **Gibaud B**. Interoperability and medical communication using "patient envelope"-based secure messaging. *Stud Health Technol Inform*. 2003;95:230-5. PMID: 14663992 [[PubMed - indexed for MEDLINE](#)]
- J03-6 Rimbault M, Jannin P, Morandi X, Riffaud L, **Gibaud B**. Models of surgical procedures for multimodal image-guided neurosurgery. *Stud Health Technol Inform*. 2003;95:50-5. PMID: 14663962 [[PubMed - indexed for MEDLINE](#)]
- J03-7 Hellier P, Barillot C, Corouge I, **Gibaud B**, Le Goualher G, Collins DL, Evans A, Malandain G, Ayache N, Christensen GE, Johnson HJ. Retrospective evaluation of intersubject brain registration. *IEEE Trans Med Imaging*. 2003 Sep;22(9):1120-30.

- PMID: 12956267 [PubMed - indexed for MEDLINE]
- J03-8 Corouge I, Hellier P, **Gibaud** B, Barillot C. Interindividual functional mapping: a nonlinear local approach. *Neuroimage*. 2003 Aug;19(4):1337-48.
PMID: 12948692 [PubMed - indexed for MEDLINE]
- J03-9 Aubert-Broche B, Grova C, Jannin P, Buvat I, Benali H, **Gibaud** B. Detection of inter-hemispheric asymmetries of brain perfusion in SPECT. *Phys Med Biol*. 2003 Jun 7;48(11):1505-17.
PMID: 12817934 [PubMed - indexed for MEDLINE]
- J03-10 Levrel JJ, Carsin-Nicol B, Louail-Tabourel C, Chabert E, Darnault P, **Gibaud** B, Dameron O, Morandi X. Electronic imaging with photo-realistic rendering for neuroanatomy teaching. Methods and preliminary results *J Neuroradiol*. 2003 Jan;30(1):31-6. French.
PMID: 12624589 [PubMed - indexed for MEDLINE]
- J02-1 Dameron O, **Gibaud** B, Burgun A, Morandi X. Towards a sharable numeric and symbolic knowledge base on cerebral cortex anatomy: lessons learned from a prototype. *Proc AMA Symp*. 2002;:185-9.
PMID: 12463812 [PubMed - indexed for MEDLINE]
- J02-2 Jannin P, Morandi X, Fleig OJ, Le Rumeur E, Toulouse P, **Gibaud** B, Scarabin JM. Integration of sulcal and functional information for multimodal neuronavigation. *J Neurosurg*. 2002 Apr;96(4):713-23.
PMID: 11990812 [PubMed - indexed for MEDLINE]
- J00-1 Heautot JF, Eichelberg M, **Gibaud** B, Tréguier C, Lemoine D, Scarabin JM, Piquerias J, Carsin M, Gandon Y. The RETAIN project: DICOM teleradiology over an ATM-based network. Radiological Examinations Transfer on an ATM Integrated Network. *Eur Radiol*. 2000;10(1):175-82.
PMID: 10663740 [PubMed - indexed for MEDLINE]
- J99-1 Heautot JF, **Gibaud** B, Catroux B, Thoreux PH, Cordonnier E, Scarabin JM, Carsin M, Gandon Y. Influence of the teleradiology technology (N-ISDN and ATM) on the inter-hospital management of neurosurgical patients. *Med Inform Internet Med*. 1999 Apr-Jun;24(2):121-34.
PMID: 10399710 [PubMed - indexed for MEDLINE]
- J98-1 **Gibaud** B, Garlatti S, Barillot C, Faure E. Computerized brain atlases as decision support systems: a methodological approach. *Artif Intell Med*. 1998 Sep-Oct;14(1-2):83-100.
PMID: 9779884 [PubMed - indexed for MEDLINE]
- J98-2 **Gibaud** B, Garfagni H, Aubry F, Pokropék AT, Chameroy V, Bizais Y, Di Paola R. Standardization in the field of medical image management: the contribution of the MIMOSA model. *IEEE Trans Med Imaging*. 1998 Feb;17(1):62-73.
PMID: 9617908 [PubMed - indexed for MEDLINE]
- J97-1 **Gibaud** B, Hervault B. Image management in PACS: how should they be decomposed into well-defined and interoperable industrial products? *Med Inform (Lond)*. 1997 Oct-Dec;22(4):315-24.
PMID: 9509402 [PubMed - indexed for MEDLINE]
- J94-1 Garfagni H, **Gibaud** B, Stut W, Aubry F, Bizais Y. MIMOSA: a functional model of the management of medical images. *Med Inform (Lond)*. 1994 Apr-Jun;19(2):95-108.
PMID: 7799695 [PubMed - indexed for MEDLINE]
- J93-1 Barillot C, Lemoine D, Le Briquer L, Lachmann F, **Gibaud** B. Data fusion in medical imaging: merging multimodal and multipatient images, identification of structures and 3D display aspects. *Eur J Radiol*. 1993 Jun;17(1):22-7.
PMID: 8348908 [PubMed - indexed for MEDLINE]
- J93-2 **Gibaud** B, Morcet N, Gandon Y. Image archiving and communication systems: review of ten years' experiences and perspectives. *Ann Radiol (Paris)*. 1993;36(6-7):412-24. Review. French.
PMID: 8117040 [PubMed - indexed for MEDLINE]
- J88-1 Barillot C, **Gibaud** B, Lis O, Min LL, Bouliou A, Le Certen G, Collorec R, Coatrieux JL. Computer graphics in medicine: a survey. *Crit Rev Biomed Eng*. 1988;15(4):269-307. Review.
PMID: 3286114 [PubMed - indexed for MEDLINE]

Remarques :

- les publications n° J11-1, J08-1, J08-2, J03-3, J03-4, J03-5, J03-6, J02-1 sont des articles longs publiés dans les proceedings de congrès référencés dans Pubmed.

Les 9 publications suivantes ne sont pas indexées dans Pubmed, mais il s'agit néanmoins d'articles originaux dans des journaux à comité de lecture

- Jni02-1 Charlet J, Cordonnier E, **Gibaud** B. Interopérabilité en médecine : quand le contenu interroge le contenant et l'organisation. *Information - Interaction - Intelligence*, 2(2):37-62, 2002.
- Jni96-1 **Gibaud** B, Hervault B, Cordonnier E, Lussot E, Gandon Y, Meunier C, Klipfel B: Transition d'un prototype PACS vers un système industriel ouvert multi-constructeurs. *Revue Européenne de Technologie Biomédicale*, Vol. 18(5), 1996, p 137-144.
- Jni92-1 Lucas C, Urbano L, Duvaufier R, **Gibaud** B, Cuvilliers D, Scarabin JM, Ramee A : Evaluation

subjective de la compression des images numériques issues d'un vidéodisque. *Revue d'Imagerie Médicale*, n° 4, 1992, pp 53-59.

- Jni91-1 Manens JP, Le Gall G, Fresne F, Barillot C, **Gibaud B**, Lemoine D, Bouliou A, Chenal C, Ben Hassel C, Scarabin JM. Irradiation multifaisceaux : plan de traitement assisté par ordinateur. *Bull. Cancer Radiother.*, 78(3):327-336, 1991.
- Jni87-1 Barillot C, **Gibaud B**, Le Certen G, Bouliou A, Collorec R, Velut S. 3-D Modeling and Computer Graphics: An Approach Directed to Teaching and Therapy Planning. *ITBM- Innovation et Technologie en Biologie et Médecine*, 8(1):121-132, 1987.
- Jni86-1 Renoulin R, Scarabin JM, Coatrieu JL, Launay JC, Babonneau G, **Gibaud B**, Curet D, Le Certen G, Mahieddine B, Islas Perez C, Barillot C, Launay M, Heuze F. The Sirene project (medical archive automation). *Bull. IDATE*, 25:256-70, 1986.
- Jni85-1 Renoulin R, Scarabin JM, **Gibaud B** : Des réseaux informatiques aux réseaux large bande : conditions d'évolution vers des systèmes d'informations multi-services intégrés. *Gestion Hospitalière* n° 248, 1985, pp. 527-535.
- Jni85-2 **Gibaud B**, Barillot C, Scarabin JM. Photogrammétrie et Synthèse d'Images 3D pour la Représentation du Réseau Vasculaire Cérébral. *ITBM- Innovation et Technologie en Biologie et Médecine*, 6(2):159-166, 1985.
- Jni85-3 Barillot C, **Gibaud B**, Scarabin JM, Coatrieu JL. Three Dimensional Reconstruction of Cerebral Blood Vessels. *IEEE Computer Graphics and Applications*, 5(12):13-19, 1985.

- **articles de revue**

6 articles

- R18-1 Maier-Hein L, Eisenmann M, Feldmann C, Feussner H, Forestier G, Giannarou S, **Gibaud B**, Hager G, Hashizume M, Katic D, Kenngott H, Kikinis R, Kranzfelder M, Malpani A, März K, Müller-Stich B, Navab N, Neumuth T, Padov N, Park A, Pugh C, Schoch N, Stoyanov D, Taylor R, Wagner M, Swaroop VS, Jannin P, Speidel S. Surgical Data Science: A Consensus Perspective. eprint arXiv:1806.03184 (2018).
- R15-1 Smith B, Arabandi S, Brochhausen M, Calhoun M, Ciccarese P, Doyle S, **Gibaud B**, Goldberg I, Kahn CE Jr., Overton J, Tomaszewski J, Gurcan M. Biomedical Imaging Ontologies: A survey and proposal for future work. *Journal of Pathology Informatics* 2015, 6 :37.
- R11-1 **Gibaud B**. The quest for standards in medical imaging. *European Journal of Radiology* 2011, 78(2):190-198.
- R01-1 **Gibaud B**. Les réseaux d'imagerie médicale : réalités et enjeux, in « L'information médicale numérique », Pierre Le Beux et Dominique Boullier (eds), *Les Cahier du Numérique*, 2(2) 75-104, 2001.
- R01-2 Jannin P, Grova C, **Gibaud B**. Fusion de données en imagerie médicale : une revue méthodologique basée sur le contexte clinique. *ITBM-RBM Innovation et Technologie en Biologie et Médecine*, 22(4):196-215, 2001.
- R94-1 **Gibaud B**, Morcet N, Gandon Y. Les systèmes de communication et d'archivage d'images : Bilan et perspectives. *Informatique et santé*, n° 17, 1994, pp 32-39.

- **Contributions à des 'position paper'**

2 articles

- PP18-1 ESR paper on structured reporting in radiology. *Insights Imaging* (2018) 9:1-7. DOI 10.1007/s13244-017-0588-8
- PP15-1 ESR Position paper on imaging biobank. *Insights Imaging* (2015) 6(4):403-10, 2015. DOI 10.1007/s13244-015-0409-x

- **publications à caractère didactique et chapitres de livres.**

20 articles

- O16-1 Chabriais J and **Gibaud B**. DICOM, le standard pour l'imagerie médicale, Encyclopédie Médico Chirurgicale (EMC) - Radiologie et imagerie médicale - principes et technique – radioprotection. 35-120-A-10, Elsevier Masson SAS, 2016.
- O13-1 Chabriais J and **Gibaud B**. DICOM, le standard pour l'imagerie médicale, In 'Traitement de l'image - de la numérisation à l'archivage et à la communication' (coordonné par O. Hélénon), Elsevier-Masson, p. 99-150. 2013.
- O13-2 **Gibaud B** and Chabriais J. Systèmes de communication et d'archivage d'images et leur intégration dans les systèmes de gestion de dossiers patient, In 'Traitement de l'image - de la numérisation à l'archivage et à la communication' (coordonné par O. Hélénon), Elsevier-Masson, p. 151-196. 2013.
- O12-1 Scarabin JM, Mercier Ph, Delion M, Barillot C, Jannin P, **Gibaud B**, Berton E. From Bourgery's anatomy to multiparameter, 3D, digital imaging, individual for each patient. In 'Stereotaxy and epilepsy surgery'

Jean-Marie Scarabin (Ed), published by John Libbey Eurotext Editions, 2012, pp. 41-90.

O12-2 Cordonnier E, Croci S, Hervault B, Lemoine D, Mével G, **Gibaud B**.

Communicative neuroimaging. In 'Stereotaxy and epilepsy surgery' Jean-Marie Scarabin (Ed), published by John Libbey Eurotext Editions, 2012, pp. 158-178.

O12-3 **Gibaud B** et Chabriais J. Les systèmes de communication et d'archivage d'images et leur intégration dans les systèmes de gestion de dossiers patient, Encyclopédie Médico-Chirurgicale (EMC) Radiologie et imagerie médicale - Principes et technique - radioprotection, Vol 35-125-A-10, Elsevier Masson SAS, 2012.

O10-1 Chabriais J and **Gibaud B**. DICOM, le standard pour l'imagerie, *Encyclopédie Médico-Chirurgicale (EMC) Radiologie et imagerie médicale – principe et technique*, Vol 35-120-A-10, Elsevier, 2010.

O08-1 **Gibaud B**. The DICOM Standard: a brief overview, in "Molecular imaging: Computer reconstruction and practice", Y. LE MOIGNE , A. CANER (editors), Springer, 2008, p. 229–238, ([pdf](#)).

O08-2 **Gibaud B** and Chabriais J, The role of standards in the compression of medical images, in « Compression of medical images and signals », Amine Naït-Ali and Christine Cavaro-Ménard (eds), Digital signal and image processing series, John Wiley & Sons, Inc., pp 77-100, 2008.

O07-1 **Gibaud B** et Chabriais J, Place des standards dans la compression des images, médicale, in « Compression des images et des signaux médicaux », Amine Naït-Ali et Christine Cavaro-Ménard (eds), Traité IC2, Hermès-Lavoisier, pp 99-123, 2007.

O05-1 **Gibaud B** and Chabriais J. Les systèmes de communication et d'archivage d'images et leur intégration dans les systèmes de gestion de dossiers patient, *Encyclopédie Médico-Chirurgicale (EMC) Radiodiagnostic – Principes et techniques d'imagerie*, Vol 35-125-A-10, Elsevier, 2005.

O04-1 Chabriais J and **Gibaud B**. DICOM, le standard pour l'imagerie médicale, *Encyclopédie Médico-Chirurgicale- Radiologie 1* :577-603, 2004.

O02-1 Cordonnier E, **Gibaud B**, Charlet J, Charbonnel P, Rougerie F, Mennerat F, Chevalier F, Demay MJ, Estève A, Hajji L, Paquel N. L'approche enveloppe pour les échanges de dossiers médicaux multimédia : le projet EDI données cliniques, in « Télémédecine et e-santé », R. Beuscart, P. Zweigenbaum, A. Venot et P. Degoulet (eds), Série « Informatique et santé » (13), Springer, pp 3-10, 2002.

O01-1 Jannin P., Grova C., **Gibaud B**. *Medical applications of NDT data fusion*, pages 227-267. Applications of NDT data fusion. Kluwer Academic Publishers, Gros X.E. edition, 2001.

O95-1 Barillot C, **Gibaud B**, Gee JC, Lemoine D : Segmentation and Fusion of Multimodality and Multi-Subjects Data for the Preparation of Neurosurgical Procedures. in Medical Imaging: Analysis of Multimodality 2D/3D Images, Series : *Studies in Health Technology and Informatics*, Volume 19, Edited by L. Beolchi and M.H. Kuhn, IOS Press, pp 70-82, 1995.

O94-1 Barillot C, Lemoine D, Le Briquer L, Lachmann F, **Gibaud B**. Data Fusion in Medical Imaging: Merging Multimodal and Multipatient Images, Identification of Structures and 3D Display Aspects. Selected paper in 1994 *IMIA Yearbook of Medical Informatics*, J.H. Van Bemmel and A.T. McCray Eds, Schattauer Publ., pp 290-295, 1994.

O92-1 **Gibaud B**, Scarabin JM, Gandon Y. PACS Evolution between 1980 and 2000, in "Integrated Diagnostic Imaging: Digital PACS in Medicine 1980-2000", J.P.J. de Valk Ed., Elsevier Science Publishers, pp 175-200, 1992.

O91-1 **Gibaud B**., Toumoulin C, Scarabin JM. PACS activities at the University Hospital of Rennes: *NATO ASI series*, Vol. F74 "PACS in medicine", H.K. Huang et al., Ed., Springer Verlag Berlin Heidelberg pp 263-265, 1991.

O91-2 Bizaïs Y, Forte AM, **Gibaud B**, Aubry F. Storage and retrieval of medical image data, relationship to image processing and analysis: *NATO ASI series*, Vol. F74 "PACS in medicine", H.K. Huang et al., Ed., Springer Verlag, pp 357-359, 1991.

O91-3 Bizaïs Y, Aubry F, **Gibaud B**, Scarabin JM, Di Paola R. A comprehensive model for medical image data bases, in "Integrated System for the Management and Manipulation of Medical Images" J. Demongeot and A. Sousa Pereira (eds), Springer Verlag, pp 73-81, 1991.

- **mémoires d'habilitation et thèse.**

T00-1 **Gibaud B** : Intéropérabilité syntaxique et sémantique pour l'échange de données et de connaissances en imagerie médicale, Thèse d'Habilitation à diriger des recherches, Université de Rennes I, 2000.

T83-1 **Gibaud B** : Etude et réalisation d'un système d'analyse d'informations radiologiques tridimensionnelles tomodensitométriques, stéréotaxiques et stéréoscopiques, Thèse de doctorat d'ingénieur, Université de Rennes I, 1983.

- ***publications effectuées dans le cadre de congrès internationaux (articles longs)***

100 articles

- C18-1 Amdouni E, **Gibaud B.** Semantic representation of neuroimaging observations: proof of concept Based on the VASARI terminology. 10th International Conference on Knowledge Engineering and Ontology Development (KEOD), 18-20 Sept 2018, Séville (Espagne).
- C16-1 Claude G, Gouranton V, Caillaud B, **Gibaud B.** Arnaldi B, Jannin P. Synthesis and simulation of surgical process models. Medicine Meets Virtual Reality (MMVR 22) Apr 2016, Los Angeles (USA) *Studies in Health Technology and Informatics*, IOS Press, 2016, 220, pp.63-70.
DOI : [10.3233/978-1-61499-625-5-63](https://doi.org/10.3233/978-1-61499-625-5-63)
- C16-2 Amdouni E, **Gibaud B.** Concept-based versus Realism-based approach to represent neuroimaging observations. 8th International Conference on Knowledge Engineering and Ontology Development (KEOD), 9-11 Nov 2016, Porto (Portugal).
- C15-1 Moreau T, **Gibaud B.** A pipeline for automatic semantic annotation of human connectomics revealed by diffusion tractography. Symposium on Big Data Initiatives for Connectomics Research, London (UK), 30 September 2015.
- C15-2 Amdouni E, Morvan Y, **Gibaud B.** Towards an Imaging Biomarker Ontology Based on the Open Biological and Biomedical Ontologies Foundry (Poster). Proceedings of the 8th Semantic Web Applications and Tools for Life Sciences International Conference (SWAT4LS), Cambridge UK, December 7-10 2015, CEUR Vol. 1546, 193-194.
- C14-1 **Gibaud B.**, Penet C, Jannin P. OntoSPM: a core ontology of surgical procedure models. Conference Surgetica 2014. Chambéry (France)
- C14-2 Garraud C, **Gibaud B.**, Penet C, Cazuguel G, Dardenne G, Jannin P. An ontology-based software for the analysis of surgical process model. Conference Surgetica 2014. Chambéry (France)
- C13-1 Moreau T, **Gibaud B.** Connectivity-based parcellation of the postcentral gyrus using a spectral approach, *Proc. SPIE* 8669, Medical Imaging 2013: Image Processing, 86692B (March 13, 2013); doi:10.1117/12.2006875
- C12-1 Glatard T, Marion A, Benoit-Cattin H, Camarasu-Pop S, Clarysse P, da Silva RF, Forestier G, **Gibaud B.**, Lartizien C, Liebgott H, Moulin K, Friboulet D. Multi-modality image simulation with the Virtual Imaging Platform: Illustration on cardiac echography and MRI. In: ISBI : IEEE, 2012. - ISBN 978-1-4577-1858-8, S. 98-101.
- C12-2 Wali B, **Gibaud B.** Semantic annotation of image processing tools. Proceedings of the 2nd International Conference on Web Intelligence, Mining and Semantics, Craiova (Romania), Article No. 29, ACM New York, NY, USA(2012). doi>10.1145/2254129.2254165
- C12-3 Wali B, **Gibaud B.** Extending OWL-S for the composition of web services generated with a legacy application wrapper. ICIW 2012, The Seventh International Conference on Internet and Web Applications and Services, May 2012, Stuttgart, Germany. pp. 97 - 105.
- C12-4 **Gibaud B.**, Forestier G, Benoit-Cattin H, Cervenansky F, Clarysse P, Friboulet D, Gaignard A, Hugonnard P, Lartizien C, Liebgott H, Montagnat J, Tabary J, Glatard T. OntoVIP. An ontology for the annotation of object models used for medical image simulation. Second annual IEEE International Conference on Healthcare informatics, Imaging and Systems Biology (HISB'2012), La Jolla, Ca (USA), 2012. (Best Poster Award)
- C11-1 **Gibaud B.**, Kassel G, Dojat M, Batrancourt B, Michel F, Gaignard A, Montagnat J. NeuroLOG : Sharing neuroimaging data using an ontology-based federated approach. Annual Symposium proceedings electronic resource / AMIA Symposium. AMIA Symposium, 2011, pp. 472-80.
<http://www.ncbi.nlm.nih.gov/gate2.inist.fr/pubmed/22195101>
- C11-2 **Gibaud B.**, Ahmad F, Barillot C, Batrancourt B, Dojat M, Gaignard A, Girard P, Godard D, Kassel G, Lingrand D, Malandain G, Michel F, Montagnat J, Péligrini-Issac M, Pennec X, Rojas Balderrama J, Wali B, NeuroLOG : A federated system for sharing and reuse of images and image processing tools in neuroimaging. CARS/EuroPACS Berlin 2011. Int J CARS, 6 (Suppl 1): S62-S63, 2011.
pas indexé dans pubmed
- C11-3 Renard G, Ferial A, **Gibaud B.**, Wiest-Dasslé N, Barillot C. Shanoir: an open source software application designed to help collecting, archiving, retrieving and sharing neuroimaging data. CARS/EuroPACS Berlin 2011. Int J CARS, 6 (Suppl 1): S298-S299, 2011.
pas indexé dans pubmed
- C11-4 Forestier G, Marion A, Benoit-Cattin H, Clarysse P, Friboulet D, Glatard T, Hugonnard P, Lartizien C, Liebgott H, Tabary J, **Gibaud B.** Sharing object models for multi-modality image simulation: a semantic approach. CBMS 2011, Bristol 2011.
pas indexé dans pubmed
<http://doi.ieeecomputersociety.org/10.1109/CBMS.2011.5999167>
- C11-5 Marion A, Forestier G, Benoit-Cattin H, Camarasu-Pop S, Clarysse P, Ferreira da Silva R, **Gibaud B.**,

- Glatard T, Hugonnard P, Lartizien C, Liebgott H, Tabary J, Valette S, Friboulet D. Multi-modality medical image simulation of biological models with the VirtuallImaging Platform (VIP). CBMS 2011, Bristol
pas indexé dans pubmed
<http://doi.ieeecomputersociety.org/10.1109/CBMS.2011.5999141>
- C11-6 Gaignard A, Montagnat J, Wali B, **Gibaud B.** Characterizing semantic service parameters with Role concepts to infer domain-specific knowledge at runtime. International Conference on Knowledge Engineering and Ontology Development (KEOD'11), Paris: France (2011).
pas indexé dans pubmed
- C11-7 Magro E, Moreau T, Seizeur R, **Gibaud B.** White matter short bundles in central area from Diffusion Tensor MRI Study. RSNA 2011 SSA15-06 (abstract).
- C10-1 Batrancourt B, Dojat M, **Gibaud B.** and Kassel G. A core ontology of instruments used for neurological, behavioral and cognitive assessments. In: A. Galton and R. Mizoguchi, eds., Proceedings of the Sixth International Conference on formal Ontology in Information Systems (FOIS 2010), IOS Press, Toronto (Ca), May 2010, 185-198, 2010.
pas indexé dans pubmed
- C10-2 Michel F, Gaignard A, Ahmad F, Barillot C, Batrancourt B, Dojat M, **Gibaud B.**, Girard P, Godard D, Kassel G, Lingrand D, Malandain G, Montagnat J, Pélérini-Issac M, Pennec X, Rojas Balderrama J, Wali B. Grid-wide neuroimaging data federation in the context of the NeuroLOG project, HealthGrid'10 (HG'10), Paris (France). Stud Health Technol Inform ; 159 :112-123, 2010.
- C08-1 Mechouche A, Golbreich C, Morandi X, **Gibaud B.** Ontology-based annotation of brain MRI images, in "AMIA - American Medical Informatics Association- AMIA 2008, Washington, USA", AMIA (editor), 2008, ([pdf](#))
- C08-2 Mechouche A, Morandi X, Golbreich C, **Gibaud B.** A hybrid system for the semantic annotation of sulco-gyrnal anatomy in MRI images. , in "Medical Image Computing and Computer Assisted Intervention, MICCAI'08, New York, USA", D. METAXAS , L. AXEL , G. FICHTINGER , G. SZÉKELY (editors), vol. 5241, Springer-verlag, 2008, p. 807-814 ([pdf](#))
- C07-1 A. Mechouche, C. Golbreich, B. **Gibaud**. Towards an hybrid system using an ontology enriched by rules for the semantic annotation of brain MRI images. In First International Conference on Web reasoning and rule systems, RR'2007, M. Marchiori, J.Z Pan, C. de Sainte Marie (Eds), Lecture Notes in Computer Science, Volume 4524, Innsbruck (Austria), pp 219-228, 2007. ([pdf](#))
- C07-2 C. Barillot, P. Coupé, O. El Ganaoui, B. **Gibaud**, P. Hellier, P. Jannin, P. Paul, S. Prima, N. Wiest-Daesslé, X. Morandi. Image guidance in neurosurgical procedures, the « VISAGES » point of view, In IEEE International Symposium on Biomedical Imaging: From Nano to Macro, ISBI'2007, Washington, USA, April 2007. ([pdf](#))
- C07-3 J. Ure, R. Procter, M. Martone, D. Porteus, S. Lloyd, S. Lawrie, D Job, R. Baldock, A. Philip, D. Liewald, F. Rakebrandt, A. Blaikie, C. McKay, S. Anderson, J. Ainsworth, J. van Hemert, I. Blanquer, R. Sinnott, C. Barillot, B. **Gibaud**, A. Williams, M. Hartswood, P. Watson, L. Smith, A. Burger, J. Kennedy, H. Gonzalez-Velez, R. Stevens, O. Corcho, R. Morton, P. Linksted, M. Deschenes, M. McGilchrist, P. Johnson, A. Voss, R. Gertz, J. Wardlaw. Data Integration in eHealth: A Domain/Disease Specific Roadmap. From Genes to Personalized HealthCare: Grid Solutions for the Life Sciences, *Proceedings of HealthGrid 2007*, Volume 126, Studies in Health Technology and Informatics, N. Jacq, Y. Legré, H. Muller, I. Blanquer, V. Breton, D. Hausser, V. Hernández, T. Solomonides and M. Hofman-Apitius (eds). April 2007, pp 144-153, 2007.
- C06-1 L. Temal, P. Lando, B. **Gibaud**, M. Dojat, G. Kassel, A. Lapujade. OntoNeuroBase: a multi-layered application ontology in neuroimaging. In Second Workshop : Formal Ontologies Meet Industry (FOMI 2006), Trento (Italy), 2006. ([pdf](#))
- C06-2 B. **Gibaud**, C. Barillot, H. Benali, M. Dojat, A. Gaignard, S. Kinkingnéhun, J.P. Matsumoto, M. Pélérini-Issac, E. Simon, L. Temal. Sharing data and image processing tools in neuroimaging. In Computer Assisted Radiology and Surgery, Lemke H.U., Vannier M.W., Inamura K., Farman A.G. and Doi K. (eds.), Volume 1-S1, Pages 41-42, 2006. ([pdf](#))
- C06-3 C. Barillot, H. Benali, M. Dojat, A. Gaignard, B. **Gibaud**, S. Kinkingnehus, J.P. Matsumoto, M. Pelegrini-Issac, E. Simon, L. Temal. Federating distributed and heterogeneous information sources in neuroimaging: the NeuroBase Project. Proceeding Healthgrid 2006, Hernandez V., Blanquer I., Solomonides T., Breton V. and Legré Y. (eds.), IOS Press, pages 3-13, 2006. ([pdf](#))
- C06-4 A. Mechouche, C. Golbreich, B. **Gibaud**. Towards an hybrid system for annotating brain MRI images. In Workshop on OWL Experiences and Directions, B. Cuenca Grau, P. Hitzler, C. Shankey, E. Wallace (eds.), Volume 216, Athens, Georgia, USA, 2006. ([pdf](#))
- C06-5 A. Mechouche, C. Golbreich, B. **Gibaud**. Semantic description of brain MRI images. In SWAMM 2006 Workshop, collocated with WWW 2006, Edinburgh (Scotland), 2006. ([pdf](#))
- C05-1 C. Golbreich, O. Bierlaire, O. Dameron, and B. **Gibaud**. Use case: Ontology with rules for identifying brain anatomical structures. In W3C Workshop on rule languages for interoperability, Washington DC, USA, April 2005. ([pdf](#))

- C05-2 C. Golbreich, O. Dameron, O. Bierlaire, and B. **Gibaud**. Use case: What reasoning support for ontology and rules ? the brain anatomy case study. In Workshop on OWL Experiences and Directions, Galway : Irlande (2005), 2005. ([pdf](#))
- C05-3 B. **Gibaud**, O. Dameron, E. Poiseau, P. Toulouse, and P. Jannin. Implementation of atlas-matching capabilities using web services technology: lessons learned from the development of a demonstrator. In H.U. Lemke, M.W. Vannier, K. Inamura, A.G. Farman, K. Doi, and J.H.C. Reiber, editors, *Computer Assisted Radiology and Surgery*. Elsevier, 2005.
- C04-1 C. Grova, P. Jannin, I. Buvat, H. Benali, and B. **Gibaud**. Evaluation of registration of ictal SPECT/MRI data using statistical similarity methods. In C. Barillot, D.R. Haynor, and P. Hellier, editors, *MICCAI 2004, Saint Malo (France)*, Lecture Notes in Computer Science, volume 3216, pages 687-695. Springer Verlag, 2004.
- C04-2 O. Dameron, B. **Gibaud**, and M. Musen. Using semantic dependencies for consistency management of an ontology of brain cortex anatomy. In *First International Workshop on Formal Biomedical Knowledge Representation KR-MED04*, pages 30-38, 2004.
- C04-3 B. **Gibaud**, M. Dojat, F. Aubry, H. Benali, O. Dameron, S. Kinkingn  hun, J.P. Matsumoto, M. P  l  grini-Issac, R. Valabregue, and C. Barillot. Toward an ontology for sharing neuroimaging data and processing methods: experience learned from the development of a demonstrator. In *Workshop DiDaMIC-Distributed Databases in Medical Image Computing, Rennes (France)*, pages 15-23, 2004.
- C04-4 C. Barillot, R. Valabregue, J.P. Matsumoto, F. Aubry, H. Benali, Y. Cointepas, O. Dameron, M. Dojat, E. Duchesnay, B. **Gibaud**, S. Kinkingn  hun, D. Papadopoulos, M. P  l  grini-Issac, and E. Simon. Management of distributed and heterogeneous information sources in neuroimaging. In *Workshop DiDaMIC- Distributed Databases in Medical Image Computing, Rennes (France)*, pages 85-94, 2004.
- C03-1 Dameron O., Burgun A., Morandi X., and **Gibaud** B. Modelling dependencies between relations to ensure consistency of a cerebral cortex anatomy knowledge base. In R. Baud, M. Fieschi, P. Le Beux, and P. Ruch, editors, *Medical Informatics in Europe 2003, The New Navigators: from Professionals to Patients*, volume 95, pages 403-408. IOS Press, 2003.
- C03-2 **Gibaud** B., Dameron O., and Morandi X. Reuse of a multi-purpose knowledge corpus on cortex anatomy for educational purposes. In R. Baud, M. Fieschi, P. Le Beux, and P. Ruch, editors, *Medical Informatics in Europe 2003, The New Navigators: from Professionals to Patients*, volume 95, pages 439-444. IOS Press, 2003.
- C03-3 C. Golbreich, O. Dameron, B. **Gibaud**, A. Burgun. Web ontology language requirements w.r.t. expressiveness of taxonomy and axioms in medicine. In Second International Semantic Web Conference (ISWC2003), Lecture Notes in Computer Science, (ed.), Volume 2870, Pages 180-194, 2003.
- C03-4 Raimbault M., Jannin P., Riffaud L., Morandi X., and **Gibaud** B. Models of surgical procedures for multimodal image-guided neurosurgery. In R. Baud, M. Fieschi, P. Le Beux, and P. Ruch, editors, *Medical Informatics in Europe 2003, The New Navigators: from Professionals to Patients*, volume 95, pages 50-55. IOS Press, 2003.
- C03-5 Cordonnier E., Croci S., Laurent J.F., and **Gibaud** B. Interoperability and medical communication using patient envelope-based secure messaging. In R. Baud, M. Fieschi, P. Le Beux, and P. Ruch, editors, *Medical Informatics in Europe 2003, The New Navigators: from Professionals to Patients*, volume 95, pages 230-235. IOS Press, 2003.
- C03-6 Grova C., Jannin P., Buvat I., Benali H., Bansard J.Y., Biraben A., and **Gibaud** B. From anatomic standardization analysis of perfusion SPECT data to perfusion pattern modelling. In *MICCAI 2003, Montreal (Canada)*, Lecture Notes in Computer Science, volume 2879, pages 328-335. Springer Verlag, 2003.
- C03-7 Golbreich C., Dameron O., **Gibaud** B., and Burgun A. How to represent ontologies in view of a medical semantic web ? In *Artificial Intelligence in Medicine Europe 2003, Lecture Notes in Artificial Intelligence*, volume 2780, pages 51-60. Springer Verlag, 2003.
- C02-1 Grova C., Jannin P., Biraben A., Buvat I., Benali H., Bernard A.M., Scarabin J.M., and **Gibaud** B. Validation of MRI/SPECT similarity-based registration methods using realistic simulations of normal and pathological SPECT data. In *Computer Assisted Radiology and Surgery 2002*, pages 450-455. Springer, 2002.
- C02-2 Dameron O., **Gibaud** B., Burgun A., and Morandi X. Towards a sharable numeric and symbolic knowledge base on cerebral cortex anatomy: learnings from a prototype. In *AMIA 2002*, pages 185-189, 2002.
- C02-3 Aubert-Broche B., Grova C., Jannin P., Buvat I., Benali H., and **Gibaud** B. Detection of inter-hemispheric asymmetries of brain perfusion in SPECT. In T. Dohi and R. Kikinis, editors, *MICCAI 2002, Tokyo (Japan)*, Lecture Notes in Computer Science, volume 2488-I, pages 500-507. Springer, 2002.
- C01-1 Corouge I., Barillot C., Hellier P., Toulouse P., and **Gibaud** B. Non-linear local registration of functional data. In W.J. Niessen and M.A. Viergever, editors, *MICCAI 2001, Utrecht (The Netherlands)*, Lecture Notes in Computer Science, volume 2208, pages 948-956. Springer, 2001.

- C01-2 Hellier P., Barillot C., **Gibaud** B., Le Goualher G., Collins L., Evans A., Malandain G., and Ayache N. Retrospective evaluation of inter-subject brain registration. In W.J. Niessen and M.A. Viergever, editors, *MICCAI 2001, Utrecht (The Netherlands), Lecture Notes in Computer Science*, volume 2208, pages 258-265. Springer, 2001.
- C01-3 Grova C., Biraben A., Scarabin J.M., Jannin P., Buvat I., Benali H., and **Gibaud** B. A methodology to validate MRI / SPECT registration methods using realistic simulated SPECT data. In W.J. Niessen and M.A. Viergever, editors, *MICCAI 2001, Utrecht (The Netherlands), Lecture Notes in Computer Science*, volume 2208, pages 275-282. Springer, 2001.
- C01-4 Jannin P., Raimbault M., Morandi X., and **Gibaud** B. Modeling surgical procedures for multimodal image-guided neurosurgery. In W.J. Niessen and M.A. Viergever, editors, *MICCAI 2001, Utrecht (The Netherlands), Lecture Notes in Computer Science*, volume 2208, pages 565-572. Springer, 2001.
- C01-5 Dameron O., **Gibaud** B., and Morandi X. Numeric and symbolic knowledge representation on cortex anatomy using web technology. In S. Quaglini, P. Barahona, and S. Andreassen, editors, *Artificial Intelligence in Medicine (AIME 01), Cascais (Portugal), Lecture Notes in Artificial intelligence*, volume 2101, pages 359-368, Berlin, Heidelberg, 2001. Springer.
- C01-6 Jannin P., Raimbault M., Morandi X., Seigneuret E., and **Gibaud** B. Design of a neurosurgical gestures model to improve neuronavigation procedures. In H.U. Lemke, M.W. Vannier, K. Inamura, A.G. Farman, and K. Doi, editors, *Computer Assisted Radiology and Surgery 2001*, pages 102-107. Elsevier, 2001.
- C01-7 **Gibaud** B., Dameron O., and Morandi X. Representation and sharing of numeric and symbolic knowledge about brain cortex anatomy using web technology. In H.U. Lemke, M.W. Vannier, K. Inamura, A.G. Farman, and K. Doi, editors, *Computer Assisted Radiology and Surgery 2001*, pages 356-361. Elsevier, 2001.
- C00-1 Lemke H.U., ter Haar Romeny B., Osteaux M., Gell G., Craig O., **Gibaud** B., and Caramella D. Early developments of PACS in Europe. In *Medical Imaging , New Port Beach*. SPIE, H. U. Lemke, M. W. Vannier, K. A. Inamura, D. A. G. Farman, K. Doi, and J. H. C. Reiber, Eds., pp.903-909, 2000.
- C99-1 Barillot C., Le Goualher G., Hellier P., and **Gibaud** B. Statistical analysis of brain sulci based on active ribbon modeling. In *Medical Imaging , New Port Beach*, volume 3661, pages 312-321. SPIE, 1999.
- C99-2 Brown N.J.G., **Gibaud** B., Arvanitis T.N., Hinckley A., Britton K.E., Todd-Pokropek A., and Varri A. Navigation and performance presentation of multimedia diagnostic imaging reports. In H.U. Lemke, M.W. Vannier, K. Inamura, and A.G. Farman, editors, *Computer Assisted Radiology & Surgery 1999, Paris*, pages 479-483. Elsevier, 1999.
- C99-3 Jannin P., Schwartz D., Grova C., Barillot C., and **Gibaud** B. Fusion of multimodal functional neuro-imaging (MEG, fMRI, SPECT): definition of different matching paradigms. In H.U. Lemke, M.W. Vannier, K. Inamura, and A.G. Farman, editors, *Computer Assisted Radiology & Surgery 1999, Paris*, pages 238-243. Elsevier, 1999.
- C98-1 **Gibaud** B., Brown N., and Todd Pokropek A. Towards standards for multimedia radiological reports. In *16th International EuroPACS Meeting, Barcelona (Spain)*, pages 185-188, 1998.
- C98-2 Heautot J.F., **Gibaud** B., Cordonnier E., Gandon Y., Tréguier C., Catroux B., and Scarabin J.M. Influence of the teleradiology technology (N-ISDN and ATM) on the inter-hospital management of neurosurgical patients. In *16th International EuroPACS Meeting, Barcelona (Spain)*, pages 147-151, 1998.
- C97-1 **Gibaud** B., Le Goualher G., Barillot C., Schwartz D., Morandi X., Scarabin J.M. : Setting up of a database for the description of brain cortical structures. *Computer Assisted Radiology 1997, Paris*, Edited by H.U. Lemke, M.W. Vannier and K. Inamura, Elsevier, pp 559-564, 1997.
- C97-2 **Gibaud** B., Garlatti S., Barillot C., Faure E. : Methodology of design of digital brain atlases. *Artificial Intelligence in Medicine (AIME 97), Grenoble, Lecture Notes in Artificial intelligence Vol 1211, E. Keravnou, C. Garbay, R. Baud, J. Wyatt (Eds)*, 1997, pp 441-452, 1997.
- C96-1 Aubry F., Bizais Y., Chabriais J., Chamero V., Di Paola R., Garfagni H., **Gibaud** B., Klipfel B., Parisot C., Pavageau E., Todd Pokropek A.: The MIMOSA model for the management of medical images in an open system architecture. *Computer Assisted Radiology 1996, Paris*, Edited by H.U. Lemke, M.W. Vannier, K. Inamura and A.G. Farman, Elsevier, pp 1021-1026, 1996.
- C96-2 Barillot C., Schwartz D., Le Goualher G., **Gibaud** B., Scarabin J.M. : Representation of MEG/EEG data in a 3D morphological environment. *Computer Assisted Radiology 1996, Paris*, Edited by H.U. Lemke, M.W. Vannier, K. Inamura and A.G. Farman, Elsevier, pp 249-254, 1996.
- C96-3 **Gibaud** B., Garfagni H. : Management of worklists in medical imaging: modelling issues. *Computer Assisted Radiology 1996, Paris*, Edited by H.U. Lemke, M.W. Vannier, K. Inamura and A.G. Farman, Elsevier, pp 435-439, 1996.
- C96-4 Cordonnier E., Hervault B., **Gibaud** B., Lussot E., Gandon Y., Meunier C., Klipfel B.: Gradual evolution from a PACS prototype to an open industrial system. *Computer Assisted Radiology 1996, Paris*, Edited by H.U. Lemke, M.W. Vannier, K. Inamura and A.G. Farman, Elsevier, pp 429-434, 1996.
- C96-5 **Gibaud** B., Hervault B. : Image management in PACS : which decomposition into well-defined and interoperable industrial products. *14th International EuroPACS Meeting, Heraklion (Grèce)*,

- Proceedings EuroPACS 96, pp 56-59, 1996.
- C96-6 Yapi J.H., Lasquellec A., **Gibaud** B., Bosc P. : Evolution de schéma et adaptation des instances. 3ième Colloque Africain sur la Recherche en Informatique (CARI 96), Libreville (Gabon), 1996, 1996.
- C95-1 **Gibaud** B., Hervault B., Barès B., Garfagni H., Gandon Y., Lussot E., Bourgeois L., Quideau J.C. , Klipfel B.: From the MIMOSA model to the implementation of a demonstrator at the University hospital of Rennes. EuroPACS 95, Berlin, in: Lemke HU, Inamura K., Jaffe CC, Vannier M.W. Eds., Computer Assisted Radiology, Springer-Verlag Berlin Heidelberg, 1995, pp 494-498, 1995.
- C95-2 Garlatti S., Montabord E., **Gibaud** B., Barillot C.: A methodological approach for object knowledge bases. Expert Systems 95, Cambridge, december 1995, Edited by M.A. Brammer, J.L. Nealon, R. Milne, Research and Developments in Expert Systems XII, pp 201-214, 1995.
- C94-1 Stut W.J.J., **Gibaud** B., Hervault B., Mevel G. : Transforming PACS models into implementations. Medical Imaging VIII, Newport Beach (USA), Feb 1994, SPIE Vol 2165, pp 659-670, 1994.
- C94-2 Bizais Y., Aubry F., Chameroy V., **Gibaud** B., Lavaire F., Garfagni H. , Todd-Pokropek A., Ratib O. , Di Paola R. : Image kernel of MIMOSA medical imaging model. Medical Imaging VIII, Newport Beach (USA), SPIE Vol 2167, pp 513-524, 1994.
- C94-3 **Gibaud** B., Gandon Y., Garfagni H., Hervault B., Lussot E., Barès B., Klipfel B., Bourgeois L., Quideau J.C. : Assessment of the MIMOSA model: experience learned from the development of a demonstrator. Medical Imaging 95, San Diego (USA), SPIE Vol 2435, 1994, pp 355-367.
- C94-4 Barillot C., **Gibaud** B., Montabord E., Garlatti S., Kanellos I.: An Information System to Manage Anatomical Knowledge and Image Data about Brain, SPIE Vol 2359, Visualization in Biomedical Computing, 1994, pp 424-434.
- C94-5 Kanellos I., Garlatti S., **Gibaud** B., Barillot C.: The Atlas Project: A joint Industrial and Scientific Development under the Cognitive Paradigm of Information Processing, Proc. 1st Eur. Conf. on Cognitive Science in Industry, Luxembourg, 28-30 Sept. 1994, pp 451-466.
- C94-6 Montabord E., Garlatti S., **Gibaud** B., Barillot C.: Interaction between a Hypermedia and a Knowledge Base for the Management of a Knowledge System about the Brain, Proc. of Int. Conf. on Neural Network and Expert Systems, Plymouth, U.K., 1994.
- C93-1 Montabord E., **Gibaud** B., C. Barillot, S. Garlatti, I. Kanellos, B.S. Wu, A. Biraben, X. Morandi.: An Hypermedia System to Manage Anatomical Knowledge about Brain. in: Lemke HU, Inamura K., Jaffe CC, Felix R. Eds., Computer Assisted Radiology, Springer-Verlag Berlin Heidelberg, 1993, pp.414-419.
- C92-1 Urbano L., **Gibaud** B., Coatrieux J.L., Duvaufier R. , Lucas C. : Three-dimensional medical image compression : a first approach to the application of the ADCT-ISO. IEEE EMBS 1992, Paris, pp 1219-1220.
- C92-2 Aubry F., **Gibaud** B., Bizais Y., Di Paola R.: MIMOSA: Conceptual Modelling of medical image management in an open system architecture. IEEE EMBS 1992, Paris, pp 1199-1201.
- C92-3 **Gibaud** B., Bizais Y., Morcet N., Gandon Y., Buhé T., Forte A.M., Aubry F., Chabriais J., Chameroy V., Di Paola R., Ratib O., Todd Pokropek A., Kanz R., Guitel M., Vital D., Ramond J.P.: Toward modelling image management in PACS: Lessons from a preliminary review of end-users requirements. IEEE EMBS 1992, Paris, pp 1202-1203.
- C91-1 Bizais Y., Aubry F., **Gibaud** B., Scarabin J.M., Di paola R. : A comprehensive model for medical image data bases, Meeting COMAC-BME, avril 89, Aveiro (Portugal), ISCAMI 1, Ed by J. Demongeot & A. Sousa Pereira, Springer Verlag, 1991, pp 73-81.
- C91-2 Lemoine D., Barillot C., **Gibaud** B., Pasqualini E. : A 3D C1 stereotactic deformation model to merge multimodality images and atlas data: CAR 91, Berlin RFA , Springer Verlag Ed., pp. 663-668.
- C91-3 Aubry F., Bizais Y., **Gibaud** B., Forte A.M., Chameroy V., Di Paola R., Scarabin J.M. : An object-oriented model for medical image data: Medical Imaging V, San Diego (USA), SPIE Vol 1446, 1991, pp 168-178.
- C91-4 Bizais Y., **Gibaud** B., Forte A.M., Aubry F., Di Paola R., Scarabin J.M. : A qualitative approach to medical image databases: Medical Imaging V, San Diego (USA), SPIE Vol 1446, 1991, pp 156-167.
- C91-5 Fresne F., Le Gall G., Barillot C., **Gibaud** B., Manens J.P., Toumoulin C., Lemoine D., Chenal C., Scarabin J.M. : A stereotactic multibeam radiation therapy system in a PACS environment: Medical Imaging V, San Diego (USA), SPIE Vol 1444, 1991, pp 26-36.
- C91-6 Barillot C., Lachmann F., **Gibaud** B., Scarabin J.M. : 3D display of MRI data in neurosurgery: volume sampling, segmentation and rendering aspects: Medical Imaging V, San Diego (USA), SPIE Vol 1445, 1991, pp 54-65.
- C91-7 D. Lemoine, C. Barillot, B. **Gibaud**, E. Pasqualini. An Anatomical-based 3D Registration System of Multimodality and Atlas Data in Neurosurgery. In Information Processing in Medical Imaging, A. C. F. Colchester, D. J. Hawkes (eds.), Lecture Notes in Computer Sciences, Volume 511, Pages 154-164, Berlin Heidelberg, 1991.
- C90-1 **Gibaud** B., Rodriguez-Pereira S., Benslimane A., Scarabin J.M. : A distributed approach for the development of integrated applications in PACS: Medical Imaging IV, Newport Beach (USA), SPIE Vol

1234, 1990, pp 568-577.

- C90-2 Barillot C., Lemoine D., **Gibaud B.**, Toulemont P.J., Scarabin J.M. : A PC Software to confront multimodality images and a stereotactic atlas in neurosurgery: Medical Imaging IV, Newport Beach (USA), SPIE Vol 1232, 1990, pp 188-199.
- C89-1 Fresne F., **Gibaud B.**, Barillot C., Toumoulin C., Lemoine D., Manens J.P., Scarabin J.M.: A computer assisted stereotactic approach for multibeam radiation therapy planning, Int. Conf. IEEE EMBS , Vol 13, 7, 1989, pp 1936-1937.
- C89-2 **Gibaud B.**, Picand F., Benslimane A., Grassin P., Urbano L., Toumoulin C., Fresne F., Rouviere M., Scarabin J.M. : SIRENE: Design and evaluation of a PACS prototype, CAR 89, Berlin RFA , Springer Verlag Ed., pp. 484-488, 1989.
- C87-1 Collorec R., **Gibaud B.**, Barillot C., Bouliou A. : Methods for automatic 3-D reconstruction of cerebral blood vessels, Acta Stereol., 6/III, Proc. ICS VII, Caen, 1987, pp. 745-750.
- C87-2 Jannin P., Barillot C., **Gibaud B.**, Scarabin J.M., Bouliou A. : Octree encoding with volume and surface informations in medical imaging, Proceedings IEEE-EMBS 9th Annual Conference, Boston, USA, 1987, pp. 1666-1667.
- C87-3 Renoulin R., Scarabin J.M., Coatrieu J.L. , Launay J.C., Babonneau G., **Gibaud B.** et al : The SIRENE Project, Proceedings CAR 87, Berlin, RFA, Springer Verlag, 1987, pp. 525-531.
- C85-1 Barillot C., **Gibaud B.**, Luo L.M., Toumoulin C., Coatrieu J.L. : Some applications of computer graphics in Medicine. Proceeding of 20th Conference of IEEE:EMBS Frontiers of Engineering an computing in Health Care, Chicago, 1985 Vol. 1, pp. 623-627.
- C85-2 Legout A., **Gibaud B.**, Barillot C., Moreau J.J. : 3D representation of Cerebral Blood Vessels using photogrammetry and Computer Graphics. Proceedings SPIE BioStereometrics'85, Vol. 302, 1985, pp 295-300.
- C85-3 Barillot C., **Gibaud B.**, Luo L.M., Scarabin J.M. : 3D Representation of anatomic structures from CT Examinations. Proceedings SPIE BioStereometrics'85, Vol. 302, 1985, pp. 307-314.
- C82-1 **Gibaud B.**, Scarabin J.M., Lorig B., Cruette C. : Accurate use of CT scanner, stereotaxis and photogrammetry for diagnosis and treatment of cerebral lesions (tumors). International archives of photogrammetry 1982, 14, 5 - pp. 225-235.
- C79-1 Bazin J.P., Di Paola R., **Gibaud B.**, Tubiana M.: Factor Analysis of dynamic scintigraphic data as a modelling method. An application to the detection of metastases. Les Colloques de l'INSERM: Information Processing in Medical Imaging, Paris, 1979, 88, pp 345-366.

- **publications effectuées dans le cadre de réunions ou congrès internationaux (abstracts)**

67 communications

- CA18-1 **Gibaud B.** Imaging biobanks. Special Focus Session on Artificial Intelligence (AI) Applications. European Congress of Radiology 2018, Vienna (Austria). (*Communication invitée*)
- CA18-2 **Gibaud B.** Integrating an imaging biobank in a BBMRI biobank. ESR/BBMRI-ERIC Session: Linking imaging biobanks to -omics : the role of BBMRI and ESR. European Congress of Radiology 2018, Vienna (Austria). (*Communication invitée*)
- CA18-3 **Gibaud B.** Organisation of dose management systems and repositories for radiation protection and biomedical research: possibilities and limitations of current implementations and standards. EFOMP Workshop: Radiation Dose Management systems and repositories: the present and the future. European Congress of Radiology 2018, Vienna (Austria). (*Communication invitée*)
- CA17-1 **Gibaud B.** Image sharing and biobanks. EuSoMII Academy: Game changers in radiology, Rotterdam (Pays-Bas), November 18th, 2017. (*Communication invitée*)
- CA16-1 **Gibaud B.** What are ontologies ? How can they help implementing interoperable imaging biobanks Professional Challenges 9 "Biobanks meet imaging", ECR 2016, Vienna (Austria) (*Communication invitée*)
- CA16-2 Holub P., **Gibaud B.** Biobanks and Imaging; the bioinformatic challenge, from MIABIS to DICOM. Medical imaging and biobanking (radiology and digital pathology) - a joint BBMRI/ESR session, Europe Biobank Week, 15 September 2016, Vienna (Austria) (*Communication invitée*)
- CA16-3 **Gibaud B.** Semantic models and ontologies in Surgical Data Science. Workshop on Surgical Data Science, June 20, 2016, Heidelberg (Germany). (*Communication invitée*)
- CA15-1 **Gibaud B.** Sharing imaging biomarkers in imaging biobanks. Professional Challenges 5b "Imaging biobanks: from genomic to radiomic in the era of personalised medicine", ECR 2015, Vienna (Austria). (*Communication invitée*)
- CA15-2 **Gibaud B.** Representation and sharing of imaging biomarkers in imaging biobanks for biomedical and translational research. DHU2020 Autumn school - From systems biology to new targets and therapeutics, Nantes, October 15, 2015. (*Communication invitée*)

- CA15-3 **Gibaud B.** Imaging biobanks : a strategy regarding interoperability issues. Joint ESR - BBMRI-ERIC Workshop, Barcelona, October 7, 2015. (*Communication invitée*)
- CA14-1 **Gibaud B.** Imaging biomarkers and PACS ontologies. Annual Conference of the European Society of Imaging Informatics (EuSoMII), 24-27 September 2014, Warsaw (Poland). (*Communication invitée*)
- CA14-2 **Gibaud B.** Ontology of imaging datasets as a prerequisite for ontologies of imaging biomarkers. Ontology and Imaging Informatics Workshop, June 23-25, 2014 Amherst, NY, USA. (*Communication invitée*)
- CA14-3 **Gibaud B.** Semantic annotation of medical image simulation object models. COST Action TD1007 "Bridging the gap between PET and MR simulations », April 3, 2014, Brussels, Belgium. (*Communication invitée*)
- CA13-2 **Gibaud B.** Dismantling PACS: separating image viewing from the data storage and sharing. Refreshing Course 305 "New PACS architecture: decoupling image management from image navigation", ECR'2013, Vienna. (*Communication invitée*)
- CA12-1 **Gibaud B.** Toward ontology-based federated systems for sharing medical images: lessons from the NeuroLOG experience. iDash Image informatics Workshop, University of California, San Diego, La Jolla (USA), Sep 29, 2012. (*Communication invitée*)
http://idash.ucsd.edu/sites/default/files/uploads/Gibaud_iDASH_2012.pdf
- CA12-2 **Gibaud B.** Semantic web technologies for sharing and reuse of imaging-related information. Refreshing Course 305 "Image processing and computer-aided diagnosis (CAD)", ECR'2012, Vienna. (*Communication invitée*)
- CA11-1 **Gibaud B.**, Forestier G. Ontologies for the expression model semantics for image simulation. « Data and Model Interoperability » Workshop, EMBL-EBI, 28-29th March 2011, Hinxton (UK). (*Communication invitée*)
- CA11-2 Magro E, Moreau T, Seizeur R, **Gibaud B.**, Morandi X. White matter short bundles in central area from Diffusion Tensor MRI Study. RSNA 2011 SSA15-06 (abstract).
- CA06-1 **Gibaud B.** Ontologies in the context of the Neurobase projects, e-Science Workshop « A roadmap for data integration », Edimburg (UK), nov. 27-28, 2006. (*Communication invitée*)
- CA06-2 Barillot C., Benali H., Dojat M., Gaignard A., **Gibaud B.**, Kinkingnöhun S., Matsumoto J.P., Pelegrini-Issac M., Simon E and Temal L. Federating Distributed and Heterogeneous Information Sources in Neuroimaging: The NeuroBase Project. In *Human Brain Mapping* 2006, 2006.
- CA04-1 C. Grova, B. Aubert-Broche, A. Reilhac, and B. **Gibaud**. Evaluation of partial volume correction for FDG PET and perfusion SPECT data. In *IEEE Nuclear Science Symposium*, 2004.
- CA04-2 **Gibaud B.** Introduction to the DICOM Structured Reporting. *European Congress of Radiology*, Vienna (Austria), 2004. (*Communication invitée*)
- CA03-1 C. Grova, A. Biraben, P. Jannin, B. **Gibaud**, J.M. Scarabin. Modelling of normal and ictal perfusion patterns in SPECT using correspondence analysis. *Congress of the American Epilepsy Society*, Epilepsia 44 Suppl. 9:82, 2003.
- CA03-2 Barillot, C., Amsaleg L., Aubry F., Bazin J.-P., Benali H., Cointepas Y., Corouge I., Dameron O., Dojat M., Garbay C., **Gibaud B.**, Gros P., Kinkingnöhun S., Malandain G., Matsumoto J., Papadopoulos D., Péligrini M., Richard N., and Simon E. Neurobase: Management of distributed knowledge and data bases in neuroimaging. *Human Brain Mapping*, Neuroimage, vol. 19, Academic Press, New-York, NY, pp.726, 2003.
- CA02-1 **Gibaud B.** Standards for structured reports: achievements and future challenges. In *20th International Conference EuroPACS, Oulu (Finland)*, 2002.
- CA02-2 Chabriais J., **Gibaud B.**, Aubry F., Gandon Y., Mével G., Guignot J., Todd Pokropek A., Eichelberg M., and Riesmeier J. DICOM and other related standards for medical imaging. In *European Congress of Radiology*, Vienna (Austria), pages D-0013, 2002.
- CA02-3 Chabriais J. and **Gibaud B.** DICOM: What a radiologist must know. In *European Congress of Radiology*, Vienna (Austria), pages D-0011, 2002.
- CA01-1 Chabriais J., **Gibaud B.**, Aubry F., Gandon Y., Lefèvre J.E., Todd Pokropek A., Perron Cabus G., and Klose K.J. DICOM space: DICOM and the other related standards for medical imaging. In *European Congress of Radiology*, Vienna (Austria), page 461, 2001.
- CA01-2 Chabriais J. and **Gibaud B.** What a radiologist must know. In *European Congress of Radiology*, Vienna (Austria), page 472, 2001.
- CA01-3 Grova C., Jannin P., Biraben A., Scarabin J.M., Benali H., and **Gibaud B.** Generation of realistic models of ictal SPECT using monte-carlo simulations. In *Human Brain Mapping*, Neuroimage, 13 (6), page S137, 2001.
- CA01-4 Corouge I., Hellier P., Toulouse P., **Gibaud B.**, and Barillot C. A new inter-individual functional mapping scheme based on a local non linear registration method. In *Human Brain Mapping*, Neuroimage, 13 (6), 2001.

- CA00-1 **Gibaud** B. Integration of medical information. In *European Congress of Radiology, Vienna (Austria)*, 2000.
- CA99-1 Varri A., Brown N.J.G., **Gibaud** B., Arvanitis T.N., Hinchley A., Britton K.E., and Todd-Pokropek A. Aspects of multimedia diagnostic service reports. In *ICM Seminar Multimedia, Data Integration, Medical database, Varsovie (Pologne)*, 1999.
- CA98-1 Morandi X., Schwartz D., Godey B., Le Goualher G., Barillot C., Scarabin J.M., and **Gibaud** B. MEG mapping of language-related cortex: a preliminary study. In *4th International Conference on functional mapping of the human brain, Montréal (Canada)*, 1998.
- CA98-2 Barillot C., Schwartz D., Le Goualher G., Morandi X., and **Gibaud** B. Merging 3D cortical sulci models with 3D representations of MEG data. In *4th International Conference on functional mapping of the human brain, Montréal (Canada)*, 1998.
- CA98-3 Barillot C., Champmartin S., Le Goualher G., and **Gibaud** B. Probabilistic modeling of brain sulci based on statistical analysis of 3D surfaces. In *4th International Conference on functional mapping of the human brain, Montréal (Canada)*, 1998.
- CA98-4 **Gibaud** B. Importance et état de la standardisation en imagerie médicale, 37^{ème} Colloque de médecine nucléaire de langue française, Genève, 1998 (*Communication invitée*).
- CA97-1 **Gibaud** B. : Design of Information systems in imaging departments: the role of modeling. World Congress on Medical Physics and Biomedical Engineering, Nice 1997 (*Communication invitée*).
- CA96-1 **Gibaud** B. : Interfacing the digital imaging modalities. Second International PACS, CR & Image Networking Seminar, St Leonard-on-Sea (U.K.), June 1996 (*Communication invitée*).
- CA96-2 **Gibaud** B. : The MIMOSA model. Second International PACS, CR & Image Networking Seminar, St Leonard-on-Sea (U.K.), June 1996 (*Communication invitée*)
- CA96-3 **Gibaud** B., Barillot C., Goualher G., Scarabin J.M. : ATLAS-based image segmentation: Survey of european works. Workshop on "Digital Brain Anatomy", Second Conference of the European Federation of Neurological Societies, Rome, october 1996 (*Communication invitée*).
- CA95-1 Aubry F., Chameroy V., Chabriais J., **Gibaud** B., Bizais Y., Todd Pokropek A., Garfagni H., Di Paola R. : Data Availability management and act management within a HIS/RIS/PACS: the MIMOSA approach. 81th RSNA meeting, Chicago, 1995, Radiology, 197, pp 258. (Abstract)
- CA95-2 Chameroy V., Chabriais J., Aubry F., **Gibaud** B., Todd Pokropek A., Di Paola R., Garfagni H., Bizais Y. : Image Exchange management inside and between HIS/RIS/PACS : the MIMOSA approach. 81th RSNA meeting, Chicago, 1995, Radiology, 197, pp 257. (Abstract)
- CA95-3 Aubry F., Chameroy V., Chabriais J., Bizais Y., **Gibaud** B., Garfagni H., Todd Pokropek A., Di Paola R. : Medical Image Management in an Open System Architecture (MIMOSA). A generic approach of data and image exchange witin a PACS. 81th RSNA meeting, Chicago, 1995, Radiology, 197, pp 259. (Abstract).
- CA95-4 Chabriais J., Aubry F., Chameroy V., Bizais Y., **Gibaud** B., Gandon Y., Garfagni H., Barès B., Todd Pokropek A., Ratib O., Di Paola R. : Medical Image Management in an Open System Architecture (MIMOSA). A generic conceptual model of the data and image management and exchange within a PACS. ECR '95, Vienna (Austria) (Abstract).
- CA94-1 Bizais Y., Aubry F., Chameroy V., **Gibaud** B., Lavaire F., Garfagni H., Todd-Pokropek A., Ratib O., Di Paola R. : A multimodality multidimensional image model. EuroPACS 94', Genève, 22 septembre-24 septembre 1994 (Abstract).
- CA94-2 **Gibaud** B., Garfagni H., Aubry F., Chameroy V., Stut W., Barès B. : How to manage the timely availability of medical images in PACS ? The MIMOSA Image Management model. EuroPACS 94', Genève, 22 septembre-24 septembre 1994 (Abstract).
- CA93-1 Barillot C., **Gibaud** B. : Data Fusion and Management of Anatomical Knowledge about Brain, Tutorial on Biomathematics and Medical Informatics, Institute for Mathematic and Information Processing, Univ. Hamburg-Ependorf, Hamburg, May 13, 1993.
- CA93-2 Stut W., **Gibaud** B. : PACS development : the need for modelling and simulation . EuroPACS 93', Rennes, 30 septembre-2 octobre 1993 (Abstract).
- CA93-3 Garfagni H., **Gibaud** B., Stut W., Segard O., Aubry F.: A functional model of the management of medical images. EuroPACS 93', Rennes, 30 septembre-2 octobre 1993 (Abstract).
- CA92-1 Chameroy V., Aubry F., **Gibaud** B., Bizais Y., Todd Pokropek A., Di Paola R.: Picture Archiving and Communication systems: from myth to reality. IEEE EMBS 1992, Paris, (Tutorial)
- CA92-2 Aubry F., **Gibaud** B., Bizais Y., Di Paola R.: MIMOSA: Conceptual Modelling of medical image management in an open system architecture. EuroPACS 1992, Londres, (abstract).
- CA92-3 **Gibaud** B., Bizais Y., Morcet N., Gandon Y., Buhé T., Forte A.M., Aubry F., Chabriais J., Chameroy V., Di Paola R., Ratib O., Todd Pokropek A., Kanz R., Guitel M., Vital D., Ramond J.P.: Analysis of end-users requirements as a first step toward modelling image management in PACS. EuroPACS 1992, Londres, (abstract).

- CA90-1 Scarabin J.M., **Gibaud B.**, Barillot C., Fresne F., Lemoine D. : From imaging towards robotics in neurosurgery: Int. Soc. for Pediatric Neurosurgery, 18th annual meeting, Paris, septembre 1990.
- CA90-2 Barillot C., Lemoine D., **Gibaud B.**, Scarabin J.M. : A Workstation environment to confront a stereotactic atlas and in vivo multi-modality images: Euro-Sigma 90, London (UK), sept 1990.
- CA90-3 Bizais Y., **Gibaud B.**, Forte A.M., Aubry F., Di Paola R., Scarabin J.M. : Medical image databases: A qualitative approach: 8th Int. meeting EUROPACS, 1990, Trieste (I).
- CA90-4 Urbano L., Lucas C., **Gibaud B.**, Duvaufier R., Ramee A. : Evaluation of the diagnostic quality of compressed images: 8th Int. meeting EuroPACS, 1990, Trieste (I).
- CA89-1 Manens J.P., Fresne F., Barillot C., **Gibaud B.**, Le Gall G., Chenal C., Ben Hassel M., Carsin M., Scarabin J.M.: Multibeam radiotherapy: a robotic approach. 17th Int Cong of Radiology, juillet 1989, Paris (Poster et Abstract).
- CA89-2 **Gibaud B.**, Aubry F., Bizais Y., Di Paola R., Scarabin J.M. : Towards comprehensive specifications of medical imaging data bases, First Int. Conf. IMAC, juin 89, Washington (Poster et Abstract).
- CA89-3 **Gibaud B.**, Fresne F., Toumoulin C., Urbano L., Gandon Y., Duvaufier R., Carsin M., Scarabin J.M., Benslimane A., Rouviere M., Didenot Y. : Development and setting up in clinical environment of a Picture Archiving and Communication system. 17th Int. Cong. of Radiology , juillet 89, Paris (Poster et Abstract).
- CA89-4 Scarabin J.M., **Gibaud B.**, Aubry F., Bizais Y. : Basic features in Picture Archiving and Communication systems. 17th Int. Cong. of Radiology, juillet 89, Paris (Refresher's course et Abstract)
- CA88-1 **Gibaud B.**, Le Certen G., Fresne F., Toumoulin C., Benslimane A., Scarabin J.M.: 2-D and 3-D Image processing workstation in the SIRENE project. 6th EuroPACS Meeting. Leiden (Netherlands), April 1988.
- CA87-1 Coatrieux J.L., **Gibaud B.**, Collorec R. : Interpretacion y sinthesis de imagenes en medicina, Journées Franco-Hispaniques de Traitement et Synthèse d'images par ordinateur, Barcelone, Espagne, Juin 1987 (*Communication invitée*).
- CA86-1 Renoulin R., Scarabin J.M., Coatrieux J.L., **Gibaud B.** et al : Le projet SIRENE, Endoscopica 1986, Varese, Italie, Oct. 1986.
- CA84-1 Barillot C., **Gibaud B.**, Luo L., Scarabin J.M : Forum "Images électroniques et santé" : les réseaux d'images dans les éta-blissements de soins. Visualisation 3D et synthèse d'images en médecine. International Week of the Electronic Image. Biarritz, 21-25 mars 1984.
- CA84-2 Barillot C., **Gibaud B.**, Luo L., Scarabin J.M. : Computer representation anatomical structures; display of generated images. International Week of the Electronic Image. Biarritz, 21-25 mars 1984.
- CA83-1 **Gibaud B.**, Scarabin J.M., Coatrieux J.L. : Etude à moyen et long terme d'un serveur d'imagerie médicale pour l'archivage et la distribution des images numériques à l'hôpital. Définition de finalités médicales et des points-clés technologiques du système. World Conference on Systems, Caracas, 1983.

- publications effectuées dans le cadre de congrès nationaux (articles longs)**

14 articles

- N18-1 Amdouni E. and **Gibaud B.** Sémantique des données d'observation en neuro-imagerie selon un point de vue réaliste. Conférence « Extraction et Gestion des Connaissances ». EGC 2018. *Revue des Nouvelles Technologies de l'Information* vol. RNTI-E-34, 341-346, 2018.
- N17-1 Derathé A, Reche F, **Gibaud B** and Voros S. Extraction of data for surgical assessment: projection and preliminary results. *Surgetica* 2017, Strasbourg.
- N16-1 Amdouni E, **Gibaud B.** Conception d'une ontologie générique pour la représentation sémantique des biomarqueurs d'imagerie. Journées Francophones sur les Ontologies. 13-14 Oct. 2016, Bordeaux 2016. (Prix AFIA meilleur papier étudiant).
- N07-1 Mechouche A, Golbreich C, **Gibaud B.** Vers un système hybride pour l'annotation sémantique d'images IRM du cerveau. In *Extraction et Gestion de Connaissances (EGC'2007)*, Namur (Belgique), Revue des Nouvelles Technologies de l'Information, pp 433-444, 2007. Prix du meilleur article d'application.
- N03-1 Golbreich C, Dameron O, **Gibaud B.**, Burgun A. Comment représenter les ontologies pour un Web Sémantique médical ? *Journées Françaises de la Toile*, Tours, 2003.
- N02-1 Jannin P, Raimbault M, Fleig OJ, Morandi X, Scarabin JM, and **Gibaud B.** Neuronavigation multi-modalité. In J. Troccaz and P. Mermoz, editors, *Surgetica, Grenoble*, pages 174-180, 2002.
- N02-2 Raimbault M, Jannin P, Morandi X, Riffaud L, and **Gibaud B.** Modèles de procédures chirurgicales pour la neurochirurgie guidée par l'image. In J. Troccaz and P. Mermoz, editors, *Surgetica, Grenoble*, pages 217-223, 2002.

- N98-1 Barillot C, **Gibaud** B, Le Goualher G, Morandi X.: Représentation mixte numérique/symbolique des sillons corticaux, 11^{ème} Congrès RFIA 98, Clermont-Ferrand, 1998, pp 165-174.
- N96-1 Yapi JH, Lasquellec A, **Gibaud** B. : Evolution de schéma et migration d'instances. Prise en compte des besoins d'une application médicale. Congrès Bases de Données Avancées (BDA 96), Cassis (France), 1996.
- N96-2 Garlatti S, Montabord E, **Gibaud** B, Barillot C. : Base de connaissances intensionnelle avec perspectives et héritage multiple, Congrès RFIA 96, Rennes, 1996, pp 495-503.
- N95-1 Montabord E, **Gibaud** B, Barillot C.: HYPER-YAKA : Hypermedia et base de connaissances sensible au contexte. Congrès "Langages et Modèles à Objets", Nancy, 1995, pp153-171.
- N94-1 Garlatti S, Kanelllos I, Montabord E, Barillot C, **Gibaud** B.: YAKA: un Système d'Information Intensionnel sur le Cerveau Humain, Proc. Xème Congrès afcet-afia INFORSID'94, Aix en Provence, 18-20 Mai 1994, pp.323-338.
- N86-1 Barillot C, **Gibaud** B, Luo LM, Lis O. : Représentation 3-D de structures anatomiques à partir d'examens scanner, 3ème Forum des Jeunes Chercheurs GBM, Paris, France, Mai 1986.
- N84-1 **Gibaud** B, Barillot C, Scarabin JM. : Photogrammétrie et synthèse d'images 3D pour la représentation du réseau vasculaire cérébral. Forum des Jeunes Chercheurs. Lille. - 26-28 septembre 1984. Prix du meilleur article.

- publications effectuées dans le cadre de congrès nationaux (communications ou abstracts)**

48 communications

- NA16-1 Haegelen C, Le Reste PJ, **Gibaud** B, Moreau T, Morandi X. Connexions du cortex préfrontal dorsolatéral : Etude en tractographie des faisceaux de substance blanche. 98^{ème} Congrès de l'Association des Morphologistes, 17-19 Mars 2016, Toulouse (France).
- NA16-2 **Gibaud** B. Intégration du compte rendu structuré dans l'environnement radiologique moderne. Session « comptes rendus structurés en neuro-imagerie ». Journées Francophones de Radiologie. 15 Octobre 2016, Paris. (*Communication invitée*)
- NA14-1 **Gibaud** B. Organisation et interopérabilité des banques d'images pour la recherche biomédicale. AG GDR STIC-Santé Thème C, 24 Septembre 2014, Ste Foy les Lyon (*Communication invitée*)
- NA12-1 **Gibaud** B. Les technologies sémantiques au service de l'indexation des images médicales : pourquoi et comment ? Journée « Indexation et Analyse des Images et des Vidéos de la Santé » Journée commune Axe3, Thème B et GDR STIC Santé. 10 Mai 2012, Paris. (*Communication invitée*)
- NA08-1 **Gibaud** B., Kassel G. Intégration de ressources en neuroimagerie (images et outils de traitement) : le projet NeuroLOG. Journée STIC Santé Inserm « Ontologies médicales : utilité et place des ontologies fondationnelles ? », Paris, 18 Novembre 2008. (*Communication invitée*)
- NA07-1 Temal L., Lando P., Dojat M., F. Fürst, **Gibaud** B., Kassel G., Lapujade A. OntoNeuroLOG : une ontologie modulaire et multi-niveaux pour gérer l'hétérogénéité sémantique des métadonnées. Actes de la journée thématique “Ontologies et Gestion de l'Hétérogénéité Sémantique” du GDR I3, Grenoble, 3 juillet 2007.
- NA06-1 **Gibaud** B., Barillot C., Simon E., Aubry F., Benali H., Dameron O., Dojat M., Gaignard A., Kinkingnéhun S., Matsumoto J.P., Pelegrini-Issac M., Temal L., Valabregue R. Neurobase: sharing data and image processing tools in neuroimaging. *Journée INRIA-industrie*, Rocquencourt, 24 Janvier 2006.
- NA05-1 C. Barillot, L. Amsaleg, F. Aubry, J.P. Bazin, H. Benali, Y. Cointepas, I. Corouge, O. Dameron, M. Dojat, C. Garbay, B. **Gibaud**, P. Gros, S. Kinkingnéhun, G. Malandain, J.P. Matsumoto, D. Papadopoulos, M. Pelegrini, N. Richard, and E. Simon. Neurobase: gestion de données et de connaissances distribuées en neuroimagerie. In *Journée spéciale du GDR STIC Santé-Inserm sur : Gestion de données et de traitements distribués en imagerie médicale*, 2005.
- NA05-2 B. **Gibaud**, M. Dojat, L. Temal, F. Aubry, H. Benali, O. Dameron, S. Kinkingnéhun, J.P. Matsumoto, M. Péligrini-Issac, R. Valabregue, and C. Barillot. Neurobase: gestion de données et de connaissances distribuées en neuroimagerie. In *Journée spéciale du GDR STIC Santé-Inserm sur : Gestion de données et de traitements distribués en imagerie médicale*, 2005.
- NA05-3 B. **Gibaud**. Introduction aux PACS et au standard DICOM. In *Journée du chapitre français IEEE Engineering in Medicine and Biology sur : Archivage et transmission sécurisés de l'information médicale* parrainée par le GDR STIC-Santé et le GDR ISIS, 2005.
- NA05-4 J. Chabriais, B. **Gibaud**, Actualités sur les standards. *Journées Françaises de Radiologie*, Paris, 2005.
- NA05-5 B. **Gibaud**, P. Jannin, C. Grova, B. Aubert-Broche, C. Haegelen, X. Morandi, M. Vérin, A. Biraben, F. Prigent-Lejeune, A.M. Bernard. Analyse semi-quantitative d'images cérébrales de médecine nucléaire selon des approches basées “regions”. *Congrès de Physiologie*, Rennes, juin 2005.

- NA04-1 B. **Gibaud**. Les comptes rendus structurés DICOM. *Journées Françaises de Radiologie*, Paris, 2004.
- NA04-2 B. **Gibaud**., E. Poiseau. IHE et le compte rendu. *Journées Françaises de Radiologie*, Paris, 2004.
- NA03-1 B. **Gibaud**. Intégration de données multimédia en anatomie et physiologie cérébrale : concepts et réalisations. In *Séminaire Institut Gustave Roussy, Villejuif*, 2003. (*Communication invitée*)
- NA03-2 C. Barillot, L. Amsaleg, F. Aubry, J.P. Bazin, H. Benali, Y. Cointepas, I. Corouge, O. Dameron, M. Dojat, C. Garbay, B. **Gibaud**, P. Gros, S. Kinkingnéhun, G. Malandain, J.P. Matsumoto, D. Papadopoulos, M. Pelegrini, N. Richard, and E. Simon. Neurobase: gestion de données et de connaissances distribuées en neuroimagerie. In *Journée Web Sémantique Médical 2003*, 2003.
- NA03-3 O. Dameron, A. Burgun, X. Morandi, and B. **Gibaud**. Ontologie stratifiée de l'anatomie du cortex cérébral : application au maintien de la cohérence. In *Journée Web Sémantique Médical 2003*, 2003.
- NA03-4 J. Chabriais, B. **Gibaud**. Normes applicables aux systèmes d'information en imagerie. *Journées Françaises de Radiologie*, Paris, 2003.
- NA02-1 Charlet J., Cordonnier E., and **Gibaud** B. Interopérabilité en médecine : la syntaxe et la sémantique à l'épreuve de l'organisation. In *Journées Francophones d'Informatique Médicale*, 2002.
- NA02-2 Broche B., Grova C., Jannin P., Buvat I., Benali H., and **Gibaud** B. Détection d'asymétries inter-hémisphériques sur la perfusion cérébrale en TEMP. In *Réunion annuelle de la Société d'Anatomie Fonctionnelle Cérébrale, Paris*, 2002.
- NA02-3 Jannin P., Fleig O.J., Morandi X., Riffaud L., Raimbault M., Scarabin J.M., and **Gibaud** B. Neuronavigation multi-modalité. In *Réunion annuelle de la Société d'Anatomie Fonctionnelle Cérébrale, Paris*, 2002.
- NA02-4 **Gibaud** B., Dameron O., and Morandi X. Enseignement de l'anatomie : ré-utilisation d'un corpus de connaissances numériques et symboliques sur le cortex cérébral. In *Séminaire Université Médicale Virtuelle, Rennes*, 2002.
- NA02-5 Morandi X., Raimbault M., Riffaud L., **Gibaud** B., Seigneuret E., and Jannin P. Modélisation de procédures chirurgicales pour la neurochirurgie guidée par l'image. In *Société de Neurochirurgie de Langue Française, Paris*, 2002.
- NA02-6 **Gibaud** B. and Chabriais J. Les comptes rendus structurés : apport du DICOM structured reporting. In *Cours Cyberthéâtre, Journées Françaises de Radiologie, Paris*, page 1646, 2002.
- NA02-7 Chateil J.F., **Gibaud** B., Gandon Y., and Chabriais J. Les PACS en France : bilan des expériences en 2002. In *Journées Françaises de Radiologie, Paris*, page 1626, 2002.
- NA01-1 Grova C., Jannin P., Biraben A., Scarabin J.M., Buvat I., Benali H., **Gibaud** B. Méthodologie de validation de méthodes de recalage TEMP/IRM à l'aide de simulations réalistes de données TEMP. *11ème Forum des jeunes chercheurs en Génie Biologique et Médical, Compiègne*, 2001.
- NA01-2 Grova C., Jannin P., Scarabin J. M., and **Gibaud** B. Fusion de données multimodales: acquis, enjeux et perspectives. L'exemple de la fusion TEMP/IRM en épilepsie. *Congrès de la Société de Neurophysiologie Clinique de Langue Française (SNCLF), Paris*, 2001.
- NA00-1 Grova C., Jannin P., Le Rumeur E., Morandi X. and **Gibaud** B. Comparaison qualitative de données MEG/IRMF pour la réalisation d'une cartographie anatomo-Fonctionnelle. *10ème Forum des jeunes chercheurs en Génie Biologique et Médical, Tours*, 2000.
- NA99-1 Grova C., Jannin P., Le Rumeur E., Morandi X. and **Gibaud** B. Fusion de données orientée vers la comparaison MEG/IRMF : Une approche qualitative. *Réunion Scientifique Inaugurale de la Société d'Anatomie Fonctionnelle Cérébrale (SAFC)*, Ecole Nationale Supérieure des Télécommunications (ENST), Paris, 1999. (poster)
- NA99-2 Chabriais J., Gandon Y., **Gibaud** B. and Di Paola, R. DICOM: Ou en est-on ? Ou va-t-on ? *Informag, Journées Françaises de Radiologie*, Paris, 1999.
- NA99-3 Gandon Y., and **Gibaud** B. PACS : les différentes pièces du puzzle. *Journées Françaises de Radiologie*, Paris, 1999.
- NA96-1 GandonY., Heautot J.F., Mével G., **Gibaud** B., Hervault B., Meunier C., Carsin M. : Creation et distribution de comptes-rendus multimédia, Présentation orale et démonstration au Forum Informag, *Journées Françaises de Radiologie 96*, Paris (Abstract).
- NA96-2 **Gibaud** B., Barillot C., Garlatti S., Montabord E., Yapi J.H., Lasquellec A., Le Goualher G., Collins L., Scarabin J.M. : Méthodologie de conception et d'utilisation des atlas informatiques du cerveau. *Communication au GDR-PRC 134 Traitement du Signal et des Images (Projet Imagerie Cérébrale)*, ENST Paris, Janvier 96.
- NA96-3 Barillot C., **Gibaud** B., Garlatti S., Montabord E., Yapi J.H., Lasquellec A., Le Goualher G., Collins L., Scarabin J.M. : Système d'information pour la gestion de connaissances et de données anatomiques sur le cerveau. *Communication au PRC-GDR ISIS & CHM*, ENST Paris, Mai 96.
- NA95-1 Chabriais J., Aubry F., Chamroy V., **Gibaud** B., Bizais Y., Garfagni H., Todd Pokropek A., Gandon Y., Di Paola R. : MIMOSA (Medical Image Management in an Open System Architecture) : Un support de gestion et d'échange des images médicales. *Journées Françaises de Radiologie 95*, Paris, Journal de

- Radiologie, 76, pp 931. (Abstract).
- NA95-2 Gandon Y., Lemoine D., Heautot J.F., **Gibaud** B., Hervault B., Carsin M. : Mise en place d'échanges entre un PACS et un RIS. *IIIème Congrès sur la recherche en Imagerie Médicale*, Université Paris VI- Faculté St-Antoine., 21-23 septembre 1994 (Abstract).
- NA91-1 Manens J.P., Le Gall G., Fresne F., Barillot C., **Gibaud** B., Lemoine D., Bouliou A., Chenal C., Ben Hassel M., Scarabin J.M. : Irradiations multifaisceaux: Plan de traitement assité par ordinateur. *XXX Congrès de la Société Française des Physiciens d'Hôpital*, 6, 7, 8 juin 1991, Rennes (Abstract).
- NA91-2 **Gibaud** B. : Les systèmes de communication et d'archivage d'images: points-clés et solutions actuelles. *XXX Congrès de la Société Française des Physiciens d'Hôpital*, 6, 7, 8 juin 1991, Rennes (Abstract).
- NA90-1 Lucas C., Urbano L., Duvaufier R., **Gibaud** B., Ramee A. : Evaluation médicale de la compression d'images numériques: 38ièmes Journées Françaises de Radiologie, Paris, Nov 90.
- NA89-1 Manens J.P., Le Gall G., Barillot C., **Gibaud** B., Fresne F., Scarabin J.M.: Irradiation en conditions stéréotaxiques: une approche robotisée. *28ième Congrès de la Soc. Française des Physiciens d'hôpitaux*, juillet 1989, Lyon .
- NA88-1 **Gibaud** B., Le Certen G., Fresne F., Toumoulin C., Ben Slimane A., Urbano L., Scarabin J.M. : Développement et implantation en site d'un prototype de réseau d'imagerie médicale, *Les Entretiens de Lyon*, Springer Verlag Ed., Lyon 1988, pp. 77-92.
- NA88-2 Scarabin J.M., Faivre J., Guegan Y., Brassier G., Carsin M., **Gibaud** B., Urbano L.: Console multimedia communicante en Neurochirurgie. *Communication à la Société de Neurochirurgie de Langue Française*. Paris, décembre 1988.
- NA85-1 **Gibaud** B., Renoulin R., Carsin M., Gandon Y. (avec la collaboration du CRIH et de la DSIO du CHR): Système informatique intégré au sein d'un plateau d'imagerie médicale au CHR/U de Rennes. (Projet SIRENE et SARAH). *IIIèmes Journées de l'Ecole Nationale de la Santé Publique*, Novembre 1985.
- NA84-1 Barillot C., **Gibaud** B., Luo L.M., Scarabin J.M., Velut S., Moreau J.J. : Représentation synthétique de structures anatomiques, visualisation par synthèse d'images. *Proceedings GRETSI-CESTA*. Biarritz - mai 1984 - pp. 21-28.
- NA84-2 Velut S., Barillot C., **Gibaud** B., Scarabin J.M. : Synthèse d'images et vascularisation cérébrale. *Symposium sur la vascularisation Cérébrale. 67ème Congrès de l'Association des Anatomistes de Langue Française*. Rennes, mai 1984.
- NA84-3 Velut S., Santini J., **Gibaud** B., Barillot C., Scarabin J.M. : Représentation Synthétique des os du crâne, visualisation par synthèse d'images. *Congrès de l'Association des Anatomistes de Langue Française*. Rennes, mai 1984.
- NA83-1 Scarabin J.M., **Gibaud** B., Renoulin R., De Certaines J. : Le projet SIRENE (Serveur d'Imagerie Médicale accessible via un Réseau Numérique Expérimental). *Colloque Electricité, Electronique et Civilisation*, CEE Paris, déc 1983.
- NA83-2 Barillot C., **Gibaud** B., Luo L.M., Coatrieu J.L. : Exemples d'applications de la synthèse d'images en Médecine. *Colloque "Images Médicales et Visualisation 3D"*. Centre scientifique IBM. Paris, 1983, pp. 9- 18.

