

GREGORY OPERTO, Ph. D.

37 year-old

goperto@gmail.com

LinkedIn : <http://linkedin.com/in/neuroimaging>

ResearchGate : http://researchgate.net/profile/Gregory_Operto

Web: <http://xgrg.github.io>

Dr. Greg Operto is a **senior data scientist** specialized in the field of neuroimaging and cohort studies. After graduating in 2005 from Polytech-Marseille both in **Biomedical Engineering** and **Digital Imaging**, he received his **PhD in Computer Science** from Aix-Marseille University in 2009. He then joined **NeuroSpin**, the high-field MRI center of the **Commissariat à l'Energie Atomique** (Atomic Energy Commission). There between 2011 and 2016, he managed the production unit in charge of computing biomarkers in CATI, the French platform for multicenter neuroimaging studies. Since 2016 he is holding a research fellow position in the neuroimaging team of the **BarcelonaBeta Brain Research Center**, where he studies new imaging **early predictors** of Alzheimer's disease using **advanced image processing** and **machine learning** techniques over **large cohorts** of presymptomatic subjects and **leads** the development of the platform for the management, processing and control of imaging data. By his double experience both as a **researcher** and as an **engineer**, he has been addressing not only the many technical challenges raised by data of ever-increasing complexity but also the fundamental questions related to the study of Alzheimer's disease.

QUALIFICATIONS

Advanced knowledge of the Python language (software development and scientific computing)
Proficient experience with image processing and machine learning techniques in application to health and medical imaging
Neuroimaging and brain data analysis
Design, implementation and production management of multi-site dataflows (data acquisition, processing, quality control)
Supervision of students and engineers
Open source software maintainer and contributor
Extended experience in managing large databases, big data processing and analysis in research
Excellent communication skills. Fluent in 4 languages. Participations at international conferences and meetings, articles as first and co-author.
Mentor for the Google Summer of Code Training Program
Teaching since 2005

PROFESSIONAL EXPERIENCE

Research scientist at BarcelonaBeta Brain Research Center - Pasqual Maragall Foundation (supervisor: J-D. Gispert, PhD), Barcelona (2016 -)
Leading the development of a platform for the management, processing and control of large neuroimaging datasets .
Postprocessing and analysis of large multimodal datasets, large-scale production of imaging markers in the context of Alzheimer's research
Associate Professor in Diagnostic Imaging at Pompeu Fabra University

Research Engineer / Production Manager in CATI (director: J-F. Mangin, PhD), NeuroSpin (2011-2016)
Creation of a national infrastructure for the support of cohort studies on Alzheimer's patients and related dementias.
Multi-site coordination of analyses performed on massive collections of images.
Member of the executive committee of the project.
Supervision of a software development team (3) focused on quality control.
Frequent interactions with teams in charge of national and international research projects.
Supervision of training engineers (2).

Postdoctoral Research Fellow in NeuroSpin CEA Saclay, France (2010-2011)
Working on classification and computer vision methods for the study of the cortical folding process and intersubject variability in the developing brain.
Supervision: J-F. Mangin, PhD

PhD Student - Graduate Teaching Assistant, Université Aix-Marseille (2005-2009)

Doctoral training in neuroimaging (Laboratoire des Sciences de l'Information et des Systèmes)
functional magnetic resonance imaging, computer vision, machine learning, optimization, shape analysis

Training Engineer, Neurology Department 1st Medicine Faculty, Charles University, Prague, Czech Republic (2004)

Design of a video movement detection system during the acquisition of fMRI data - Application to studies in fMRI and repetitive transcranial magnetic stimulation (rTMS)

EDUCATION [Ph.D. in Computer Science](#) - [Université Aix-Marseille](#), 2005-2009

Thesis: Structural surface-based analysis of fMRI data

Supervision: Dr. Olivier Coulon, Ph.D - Prof. Rémy Bulot, Ph.D

[Master's degree, Digital Imaging](#) - [Université Aix-Marseille](#), 2004-2005

Ranked 1st of promotion

[Diplôme d'Ingénieur](#) (Biomedical Eng.), 2002-2005

Polytech-Marseille

TRAINING [Docker & Singularity for biosciences](#) (- 6 hours) - PRBB-CRG - 2019

[Neuroanatomy](#) (- 50 hours) - Pr D. Hasboun - Université Pierre et Marie Curie, Paris - 2013-2014

[Agile software development \(Scrum\)](#) (- 20 hours) - Valtech - 2014

LANGUAGES [French](#) (native), [English](#) (full professional proficiency), [Spanish](#) (limited professional proficiency), [Catalan](#) (limited professional proficiency), [Italian](#) (elementary proficiency),

COMPUTER TECHNOLOGIES Extended knowledge of the [Python](#) language and [scientific computing](#) in [Python](#) - Knowledge of [C/C++](#), [Matlab](#), [R](#), [Java](#)
[Databases](#) (Sqlite, Postgresql) and [web](#) (server/client, JS, HTML5)
[Experienced in big data technologies](#) (machine learning, parallel computing, scalable databases) and in [high performance computing systems](#) (Docker/Singularity)
Enthusiast [Git/GitHub/GitLab](#) user
Experienced in agile project management ([Scrum](#)) and software architecture design - Enthusiast about [code quality](#) and good practices in software development
Experienced [Linux](#) system administrator since 2004.

NEUROIMAGING SOFTWARE [Statistical Parametric Mapping \(SPM\)](#), [FreeSurfer](#), [BrainVisa](#), [XNAT](#), [FSL](#), [ANTs](#)

TEACHING [Diagnostic imaging](#), since 2016, Pompeu Fabra University, Barcelona

[Computer Science](#), [Algorithmics](#), [Visualization in Scientific Computing](#), [Geometric Modeling](#), [Pattern Recognition](#), [Image Analysis](#), from 2005 to 2009, Faculté des Sciences de Luminy, Aix-Marseille University

SUPERVISION OF STUDENTS Mentor for the [Google Summer of Code](#) training program (2020)

[Guillem París](#) (2019 ; supervised Master student)

[Pauline Bezivin](#) (2012 ; co-supervised Master student)

[Samuel David](#) (2014 ; supervised Engineering student)

[Alberto Redolfi](#) (2014 ; co-supervised Ph.D candidate)

RESEARCH INTERESTS Optimization of image processing dataflows over large cohorts

Quality Control on large databases
Aging process and imaging predictors of neurodegenerative diseases
Computational anatomy

PROFESSIONAL INTERESTS

Machine learning
Computer vision
Software development in research
Large-scale data processing infrastructures

HOBBIES

Lightweight hiking, long-distance trekking
Aikido, climbing, running
Woodcraft, 3D printing

REFERENCES

[Dr. Juan Domingo Gispert López](#), Ph.D (current supervisor)
Head of neuroimaging research
BarcelonaBeta Brain Research Center – Pasqual Maragall Foundation
jdgispert@fpmaragall.org

[Dr. José Luis Molinuevo](#), M.D., Ph.D
Scientific Director
BarcelonaBeta Brain Research Center – Pasqual Maragall Foundation
jlmolinuevo@fpmaragall.org

[Dr. Jean-François Mangin](#), Ph.D (former supervisor)
Director of the CATI platform
Head of the Computer-assisted Neuroanatomy group,
NeuroSpin – Atomic Energy Commission, Saclay, France
jean-francois.mangin@cea.fr

[Dr. Olivier Coulon](#), Ph.D. (Ph.D advisor)
Head of the MeCA group
Institut des Neurosciences de La Timone, Marseille, France
olivier.coulon@univ-amu.fr

Peer-reviewed publications :

N. Vilor-Tejedor, **G. Operto**, T.E. Evans, C. Falcon, M. Crous-Bou, C. Minguillón, R. Cacciaglia, M. Milà-Alomà, O. Grau-Rivera, M. Suárez-Calvet, D. Garrido-Martín, S. Morán, M. Esteller, H.H. Adams, J.L. Molinuevo, R. Guigó, J.D. Gispert for the ALFA Study, [Effect of BDNF Val66Met on hippocampal subfields volumes and compensatory interaction with APOE- \$\epsilon\$ 4 in middle-age cognitively unimpaired individuals from the ALFA study](#), Brain Struct Funct, 2020

E. M. Arenaza-Urquijo, G. Salvadó, **G. Operto**, C. Minguillón, G. Sánchez-Benavides, M. Crous-Bou, O. Grau-Rivera, A. Sala-Vila, C. Falcón, M. Suárez-Calvet, H. Zetterberg, K. Blennow, J.D. Gispert, J.L. Molinuevo for the ALFA study, [Association of years to parent's sporadic onset and risk factors with neural integrity and Alzheimer's biomarkers](#), Neurology, 2020

S. Ingala, L. Mazzai, C. H. Sudre, G. Salvadó, A. Brugulat-Serrat, V. Wottschel, C. Falcon, **G. Operto**, B. Tijms, J.D. Gispert, J.L. Molinuevo, F. Barkhof, [The relation between APOE genotype and cerebral microbleeds in cognitively unimpaired middle- and old-aged individuals](#), Neurobiology of Aging, 2020

O. Grau-Rivera, **G. Operto**, C. Falcón, G. Sánchez-Benavides, R. Cacciaglia, A. Brugulat-Serrat, N. Gramunt, G. Salvadó, M. Suárez-Calvet, C. Minguillón, Á. Iranzo, J.D. Gispert, J.L. Molinuevo for the ALFA Study, [Association between insomnia and cognitive performance, gray matter volume, and white matter microstructure in cognitively unimpaired adults](#), Alzheimer's Research and Therapy, 2020

- G. Operto**, J.L. Molinuevo, R. Cacciaglia, C. Falcón, A. Brugulat-Serrat, M. Suárez-Calvet, O. Grau-Rivera, N. Bargalló, S. Morán, M. Esteller, J.D. Gispert for the ALFA Study, [Interactive effect of age and APOE- \$\epsilon\$ 4 allele load on white matter myelin content in cognitively normal middle-aged subjects](#), Neuroimage: Clinical, 2019
- P. M. Petrone, A. Casamitjana, C. Falcon, M. Artigues, **G. Operto**, R. Cacciaglia, J.L. Molinuevo, V. Vilaplana, J.D. Gispert & for the Alzheimer's Disease Neuroimaging Initiative, [Prediction of amyloid pathology in cognitively unimpaired individuals using voxel-wise analysis of longitudinal structural brain MRI](#), Alzheimer's Research and Therapy, 2019
- A. Brugulat-Serrat, G. Salvadó, **G. Operto**, R. Cacciaglia, C. Sudre, O. Grau-Rivera, M. Suárez-Calvet, C. Falcon, G. Sánchez-Benavides, N. Gramunt, C. Minguillon, K. Fauria, F. Barkhof, J.L. Molinuevo, J.D. Gispert for the ALFA Study, [White matter hyperintensities mediate gray matter volume and executive function relationship](#), Human Brain Mapping, 2019
- G. Operto**, R. Cacciaglia, O. Grau-Rivera, C. Falcon, A. Brugulat-Serrat, P. Ródenas, R. Ramos, S. Morán, M. Esteller, N. Bargalló, J.L. Molinuevo, J.D. Gispert for the ALFA Study, [White matter microstructure is altered in cognitively normal middle-aged APOE- \$\epsilon\$ 4 homozygotes](#), Alzheimer's Research & Therapy, 2018
- C. Falcon, A. Tucholka, G. Monté-Rubio, R. Cacciaglia, **G. Operto**, L. Rami, J.D. Gispert, J.L. Molinuevo for the Alzheimer's Disease Neuroimaging Initiative, [Longitudinal structural cerebral changes related to core CSF biomarkers in preclinical Alzheimer's disease: A study of two independent datasets](#), NeuroImage: Clinical, 2018
- C. Dufouil, B. Dubois, B. Vellas, F. Pasquier, F. Blanc, J. Hugon, O. Hanon, J-F Dartigues, S. Harston, A. Gabelle, M. Ceccaldi, O. Beauchet, P. Krolak-Salmon, R. David, O. Rouaud, O. Godefroy, C. Belin, I. Rouch, N. Auguste, D. Hannequin, A. Benetos, J. Pariente, M. Paccalin, O. Moreaud, C. Hommet, F. Sellal, M. Vercelletto, I. Jalenques, A. Gentric, P. Vandel, H. Savariaeu, **G. Operto**, H. Bertin, M. Chupin, V. Bouteloup, M-O Habert, J-F Mangin, G. Chêne on behalf of the Memento cohort Study Group, [Cognitive and imaging markers in non-demented subjects attending a memory clinic: study design and baseline findings of the MEMENTO cohort](#), Alzheimer's Research & Therapy, 2017
- G. Operto**, M. Chupin, B. Batrancourt, M.O Habert, O. Colliot, H. Benali, C. Poupon, C. Champseix, C. Delmaire, S. Marie, D. Rivière, M. Péligrini-Issac, V. Perlberg, R. Trebossen, M. Bottlaender, V. Frouin, A. Grigis, D. Papadopoulos Orfanos, H. Dary, L. Fillon, C. Azouani, A. Bouyahia, C. Fischer, L. Edward, M. Bouin, U. Thoprakarn, J. Li, L. Makkaoui, S. Poret, C. Dufouil, V. Bouteloup, G. Chételat, B. Dubois, S. Lehericy, J.F. Mangin, Y. Cointepas and the CATI Consortium, [CATI: A Large Distributed Infrastructure for the Neuroimaging of Cohorts](#), Neuroinformatics, 2016
- D. Germanaud, J. Lefèvre, C. Fischer, M. Bintner, A. Curie, V. des Portes, S. Eliez, M. Elmaleh-Bergès, D. Lamblin, S. Passemard, **G. Operto**, M. Schaer, A. Verloes, R. Toro, J.F. Mangin, L. Hertz-Pannier, [Simplified gyral pattern in severe developmental microcephalies? New insights from allometric modeling for spatial and spectral analysis of gyrification](#), Neuroimage, 2014
- G. Operto**, D. Rivière, B. Fertil, R. Bulot, J-F. Mangin, O. Coulon, [Structural Analysis of fMRI Data : A Surface-Based Framework for fMRI Multi-Subject Studies](#), Medical Image Analysis, 2012
- P. Havránková, N.D. Walker, **G. Operto**, T. Sieger, J. Vymazal, R. Jech, [Cortical pattern of complex but not simple movements is affected in writer's cramp: a parametric event-related fMRI study](#), Clinical Neurophysiology, 2011
- P. Havrankova, R. Jech, N.D. Walker, **G. Operto**, J. Tauchmanova, J. Vymazal, P. Dušek, M. Hromčík, E. Růžička, [Repetitive TMS of the somatosensory cortex improves writer's cramp and enhances cortical activity](#), Neuroendocrinology Letters, 2010
- C. Clouchoux, D. Rivière, J-F. Mangin, **G. Operto**, J. Régis, O. Coulon, [Model-driven parameterization of the cortical surface for localization and inter-subject matching](#), Neuroimage, 2010
- G. Operto**, R. Bulot, J-L. Anton, O. Coulon, [Projection of fMRI data onto the cortical surface using anatomically-informed convolution kernels](#), Neuroimage, 2008

Peer-reviewed conferences :

S. Puch, A. Aduriz, A. Casamitjana, V. Vilaplana, P. Petrone, **G. Operto**, R. Cacciaglia, S. Skouras, C. Falcon, J.L. Molinuevo, J.D. Gispert, [Voxelwise nonlinear regression toolbox for neuroimage analysis: Application to aging and neurodegenerative disease modeling](#), Neural Information Processing Systems, Workshop on Machine Learning for Health, 2016

G. Operto, G. Auzias, A. Le Troter, M. Perrot, D. Rivière, J. Dubois, P. Hüppi, O. Coulon, J.-F. Mangin, [Structural Group Analysis of Cortical Curvature and Depth Patterns in the Developing Brain](#) (accepted for oral presentation), international symposium on biomedical imaging – ISBI, Barcelona, 2012

O. Coulon, F. Pizzagalli, **G. Operto**, G. Auzias, C. Delon-Martin, M. Dojat, [Two new stable anatomical landmarks on the central sulcus: definition, automatic detection, and their relationship with primary motor functions of the hand](#), International Conference of the IEEE Engineering in Medicine and Biology Society – EMBC, 2011

G. Operto, B. Fertil, R. Bulot, O. Coulon, [Structural group analysis of brain functional data : assessing results significance](#), Medical Image Computing and Computer-Assisted Intervention – MICCAI – fMRI workshop, London, 2009

G. Operto, C. Clouchoux, R. Bulot, J.-L. Anton, O. Coulon, [Surface-based structural group analysis of fMRI data](#), Medical Image Computing and Computer-Assisted Intervention – MICCAI, New York City, 2008

G. Operto, [Noyaux de convolution contraints par l'anatomie pour la projection de données IRMf sur la surface corticale](#), Journées Du Laboratoire LSIS 2007, Giens, 2007

G. Operto, R. Bulot, J.-L. Anton, O. Coulon, [Anatomically informed convolution kernels for the projection of fmri data on the cortical surface](#), Medical Image Computing and Computer-Assisted Intervention – MICCAI, Copenhagen, 2006

Chapters in book :

C. Falcon, G. Operto, J.L. Molinuevo, J.D. Gispert. (2018) [Neuroimaging Methods for MRI Analysis in CSF Biomarkers Studies](#). In: Perneczky R. (eds) Biomarkers for Alzheimer's Disease Drug Development. Methods in Molecular Biology, vol 1750. Humana Press, New York, NY

J.-F. Mangin, M. Perrot, **G. Operto**, C. Fischer, J. Lefèvre, D. Rivière, (2015) [Sulcus Identification and Labeling](#), In [Brain Mapping](#), edited by Arthur W. Toga, Academic Press, Waltham, Pages 365–371, ISBN 9780123973160, <http://dx.doi.org/10.1016/B978-0-12-397025-1.00307-9>.

Abstracts and posters :

G. Operto, J.D. Gispert, R. Cacciaglia, J. Huguet, C. Falcon, K. Blennow, H. Zetterberg, J.L. Molinuevo for the ALFA Study, [Interactive Effect of CSF ABeta42 and p-Tau on Hippocampal Subfield Volumetry in Cognitively Unimpaired Subjects](#), Alzheimer's & Dementia: The Journal of the Alzheimer's Association, 2018

G. Operto, J.L. Molinuevo, C. Falcon, R. Cacciaglia, A. Brugulat-Serrat, O. Grau-Rivera, M. Suárez-Calvet, J.D. Gispert for the ALFA Study, [Age and Apoe genotype Interaction on White Matter Myelin in Cognitively Normal Middle-Aged Participants](#), Alzheimer's & Dementia: The Journal of the Alzheimer's Association, 2018

G. Operto, J. Huguet, C. Falcon, J.L. Molinuevo, J.D. Gispert, for the ALFA Study, [Effect of Age and Apoe on Hippocampal Subfields in Cognitively Normal Subjects \(N=1168, single site\)](#), Alzheimer's & Dementia: The Journal of the Alzheimer's Association, 2019

P. Petrone, A. Casamitjana, C. Falcon, M. Artigues, **G. Operto**, S. Skouras, R. Cacciaglia, J.L. Molinuevo, V. Vilaplana, J.D. Gispert, G. Salvadó, [Characteristic brain volumetric changes in the AD preclinical signature](#), Alzheimer's & Dementia: The Journal of the Alzheimer's Association, 2018

- JD Gisbert, G. Salvadó, R. Cacciaglia, **G. Operto**, C. Falcon, A. Brugulat, O. Grau, M. Suárez-Calvet, S. Moran, M. Esteller, JL Molinuevo,, [Reduced entorhinal gray matter volume in healthy amyloid-negative APOE-E4 homozygotes of the ALFA cohort](#), Alzheimer's & Dementia: The Journal of the Alzheimer's Association, 2018
- P. Petrone, V. Vilaplana, A. Casamitjana, D. Escobedo, A. Tucholka, R. Cacciaglia, **G. Operto**, S. Skouras, C. Falcon, JL Molinuevo, JD Gisbert, [Magnetic resonance imaging and machine learning make a valuable combined tool for the screening of preclinical AD](#), Alzheimer's & Dementia: The Journal of the Alzheimer's Association, 2017
- G. Operto**, R. Cacciaglia, C. Falcon, G. Sánchez-Benavides, N. Gramunt, S. Moran, M. Esteller, M. Crous-Bou, JL Molinuevo, JD Gisbert, [Effect of age and ApoE genotypes on brain microstructure in cognitively healthy subject as measured by diffusion-weighted imaging](#), Alzheimer's & Dementia: The Journal of the Alzheimer's Association, 2017
- C. Dufouil, J.F. Mangin, **G. Operto**, P. Amouyel, B. Dubois, B. Vellas, F. Pasquier, J.F. Dartigues, M. Ceccaldi, F. Blanc, A. Gabelle, P. Krolak-Salmon, J. Hugon, O. Hanon, O. Rouaud, R. David, M. Chupin, G. Chêne for the Memento Study group, [Are Alzheimer's Disease Risk Genes related to markers of brain pathology? The Memento cohort](#), Alzheimer's Association International Conference, 2016
- G. Operto**, C. Fischer, S. David, M. Bouin, L. Fillon, C. Champseix, J-F. Mangin, [SnapBase/SnapCheck: Assisting Quality Control of Post-processing Results over Large Cohorts](#), Human Brain Mapping, Honolulu, 2015
- C. Dufouil, M.Chupin, S. Auriacombe, H. Savarieau, B. Dubois, F. Pasquier, F. Blanc, J. Hugon, O. Hanon, A. Gabelle, M. Ceccaldi, O. Beauchet, P. Krolak Salmon, R. David, O. Rouaud, O. Godefroy, C. Belin, I. Rouch, D. Wallon, A. Benetos, M. Paccalin, M. Sauvé, L. Fillon, C. Hommet, F. Sellal, M. Vercelletto, I. Jalenques, A. Gentric, P. Vandel, V. Bouteloup, **G. Operto**, C. Thomas-Anterion, S. Belliard, J-F Mangin, P-J Ousset, G. Chene, [Age differences in the association of white matter lesions with the occurrence of dementia: The memento cohort](#), Alzheimer's & Dementia, Volume 11, Issue 7, Supplement, July 2015, Pages P678-P679, ISSN 1552-5260, <http://dx.doi.org/10.1016/j.jalz.2015.06.1008>.
- L. Edward, **G. Operto**, S. Poret, Y. Cointepas, N. Cheaib, L. Makkaoui, B. Batrancourt, [OntoCATI: Towards an ontology of neuroimaging measures in the CATI Platform](#), Frontiers in Neuroinformatics, Stockholm, 2013
- C. Fischer, **G. Operto**, S. Laguitton, M. Perrot, I. Denghien, D. Rivière, J-F. Mangin, [Morphologist 2012: The new morphological pipeline of BrainVisa](#), Human Brain Mapping, Beijing, 2012
- G. Operto**, G. Auzias, D. Rivière, J. Dubois, P. Hüppi, J-F. Mangin, [Finding Stable Sulcal Subunits in Developing Brain: a Group Analysis of Cortical Curvature and Depth Maxima](#), Human Brain Mapping, Quebec, 2011
- G. Operto**, O. Coulon, A. Cachia, D. Rivière, J. Régis, J-F. Mangin, [Finding Sulcal Stable Subunits : a Group Analysis of Primal Sketches of the Cortex Mean Curvature](#), Human Brain Mapping, Barcelona, 2010
- G. Auzias, O. Colliot, J-A. Glaunès, **G. Operto**, J-F. Mangin, A. Trouvé, S. Baillet, [Diffeomorphic registration of functional data using sulcal landmarks : DISCO is born to be alive](#), Human Brain Mapping, Barcelona, 2010
- L. Favre, A.L. Fouque, T. Vincent, A. Tucholka, M. Keller, **G. Operto**, B. Thyreau, C. Clouchoux, L. Risser, A. Moreno, D. Geoffroy, Y. Cointepas, O. Coulon, P. Ciuciu, B. Thirion, A. Roche, [A Comprehensive fMRI Processing Toolbox for BrainVISA](#), Human Brain Mapping, 2009
- P. Kochunov, J. Lancaster, S. Narayana, **G. Operto**, O. Coulon, J-F. Mangin, P. Fox, [Relationship between regional FDG uptake and other markers of cerebral health in normal aging](#), Human Brain Mapping, 2007
- G. Operto**, C. Clouchoux, J-L. Anton, A. Cachia, K. Dauchot, A. Sirigu, R. Bulot, O. Coulon, [Cortical localization by surface parameterization : a gyrus-based approach](#), Human Brain Mapping, Florence, 2006
- O. Coulon, C. Clouchoux, **G. Operto**, K. Dauchot, A. Sirigu, J-L. Anton, [Cortical localization by surface parameterization : a sulcus-based approach](#), Human Brain Mapping, Florence, 2006
- C. Clouchoux, O. Coulon, **G. Operto**, D. Riviere, K. Dauchot, A. Sirigu, J-L. Anton, J. Régis, [Cortical localization via hemisphere surface parameterization](#), Human Brain Mapping, Florence, 2006

P. Havrankova, R. Jech, N. Walker, **G. Operto**, P. Dušek, J. Vymazal, [Cortical involvement in active and passive motions in graphospasm](#) , Human Brain Mapping , Florence, 2006

P. Havrankova, R. Jech, N. Walker, **G. Operto**, P. Dušek, J. Vymazal, [Active and passive motion in patients with graphospasm: an event-related fMRI study](#), 16th International congress of Parkinson's disease and related disorders, Berlin, 2005

R. Jech, L. Nováková, N. Walker, **G. Operto**, J. Roth, J. Vymazal, E. Růžicka, [Postanoxický Myoklonus v Obraze Event-Related fMRI – Kazuistika](#) , 19th Czech and Slovak Neurological Congress, Brno, 2004