

CURRICULUM VITAE | MARINE VERNET

CNRS RESEARCHER, LYON, FRANCE

MARINE.VERNET@GMAIL.COM - WWW.MARINEVERNET.FR

EDUCATION

- 2006-2009 **PhD in Cognitive Neurosciences**, School: Brain, Cognition & Behavior, University Pierre and Marie Curie (UPMC), Paris, Mention "Very Honorable", highest Ph.D. honor granted by the UPMC
- 2005-2006 **Master 2 in Cognitive Neuroscience (Cogmaster)**, Ecole des Hautes Etudes en Sciences Sociales, Paris
- 2002-2005 **Engineer in Physics**, Ecole Supérieure de Physique Chimie Industrielles de la Ville de Paris (ESPCI-ParisTech)
- 2000-2002 **Scientific preparation for French Engineering Schools**, PCSI, PC*, Lycée Henri IV, Paris

ACADEMIC RESEARCH, R&D

- 2020- **CNRS Researcher ("Chargée de Recherche")** Impact Team, Lyon Neuroscience Research Center (CRNL/CNRS, Bron, France)
- 2016-2019 **Post-doctoral research:** Neural networks of conscious perception and brain signal decoding; direction: Dr. Leslie G. Ungerleider, Laboratory of Brain and Cognition (NIMH, NIH, Bethesda MD, USA)
- 2013-2015 **Post-doctoral research:** Oscillations, synchronizations and conscious perception in healthy adults and patients (epilepsy); direction: Dr. Antoni Valero-Cabre, FrontLab team directed by Bruno Dubois & Richard Levy, Brain and Spine Institute ICM (CNRS, Inserm, UPMC, Paris, France)
- 2010-2012 **Post-doctoral research:** Brain reactivity and connectivity at rest and during visuo-motor or perceptive tasks in healthy adults and in patients (traumatic brain injuries, epilepsy); direction: Pr. Alvaro Pascual-Leone, CNBS (Harvard, Boston MA, USA)
- 2006-2009 **PhD research:** Neural basis of the binocular motor coordination; exploration of cognitive function via eye movements in healthy adults and in patients (dementia, tinnitus); direction: Dr. Zoï Kapoula, IRIS Laboratory (CNRS, Paris, France)
- 2005 **Research project:** Participation in a new DNA-chip realization: detection of adsorption and hybridizing of RNA on micro mechanical device (phase integration interferometer); direction: Dr. Jean-Paul Roger, laboratory of Physical Optics (ESPCI, Paris, France)
- 2005 **Research project:** Development of an imaging system for detection and co-localization of fluorescent proteins; direction: Dr. Martin Oheim, laboratory of Neurophysiology (University Paris-Descartes, CNRS, INSERM, Paris, France)
- 2004 **Engineer internship:** Conception of a gas meter calibrating bench, preliminary tests, training of engineers of the SMAR firm, editing of the system book; direction: Rui Gomes (Instituto de Pesquisas Tecnológicas, São Paulo, Brazil)

ACADEMIC TEACHING

- 2014-2015 **Art and Neuroscience**, Art-Therapy master (5th year), University Paris-Descartes (2.5 hours)
- 2014 -2015 **Noninvasive brain stimulation lecture and practical**, Cognitive Science master (Cogmaster, 4th-5th year) & Integrative Biology and Physiology master (BIP, 5th year), UPMC (7.5 hours)
- 2011-2012 **TMS course practical and lecture**, CNBS, Harvard Medical School, Boston MA, USA (22 hours)
- 2009 **Physics**, faculty of pharmacy (1st year), University Paris-Sud (39 hours)
- 2009 **Eye movement physiology**, optometry formation (4th year), University Paris-Sud (3 hours)

KNOWLEDGE DIFFUSION, ANIMATION

- 2019 **Presentation of Neuroscience experiments** to children at the "Take your child to work day", NIH, Bethesda MD, USA
- 2008-2009 **Presentation of Physics experiments** to a general audience at the science museum "Palais de la Découverte", Paris

SCIENTIFIC AND TECHNICAL SKILLS

Multidisciplinary scientific culture (Physics, Chemistry, Biology and Cognitive Neuroscience)

Experiment programming and data analysis (e.g., Python, MatLab, EEGLab, AFNI) and specialized skills:

- Functional Magnetic Resonance Imaging (fMRI)
- Magnetoencephalography and Electroencephalography (M/EEG)
- Transcranial Magnetic Stimulation (TMS) and Transcranial Electric Stimulation (tDCS/tACS)
- Video-oculography and Posturography

SUPERVISION AND MENTORING OF UNDERGRADUATE (UnGr), GRADUATE (Grad) AND PhD students (underlined: work rewarded with co-authorship, * means co-supervision)

- **PhD:** Salim Klibi* (PhD UCBL1 Lyon 1/ École Nationale des Sciences de l'Informatique, Tunis, 2019-2023)
- **Grad:** Fayed Rassoulou (M2 Sciences Cognitives Univ. Lyon 2, 2021)
- **UnGr:** Corentin Bel (INSA Engineer Student, 4th year, 2021)
- **UnGr:** Marcus Toma (INSA Engineer Student, 3rd year, 2021)
- **UnGr:** Manon Petit (License 3 Ecole des Psychologues Praticiens de Lyon 2020-2021)
- **Grad:** Sara Ahmed (Graduate, NIH 2016-2019),
- **Grad:** Savannah Lokey* (Graduate, NIH 2016)
- **Grad:** Chloé Stengel* (M2 Cogmaster ENS 2014-2015)
- **Grad:** Juliette Godard* (M2 BIP UPMC 2013-2014)
- **Grad:** Frederick Ifert-Miller* (Graduate, Harvard Medical School 2010-2012)
- **UnGr:** Charles J. Beck (Senior in Neuroscience and Psychology, Boston University 2011-2012)
- **UnGr:** Christa Villari (Freshman in Biology and Psychology, Bowdin College 2012)
- **UnGr:** Marie Gruselle* (M1 Neuroscience UPMC 2007)
- **UnGr:** Mareike Trams* (M1 Neuroscience UPMC 2007)

Ph.D. JURIES

- Member of jury for the PhD of Magali Seille, *La première saccade sur les peintures et les sculptures : Etudes in situ et implications théoriques*, Supervised by Zoï Kapoula, 2021
- Reviewer for the PhD of Itsaso Colás Blanco, *The role of the frontal lobe in attention and conscious perception processes in healthy population and patients with acquired brain injury*, supervised by Ana Belén Chica Martínez and Mónica Triviño Mosquera, 2017
- Reviewer for the PhD of François Daniel, *Dysfonctionnements de la synergie vergence et accommodation chez les jeunes adultes : impact sur les saccades, la lecture et la cognition*, Supervised by Zoï Kapoula, 2017

REVIEWS FOR INTERNATIONAL JOURNALS

- *Neuroimage, Cerebral Cortex, European Journal of Neuroscience, Neuropsychologia, Brain Topography, Brain Stimulation, Journal of Neural Transmission, Frontiers in Neuroscience, Frontiers in Human Neuroscience, Frontiers in Integrative Neuroscience, Frontiers in Psychology, Psychophysiology, PlosOne, Progress in Neurobiology*

CO-ORGANIZATION OF CONFERENCES

- Symposium: *From mind-wandering to mindfulness: the role of attention and awareness at the NIH* (March 5-6 2019) with 12 international speakers
- Day on *Neuroscience, Aesthetics and Complexity* in Paris (October 2013)
- National (French) *Eye Movement Day* in Paris (September 2009)

FELLOWSHIPS AND GRANTS

- 2020 Impulsion, IDEXLYON (57,000 €)
- 2020 Fellows Award for Research Excellence at NIH (\$1,500)
- 2017 Philippe Foundation (\$10,000)
- 2013 *Fondation pour la Recherche Médicale* (110,000 €)
- 2010 Fyssen Foundation (50,000 €)
- 2006 PhD-student fellowship by the University Paris 6 (3 years Ph.D. salary)
- 2006 Garches Foundation (15,000 €)
- 2005 Master 2 fellowship

ATTENDED WORKSHOPS

- 2019 **MNE-Python course.** 3 days, NIH, Bethesda MD, USA
- 2017 **The Decoding Toolbox.** 2 days, NIH, Bethesda MD, USA
Open and reproducible neuroscience. 2 days, NIH, Bethesda MD, USA
- 2016 **AFNI bootcamp.** 1 week, NIH, Bethesda MD, USA
- 2014 **Connectomics.** 1 week, CNRS & Bordeaux University, France
- 2013 **The Visceral Mind Summer School.** 1 week, Bangor University, Wales, UK
TMS-EEG Summer School. 1 week, Aalto University school of Science, Helsinki, Finland
- 2012 **Expanding Cross-Disciplinary Dialogue.** 2 days, National Postdoctoral Association, Washington DC
Dynamic Causal Modeling (DCM) workshop. 2 days, ICM, Paris, France
- 2010 **EEGlab workshop.** 1 week, San Diego Supercomputer Center, UCSD, La Jolla CA, USA
- 2007 **Management workshops.** 9 days, PhD Formation Institute, Paris 6 University and United Partners

ATTENDED ONLINE COURSES

- 2021 **Micro-phenomenological analysis training.** 1 week, The micro-phenomenology laboratory
- 2020 **Micro-phenomenological interview training.** 1 week, The micro-phenomenology laboratory
- 2017 **Scientists Teaching Science.** 9 weeks, NIH, Bethesda MD, USA
- 2015 **Principles of fMRI.** 8 weeks, Johns Hopkins University, Coursera
An introduction to interactive programming in Python. 8 weeks, Rice University, Coursera
- 2012 **Machine Learning.** 10 weeks, Stanford University, online course, Coursera

LANGUAGES

- French Native
- English Fluent (post-docs in the USA)
- Portuguese High written and spoken level (6 months in Brazil)

CONFERENCES

- 2020 **TBS CNW: Transcranial Brain Stimulation in Cognitive Neuroscience workshop** (@ Rovereto, Italy)
- Vernet M. Variability in TMS modulation of conscious perception: insights from the combination with EEG and behavioral measures **(Invited Talk)**
- 2018 **TSC: The Science of Consciousness Conference** (Tuscon AZ, USA)
- Vernet M, Japee S, Zachariou V Ahmed S, Ungerleider LG. Disentangling models of visual awareness **(Plenary Talk)**
- CNS: Annual Meeting of the Cognitive Neuroscience Society** (Boston MA, USA)
- Vernet M, Japee S, Zachariou V Ahmed S, Lokey S, Ungerleider LG. Neural correlates of the emergence, stabilization and evaluation of conscious visual percepts
- 2017 **SfN: Annual meeting of the Society for Neurosciences** (Washington DC, USA)
- Vernet M, Japee S, Zachariou V Ahmed S, Lokey S, Ungerleider LG. Visual awareness: gradual building and sharp stabilization of visual percepts. **(Talk)**
- CNS: Annual Meeting of the Cognitive Neuroscience Society** (San Francisco CA, USA)
- Vernet M, Lokey S, Ahmed S, Japee S, Zachariou V, Ungerleider LG. Can orienting endogenous spatial attention impact subjective awareness more than objective performance?
- 2016 **SfN: Annual meeting of the Society for Neurosciences** (San Diego CA, USA)
- Vernet M, Lokey S, Ahmed S, Japee S, Zachariou V, Ungerleider LG. Orienting of endogenous spatial attention can impact subjective awareness more than objective performance.
- 2015 **Cutting EEG (II): Cutting-edge methods for EEG research on cognition** (Berlin, Germany)
- Vernet M. Brain Stimulation and EEG: Causality and Network **(Invited Talk)**
- OHBM: Annual Meeting of the Organization for Human Brain Mapping** (Honolulu HI, USA)
- Vernet M, Quentin R, Valero-Cabré A. Rhythmic TMS entrains functionally relevant FEF oscillations during a visual detection task.
 - Quentin R, Vernet M, Valero-Cabré A. Role of fronto-parietal white matter anatomy during visual performance improvement by rhythmic stimulation at different frequencies.
- 2014 **SfN: Annual meeting of the Society for Neurosciences** (Washington DC, MA)
- Valero-Cabré A., Quentin R, Vernet M. Rhythmic 30 Hz non invasive brain stimulation patterns entrain high-beta cortical oscillations relevant for conscious visual perception in the human right Frontal Eye Fields.
- CNS: Annual Meeting of the Cognitive Neuroscience Society** (Boston, Massachusetts, USA)
- Vernet M, Quentin R, Chanes L, Valero-Cabré A. Stimulating the right frontal eye field at beta frequencies: Electrophysiological correlates and impact on conscious perception. A pilot tms-egg study.
 - Quentin R, Vernet M, Elkin-Frankston S, Chanes L, Toba M, Valero-Cabré A. Visual detection improvements with frontal beta patterns of rhythmic non-invasive neurostimulation demonstrated by shifts of the psychometric function.
 - Chanes L, Vernet M, Quentin R, Valero-Cabré A. The impact of high-beta frontal pre-target oscillations on visual detection sensitivity is phase independent.
- 2011 **OHBM: Annual Meeting of the Organization for Human Brain Mapping** (Quebec City, Canada)
- Vernet M, Bashir S, Perez JM, Najib U, Pascual-Leone A. Motor plasticity induced by theta burst stimulation: correlated measures of MEPs and EEG.
 - Bashir S, Vernet M, Yoo WK, Mizrahi-Arnaud I, Theoret H, Pascual-Leone A. Noninvasive, Physiologic Characterization of Cortical Plasticity After Mild Traumatic Brain Injury in Humans.
- VSS: Annual meeting of the Vision Science Society** (Naples, FL, USA)
- Vernet M, Bashir S, Robertson E, Pascual-Leone A. Motor local and distributed network modulation during visuo-motor learning: a TMS-EEG study.
- 2009 **ECEM: European conference on eye movements** (Southampton, UK)
- Vernet M, Yang Q, Kapoula Z. The control of binocular motor coordination during reading: a transcranial magnetic stimulation study. **(Talk)**
- 2008 **SfN: Annual meeting of the Society for Neurosciences** (Washington DC, USA)
- Vernet M, Yang Q, Orssaud C, Kapoula Z. Cortical control of binocular coordination of saccades during reading **(Talk)**

Kapoula Z, Vernet M, Gruselle M, Trams M, Yang Q Switching between reflexive vs voluntary control of saccades becomes less efficient from the middle-age

2007 **ECEM: European conference on eye movements** (Postdam, Germany)

Vernet M, Yang Q, Kapoula Z. Role of posterior parietal cortex in the alignment of the eyes during fixations and saccades: A human TMS study. **(Talk)**

Vernet M, Yang Q, Daunys G, Orssaud C, Kapoula Z. Initiation of divergent vertical and horizontal eye movements.

Yang Q, Vernet M, Daunys G, Orssaud C, Kapoula Z. TMS of PPC delays saccades but not when they are combined with predictable divergence.

INVITED SEMINARS

2021 *Isolate and modulate the neural substrate of consciousness: subjective experience of seeing, thinking and acting*, Dugué Lab (Dr. Laura Dugé), Integrative Neuroscience and Cognition Center (INCC), University of Paris, @Paris, France, May 27

2020 *Modulate the neural substrate of consciousness, from external environment to our internal processes*, Plasticity & Subjectivity team (PSY) (Dr. Delphine Pins), laboratoire Neurosciences et cognition (UMRS1172, Université de Lille), Lille, France, Oct. 6

2019 *Building-up conscious visual percepts*, session *Perception and Mis-perception in the Nervous System* of the Demystifying Medicine series of lecture organized by Irwin Arias at the NIH, Bethesda MD, USA, April 2nd

2017 *Building-up conscious visual percepts*, Laboratoire Langage, Cerveau et Cognition (Dr. Tatjana Nazir & Dr. Anne Reboul) Institut des Sciences Cognitives Marc Jeannerod, Lyon, France, Sept. 25

2015 *Manipulating brain synchronization and the emergence of conscious visual perception*, Laboratory of Brain and Cognition (Dr. Leslie G. Ungerleider), NIMH/NIH, Bethesda MD, USA, May 6

2012 *Networks of consciousness explored with TMS-EEG combination*, Vestibular/Eye Movement Testing Laboratory (Pr. David S. Zee), Johns Hopkins hospital, Baltimore MD, USA, Oct. 9

Conscious and unconscious network explored with TMS-EEG combination, Laboratoire de Neuro-imagerie Cognitive (Pr. Stanislas Dehaene), Inserm-CEA, Gif-sur- Yvette, France, May 24

Stimulation magnétique transcrânienne (TMS) et l'EEG: un outil pour explorer l'interaction entre la TMS et l'activité corticale, Equipe Neuropsychologie et Neuroimagerie (Pr. Laurent Cohen), CRICM-CNRS-Inserm-Paris 6, Paris France, Jan. 3

2011 *Stimulation magnétique transcrânienne (TMS) et l'EEG: un outil pour explorer l'interaction entre la TMS et l'activité corticale*, Centre d'Etudes Sensorimotrices (Pr. Pierre-Paul Vidal), CNRS-Paris 5, Paris, France, Dec 20

Stimulation magnétique transcrânienne (TMS) et l'EEG: un outil pour explorer l'interaction entre la TMS et l'activité corticale, Equipe Dynamique corticale, Plasticité et Rééducation (Dr. Antoni Valero-Cabre), CRICM-CNRS-Inserm-Paris 6, Paris France, Dec. 19

2010 *Coordination of Eye Movements in 3D Space in Human: Cortical Substrate Studied by TMS*, Laboratory for Behavioral Neurology and Imaging of Cognition (Dr. Patrick Vuilleumier & Dr. Sophie Schwartz), Université de Genève, Genève, Suisse, Feb 18

2009 *Coordination of eye movements in 3D space in Human: cortical substrate studied by TMS*, Department of Psychology and Center for Neural Science (Dr. David Hegger), New York University, New York NY, USA, Dec 7

Coordination of eye movements in 3D space in Human: cortical substrate studied by TMS, Berenson-Allen Center for Noninvasive Brain Stimulation (Pr. Alvaro Pascual-Leone), Harvard Medical School, Boston MA, USA, Dec 5

Coordination of eye movements in 3D space in Human: cortical substrate studied by TMS, Brain and Vision research laboratory (Dr. Lucia Vania), Boston University, Boston MA, USA, Dec 4

2008 *Cortical basis of binocular movements in 3D space: behavioral and TMS studies, cognition and aging*, Vestibular/Eye Movement Testing Laboratory (Pr. David S. Zee), Johns Hopkins hospital, Baltimore MD, USA, Nov.

Metrics:

- 50 publications in international, peer-reviewed journals
- 5 book chapters
- 1 book (co-Editor)
- Citations > 16000; h-factor: 18 (source: Google Scholar)

1. Quentin R, Fanuel L, Kiss M, **Vernet M**, Vekony T, Janacsek K, Cohen L, Nemeth D (In Press) Statistical learning occurs during practice while high-order rule learning during rest period. NPJ Science of Learning
2. Stengel C, **Vernet M**, Amengual JL, Valero-Cabre A. (2021). Causal modulation of right hemisphere fronto-parietal phase synchrony with Transcranial Magnetic Stimulation during a conscious visual detection task. *Sci Rep*. 11(1):3807
3. **Vernet M**, Quentin R, Japee S, Ungerleider LG. (2020) From visual awareness to consciousness without sensory input: the role of spontaneous brain activity. *Cogn Neuropsychol*, 37 (3-4), 216-219
4. Yoo WK, **Vernet M**, Kim JH, Brem AK, Bashir S, Ifert-Miller F, Chang-Hwan Im CH, Eldaief M, Pascual-Leone A. (2020). Inter- and intra-hemispheric connectivity from the left pars opercularis within the language network is modulated by transcranial stimulation in healthy subjects. *Front Hum Neurosci*, 14(63), 1-9.
5. Zebhauser PT, **Vernet M**, Unterburger E, Brem AK. (2019). Visuospatial Neglect - a Theory-Informed Overview of Current and Emerging Strategies and a Systematic Review on the Therapeutic Use of Non-invasive Brain Stimulation. *Neuropsychol Rev*, 29(4), 397-420.
6. **Vernet M**, Stengel C, Quentin R, Amengual JL, Valero-Cabre A. (2019). Entrainment of local synchrony reveals a causal role for high-beta right frontal oscillations in human visual consciousness. *Sci Rep*, 9(1), 14510.
7. **Vernet M**, Japee S, Lokey S, Ahmed S, Zachariou V, Ungerleider LG. (2019). Endogenous visuospatial attention increases visual awareness independent of visual discrimination sensitivity. *Neuropsychologia*, 128, 297-304.
8. Iscan Z, Schurger A, **Vernet M**, Sitt JD, Valero-Cabre A. (2018). Pre-stimulus theta power is correlated with variation of motor evoked potential latency: a single-pulse TMS study. *Exp Brain Res*, 236(11), 3003-14.
9. **Amengual JL, Vernet M (co-first author)**, Adam C, Valero-Cabr  A (2017). *Local entrainment of oscillatory activity induced by direct brain stimulation in humans*. Scientific Report. 7:41908 (IF: 5.5)
10. Farzan F, **Vernet M**, Shafi M, Rotenberg A, Daskalakis ZJ, Pascual-Leone A (2016). *Characterizing and modulating brain circuitry through transcranial magnetic stimulation combined with electroencephalography*. Frontiers in Neural Circuits. 10:73
11. Teichmann M, Lesoil C, Godard J, **Vernet M**, Bertrand A, Levy R, Dubois B, Lemoine L, Truong DQ, Bikson M, Kas A, Valero-Cabr  A. (2016) *Direct current stimulation over the anterior temporal areas boosts semantic processing in primary aphasia*. Annals of Neurology. 80(5):693-707 (IF: 9.6)
12. Bashir S, **Vernet M**, Najib U, Perez J, Alonso-Alonso M, Knobel M, Yoo WK, Edwards D, Pascual-Leone A1 (2016). *Enhanced motor function and its neurophysiological correlates after navigated low-frequency repetitive transcranial magnetic stimulation over the contralesional motor cortex in stroke*. Restorative Neurology and Neuroscience. 11;34(4):677-89
13. Kapoula Z, Ruiz S, Spector L, Mocerovi M, Gaertner C, Quilici C, **Vernet M**. (2016). *Education influences creativity in dyslexic and non-dyslexic children and teenagers*. PlosOne. 11(3)1-14 (IF: 3.2)
14. Quentin R, Elkin Frankston S, **Vernet M**, Toba M, Bartolomeo P, Chanes L, Valero-Cabr  A. (2016) *Visual contrast sensitivity improvement by right frontal activity is mediated by contrast gain mechanisms and influenced by fronto-parietal white matter microstructure*. Cerebral Cortex. 26(6):2381-90 (IF: 8.3)
15. Quentin R, Chanes L, **Vernet M**, Valero-Cabr  A. (2015) *Fronto-parietal anatomical connections influence the modulation of conscious visual perception by high-beta frontal oscillatory activity*. Cerebral Cortex. 25(8):2095-101 (IF: 8.3)

16. Shafi M, **Vernet M**, Klooster D, Barnard M, Romatoski K, Westover M, Christodoulou J, Gabrieli J, Whitfield-Gabrieli S, Pascual-Leone A, Chang B. (2015) *Physiological consequences of abnormal connectivity in a developmental epilepsy*. *Annals of Neurology*. 77(3):487-503 (IF: 11.9)
17. **Tremblay S, Vernet M (co-first author)**, Bashir S, Pascual-Leone A, Théoret H. (2015) *Theta burst stimulation to characterize changes in brain plasticity following mild traumatic brain injury: a proof-of-principle study*. *Restorative Neurology and Neuroscience*. 33(5):611-20 (IF: 2.5)
18. **Vernet M**, Brem AK, Farzan F, Pascual-Leone A. (2015) *Synchronous and opposite roles of the parietal and prefrontal cortices in bistable perception: a double-coil TMS-EEG study*. *Cortex*. 64C: 78-88 (IF: 5.1)
19. Kapoula Z, Lang A, **Vernet M**, Locher P. (2015) *Eye movement instructions modulate motion illusion and body sway with Op Art*. *Frontiers in Human Neuroscience*. 9:121(IF: 2.5)
20. Chanes L, Quentin R, **Vernet M**, Valero-Cabré A. (2015) *Arrhythmic activity in the left frontal eye field facilitates conscious visual perception in humans*. *Cortex*. 71:240-7 (IF: 5.1)
21. **Vernet M**, Quentin R, Chanes L, Mitsumasu MA, Valero-Cabré A. (2014) *Frontal Eye Field, Where Art Thou? Anatomy, physiology and non-invasive manipulation of frontal regions involved in eye movements in 3D space and associated cognitive operations*. *Frontiers in Integrative Neuroscience*. 8(66): 1-24
22. Kapoula Z, Lang A, Lê TT, Adenis MS, Yang Q, Lipede G, **Vernet M**. (2014) *Visiting Richard Serra's "Promenade" sculpture improves postural control and judgment of subjective visual vertical*. *Frontiers in Psychology*. 5: 1349 (IF: 2.8)
23. Bashir S, Perez JM, Horvath JC, Pena-Gomez C, **Vernet M**, Capia A, Alonso-Alonso M and Pascual-Leone A. (2014) *Differential effects of motor cortical excitability and plasticity in young and old individuals: a Transcranial Magnetic Stimulation (TMS) study*. *Frontiers in Aging Neuroscience*. 6(111): 1-13 (IF: 5.2)
24. **Vernet M**, Bashir S, Yoo WK, Oberman L, Mizrahi I, Ifer-Miller F, Beck CJ, Pascual-Leone A. (2014) *Reproducibility of the effects of theta burst stimulation on motor cortical plasticity in healthy participants*. *Clinical Neurophysiology*. 125(2): 320-6 (IF: 3.1)
25. **Vernet M**, Bashir S, Yoo WK, Perez JM, Najib U, Pascual-Leone A. (2013) *Insights on the neural basis of motor plasticity induced by theta burst stimulation from TMS-EEG*. *European Journal of Neuroscience*. 37(4):598-606 (IF: 3.8)
26. Valero-Cabré A, Quentin R, **Vernet M**, Chanes L (2013). *Author response. Oscillation and synchrony entrainment: a new breadth for focal non-invasive neurostimulation in the cognitive neurosciences*. *Journal of Neuroscience*. 33(28):5 p following 11326 (IF: 6.9)
27. Lang A, **Vernet M**, Yang Q, Orssaud C, Londero A, Kapoula Z. (2013) *Differential auditory-oculomotor interactions in patients with right vs. left sided subjective tinnitus: a saccade study*. *Frontiers in Human Neuroscience*. 7(47): 1-10 (IF: 2.5)
28. Pereira AC, Schomer A, Feng W, Najib U, Yoo WK, **Vernet M**, Alexander MP, Caplan LR, Pascual-Leone A. (2012) *The anterior disconnection syndrome revisited using modern technologies*. *Neurology*. 79(3): 290-1 (IF: 8.2)
29. **Vernet M**, Walker L, Yoo WK, Pascual-Leone A, Chang BS. (2012) *EEG onset of a seizure during TMS from a focus independent of the stimulation site*. *Clinical Neurophysiology*. 123(10):2106-8 (IF: 3.1)
30. **Bashir S, Vernet M (co-first author)**, Yoo WK, Mizrahi I, Theoret H, Pascual-Leone A. (2012) *Changes in cortical plasticity after mild traumatic brain injury*. *Restorative Neurology and Neuroscience*. 30(4):277-82. (IF: 2.9)
31. Freitas C, Perez J, Knobel M, Tormos JM, Oberman LM, Eldaief M, Bashir S, **Vernet M**, Peña-Gómez C, Pascual-Leone A. (2011) *Changes in cortical plasticity across the lifespan*. *Frontiers in Aging Neuroscience*. 3: 1-5 (IF: 5.2)
32. Pascual-Leone A, Freitas C, Oberman L, Horvath JC, Halko M, Eldaief M, Bashir S, **Vernet M**, Shafi M, Westover B, Vahabzadeh-Hagh AM, Rotenberg A. (2011) *Characterizing Brain Cortical Plasticity and Network Dynamics Across the Age-Span in Health and Disease with TMS-EEG and TMS-fMRI*. *Brain Topography*. 24(3-4):302-15 (IF: 3.7)
33. **Vernet M**, Yang Q, Kapoula Z. (2011) *Guiding binocular saccades during reading: a TMS study of the PPC*. *Frontiers in Human Neuroscience*. 5(14): 1-8 (IF: 2.9)
34. Jainta S, **Vernet M**, Yang Q, Kapoula Z. (2011) *The pupil reflects motor preparation for saccades - even before the eye starts to move*. *Frontiers in Human Neuroscience*. 5: 1-10 (IF: 2.5)

35. Kapoula Z, Yang Q, Sabbah N, **Vernet M**. (2011) *Different effects of double-pulse TMS of the posterior parietal cortex on reflexive and voluntary saccades*. *Frontiers in Human Neuroscience*. 5: 1-9 (IF: 2.5)
36. Kapoula Z, Yang Q, Lê TT, **Vernet M**, Berbey, N, Orssaud C, Londero A, Bonfils P. (2011) *Medio-lateral postural instability in subjects with tinnitus*. *Frontiers in Neurology*. 2(35):1-8
37. Yang Q, **Vernet M**, Bucci MP, Kapoula Z. (2010) *Binocular coordination during smooth pursuit in dyslexia: a multiple case study*. *Journal of Eye Movement Research*. 3(3): 1-8
38. Kapoula Z, Yang Q, **Vernet M**, Bonfils P, Londero A. (2010) *Eye movement abnormalities in somatic tinnitus: Fixation, smooth pursuit and optokinetic nystagmus*. *Auris Nasus Larynx*. 37(3): 314-21
39. Yang Q, **Vernet M**, Orssaud C, Bonfils P, Londero A, Kapoula Z. (2010) *Central crosstalk for somatic tinnitus: abnormal vergence eye movements*. *PlosOne*. 5(7): 1-11 (IF: 3.7)
40. Kapoula Z, Yang Q, **Vernet M**, Dieudonne B, Greffard S, Verny M. (2010) *Spread deficits in initiation, speed and accuracy of horizontal and vertical automatic saccades in dementia with Lewy bodies*. *Frontiers in Neurology*. 1(138): 1-10
41. Kapoula Z, Yang Q, **Vernet M**, Orssaud C, Samson M, Dieudonne B, Greffard S, Verny M. (2010) *[Preservation of automatic ocular saccades in healthy elderly: alteration in patients with dementia with Lewy body]*. *Psychologie & NeuroPsychiatrie du Vieillissement*. 8(4): 295-306
42. **Vernet M**, Kapoula Z. (2009) *Binocular motor coordination during saccades and fixation while reading: a magnitude and time analysis*. *Journal of vision*. 9(7): 1-13 (IF: 2.5)
43. **Vernet M**, Yang Q, Gruselle M, Trams M, Kapoula Z. (2009) *Switching between gap and overlap pro-saccades: cost or benefit?* *Experimental Brain Research*. 197: 49-58 (IF: 2.2)
44. Kapoula Z, Yang Q, **Vernet M**, Bucci MP. (2009) *Eye movements and pictorial space perception: studies of paintings from Francis Bacon and Piero della Francesca*. *Cognitive Semiotics*. 5(Fall 2009)
45. Bucci MP, **Vernet M**, Gerard CL, Kapoula Z. (2009) *Normal speed and accuracy of saccade and vergence eye movements in dyslexic reader children*. *Journal of Ophthalmology*. DOI:10.1155/2009/325214
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- Freely accessible in <https://tel.archives-ouvertes.fr/tel-00459341v1>. *Coordination des Mouvements Oculaires dans l'Espace 3D chez l'Homme : substrat Cortical Étudié par TMS*
- Manuscript also published (Editions Universitaires Européennes): *Comment se coordonnent nos yeux lorsque nous explorons l'espace 3D. Substrat cortical étudié par stimulation magnétique transcrânienne*