

Florent LEBON, PhD

Professional details

Université de Bourgogne Franche-Comté, UFR STAPS
INSERM 1093, Cognition, Action et Plasticité sensorimotrice
Campus Universitaire, BP 27887
Dijon, FRANCE
+33 (0)3 80 39 67 54
florent.lebon@u-bourgogne.fr

Personal details

12 Avenue Salvador Allende
69100 VILLEURBANNE
FRANCE
florent.lebon@gmail.com

CURRENT POSITION

Sept 2012- Associate Professor at the University of Bourgogne Franche-Comté (Dijon) – Sport and Exercise Science Faculty
INSERM Laboratory U1093: *Action, Cognition and Sensorimotor Plasticity*
Main research interest: motor imagery, action observation, inhibitory mechanisms, mental fatigue, cerebral plasticity, learning
Teaching: neuroscience, cerebral plasticity, motor learning, psychopathology, exercise physiology

EDUCATION

July 2018 French Diploma to supervise PhD students (*Habilitation à Diriger des Recherches*) from University of Bourgogne Franche-Comté (Dijon)
Title : Motor learning and neural plasticity through the motor imagery process

July 2012-August 2012 Visiting researcher at the University of California, Berkeley (CA, USA)
Project title: competition resolution and corticomotor inhibition
Time course of inhibitory processes during selective motor tasks (transcranial magnetic stimulation).
Department of Psychology, Cognition and Action (CognAc) Laboratory
In collaboration with Pr Richard Ivry

Jan 2012-June 2012 Assistant Lecturer at the University of Bourgogne (Dijon) – INSERM Laboratory U1093
Project title: subliminal muscle activity during motor imagery
Action, Cognition and Sensorimotor Plasticity Laboratory
Supervised by Pr Charalambos Papaxanthis

Oct 2011-Dec 2011 Internship at the University of California, Berkeley (CA, USA)
Project title: competition resolution and corticomotor inhibition
Measurement of cortical inhibitory processes with transcranial magnetic stimulation during selective motor tasks.
Department of Psychology, Cognition and Action (CognAc) Laboratory
Supervised by Pr Richard Ivry

Jan 2010-June 2011 Post-doctoral Research Fellow at the University of Auckland (New Zealand)
Project title: Cognitive inhibition process during mental imagery
Assessment of the muscle-specific facilitation of the corticomotor pathway and intracortical inhibitory mechanisms underlying Motor Imagery, related to the imagery ability.
Department of Medicine, Centre for Brain Research
Supervised by Dr Cathy Stinear and Pr Winston Byblow.
Funding from the FYSEN foundation (18 months).

Sept 2006-Dec 2009 PhD candidate in Sport and Exercise Science at the University of Lyon (France):
Title: Mental effort efficiency on performance increase and rehabilitation of motor abilities – muscular strength and motor imagery –
Investigation of imagery-related effectiveness in strength gain and limitation of strength loss after peripheral injuries.
Sport Science Faculty, Mental and Motor Performance Laboratory

Supervised by Dr Aymeric Guillot and Pr Christian Collet.
Fellowship from the French Ministry of Research (36 months).

Sept 2004-Jun 2006 **Master Degree** in Sport and Exercise Science, University of Lyon (France)
Sept 2001-Jun 2004 **Bachelor Degree** in Sport and Exercise Science, University of Valenciennes (France)

GRANTS, FELLOWSHIPS AND HONORS

2021-2024 Co-I for the project *TEAM-sports*, Program Investing for the Future, €1 208 000 for 4 years, Priority Research Program «Very high-performance Sports» for Olympic and Paralympic Games in Paris 2024.

2018-2021 PI for the project *Understand and optimize mental strategies in motor training*, National Research Agency German-French collaboration, €140 000 for 3 years. Success rate= 11%

2017-2020 PI for the project *Neural plasticity and mental actions*, Bourgogne Franche-Comté Council and University Junior Fellowship, €152 700 for 3 years.

2015-2016 Co-I for the project *Action Preparation in the Isolated Cerebral Hemispheres: Callosal Agenesis*, France-Berkeley Funds, \$10 000 for 1 year

2014-2017 Co-I for the ANR project, 'MOTION', €230 000 for 3 years. Success rate <10%

2014-2015 PI for the project *Cerveau, Cognition, Action*, Bourgogne Council (France) €20 400 for 1 year

2013-2015 PI for the project *Cerveau, Cognition, Action*, Bourgogne Council (France) €42 000 for 2 years

2013-2014 PI for the project *Cerveau, Cognition, Action*, Bourgogne Council (France) and European funds, €20 000 for 1 year

2010-2011 FYSSEN foundation postdoctoral fellowship, €32 500 for one and half year

2007-2009 PhD program fellowship from the Centre for Academic Teaching of the University of Lyon

2006-2009 PhD program fellowship from the French Ministry of Research

2005-2006 Master Merit fellowship of the University of Lyon

PUBLICATIONS

International peer-reviewed papers

1. Neige C., Grosprêtre S., Martin A., **Lebon F.** Influence of Voluntary Contraction Level, Test Stimulus Intensity and Normalization Procedures on the Evaluation of Short-Interval Intracortical Inhibition. *Brain Sciences*, **2020**, 10, 433.
2. Neige C., Rannaud-Monany D., Stinear C.M., Byblow W.D., Papaxanthis C., **Lebon F.** Unravelling the modulation of intracortical inhibition during motor imagery: An adaptive threshold-hunting study. *Neuroscience*, **2020**, 434, 102-110.
3. **Lebon F.**, Ruffino C., Greenhouse I., Labruna L., Ivry R.B. & Papaxanthis C. The neural specificity of movement preparation during actual and imagined movements. *Cerebral Cortex*, **2019**, 29, 689-700.
4. Ruffino C., Gaveau J., Papaxanthis C., & **Lebon F.** An acute session of motor imagery training induces use-dependent plasticity. *Scientific Reports*, **2019**, 9, 20002.
5. Grosprêtre S., **Lebon F.**, Papaxanthis C., & Martin A. Spinal plasticity with motor imagery practice. *Journal of Physiology*, **2019**, 597, 921-934.
6. Labruna L., Tischler C., Cazares C., Greenhouse I., Duqué J., **Lebon F.** & Ivry R.B. Planning Face, Hand, and Leg Movements: Anatomical Constraints on Preparatory Inhibition. *Journal of Neurophysiology*, **2019**, 121, 1609-1620.
7. Ruffino C., Bourrelier J., Papaxanthis C., Mourey F. & **Lebon F.** The use of motor imagery training to retain the performance improvement following physical practice in the elderly. *Experimental Brain Research*, **2019**, 237, 1375-1382.
8. **Lebon F.**, Horn U., Domin M. & Lotze M. Motor imagery training: kinaesthetic imagery strategy and inferior parietal fMRI activation. *Human Brain Mapping*, **2018**, 39, 1805-1813.

9. Grosprêtre S., Jacquet T., **Lebon F.**, Papaxanthis C., & Martin A. Neural mechanisms of strength increase after 1-week motor imagery training. *European Journal of Sport Science*, **2018**, 17, 1-10.
10. Traverse E., **Lebon F.**, & Martin A. Corticospinal and spinal excitability are modulated during motor imagery associated with somatosensory electrical nerve stimulation. *Neural Plasticity*, **2018**, 8265427.
11. Ruffino C., Papaxanthis C., & **Lebon F.** Neural plasticity during motor learning with motor imagery practice: review and perspectives. *Neuroscience*, **2017**, 341, 61-78.
12. Ruffino C., Papaxanthis C., & **Lebon F.** The influence of imagery capacity in motor performance improvement. *Experimental Brain Research*, **2017**, 235, 3049-3057.
13. **Lebon F.**, Greenhouse I., Labruna L., Vanderschelden B., Papaxanthis C., & Ivry R.B. Influence of delay period duration on inhibitory processes for response preparation. *Cerebral Cortex*, **2016**, 26, 2461-2470.
14. Bodranghien F., Manto M., & **Lebon F.** Enhancing transcranial direct current stimulation via motor imagery and kinesthetic illusion: crossing internal and external tools. *Journal of Neuroengineering and Rehabilitation*, **2016**, 13, 50.
15. Grosprêtre S., **Lebon F.**, Papaxanthis C., & Martin A. New evidence of cortico-spinal network modulation induced by motor imagery. *Journal of Neurophysiology*, **2016**, 115, 1279-1288.
16. Rozand V., **Lebon F.**, Stapley P.J., Papaxanthis C., & Lepers R. A prolonged motor imagery session alter imagined and actual movement durations: Potential implications for neurorehabilitation. *Behavioural Brain Research*, **2016**, 297, 67-75.
17. Grosprêtre S., Ruffino C., & **Lebon F.** Motor imagery and cortico-spinal excitability: A review. *European Journal of Sport Science*, **2016**, 16, 317-324.
18. Rozand V., **Lebon F.**, Papaxanthis C., & Lepers R. Effects of mental fatigue on speed-accuracy trade-off. *Neuroscience*, **2015**, 297, 219-230.
19. Grosprêtre S., **Lebon F.**, Papaxanthis C., & Martin A. Impact of motor imagery at spinal level. *Japanese Journal of Physical Fitness and Sports Medicine*, **2015**, 64, 113.
20. Rozand V., **Lebon F.**, Papaxanthis C. & Lepers R. Does a mental-training session induce neuromuscular fatigue? *Medicine & Science in Sports & Exercise*, **2014**, 46, 1981-1989.
21. Labruna L., **Lebon F.**, Duque J., Klein P-A, & Ivry R. Generic inhibition of the selected movement and constrained inhibition of non-selected movements during response preparation. *Journal of Cognitive Neuroscience*, **2014**, 26, 269-278.
22. **Lebon F.**, Lotze M., Stinear C.M. & Byblow W.D. Task-dependant interaction between right inferior parietal and left primary motor cortices during motor imagery and mental rotation. *PLoS One*, **2012**, 7:e37850.
23. **Lebon F.**, Byblow W.D., Collet C., Guillot A., & Stinear C.M. The modulation of motor cortex excitability during motor imagery depends on imagery quality. *European Journal of Neuroscience*, **2012**, 35, 323-331.
24. **Lebon F.**, Guillot A., & Collet C. Increased muscle activation following motor imagery during the rehabilitation of the anterior cruciate ligament. *Applied Psychophysiology and Biofeedback*, **2012**, 37, 45-51.
25. Collet C., Guillot A., **Lebon F.**, MacIntyre T. & Moran A. Measuring motor imagery: psychometric, behavioural and psychophysiological techniques. *Exercise and Sport Sciences Reviews*, **2011**, 39, 85-92.
26. **Lebon F.**, Collet C. & Guillot A. Benefits of motor imagery training on muscle strength. *Journal of Strength and Conditioning Research*, **2010**, 24, 1680-1687.
27. Guillot A., **Lebon F.**, Vernay M., Girbon J.P., Doyon J. & Collet C. Effect of motor imagery in the rehabilitation of burn patients. *Journal of Burn Care and Rehabilitation*, **2009**, 30, 686-693.
28. **Lebon F.**, Guillot A., Rouffet D., & Collet C. Modulation of EMG power spectrum frequency during motor imagery. *Neuroscience Letters*, **2008**, 435, 181-185.
29. Guillot A., **Lebon F.**, Rouffet D., Champely S., Doyon J. & Collet C. Muscular responses during motor imagery as a function of muscle contraction types. *International Journal of Psychophysiology*, **2007**, 66, 18-27.

National peer-reviewed paper (France)

30. **Lebon F.**, Guillot A., Collet C., & Papaxanthis C. Perception, Observation et Action. *Movement and Sport Sciences - Science & Motricité*, **2015**.
31. **Lebon F.**, Gueugneau N., & Papaxanthis C. Stimulation magnétique transcrânienne et imagerie motrice : corrélats neurophysiologiques de l'action mentalement simulée. *Movement & Sport Sciences - Science & Motricité*, **2013a**, 82, 21-30.
32. **Lebon F.**, Gueugneau N., & Papaxanthis C. Modèles internes et imagerie motrice. *Movement & Sport Sciences - Science & Motricité*, **2013b**, 82, 51-61.
33. **Lebon F.**, Guillot A. & Collet C. Imagerie motrice et activité électromyographique. *Science & Motricité*, **2008**, 64, 11-34.

Book

34. Lepers R., Bretin-Maffiuletti K., Campo M., Crognier L., Gaveau J. & **Lebon F.** (Eds.) Actes de l'ACAPS, **2017**
35. Collet C., Guillet E., **Lebon F.**, Rogowski I. & Saint-Martin J. (Eds.)
Approche pluridisciplinaire de la motricité humaine (Multidisciplinary approach of human motion), ACAPS proceedings, Mangrove, **2009**.

Book chapter

36. **Lebon F.** Blessure du sportif et plasticité cérébrale. In: J. Frogier et al. (Eds.) *La Plasticité Cérébrale*, Sauramps Medical, **2017**, pp 92-98.
37. Guillot A., **Lebon F.** & Collet C. Electromyographic activity during motor imagery. In: A. Guillot & C. Collet (Eds.) *The neurophysiological foundations of mental and motor imagery*, Oxford University Press, **2010**, pp 215-226.

Popularisation article

38. **Lebon F.** Les processus cognitifs sous-jacents de l'imagerie motrice – capacité d'imagerie et mécanismes d'inhibiteurs. *Annales de la Fondation FYSSEN*, **2013**.

Scientific Reviews for the following journals:

Cerebral Cortex, Scientific Reports, Cortex, Journal of Physiology, Sports Medicine, Medicine and Science in Sports and Exercise, Journal of Cognitive Neuroscience, NeuroImage, NeuroImage Clinical, Journal of Neurophysiology, Neurorehabilitation & Neural Repair, Neuroscience, Neuropsychologia, European Journal of Neuroscience, Experimental Brain Research, Behavioural Brain Research, Neuroscience Letters, International Review of Sport and Exercise Psychology, Brain Sciences, Frontiers in Neuroscience, Frontiers in Human Neuroscience, Behavioral Neuroscience, Acta, Neurologica Belgica, PeerJ, Journal of NeuroEngineering and Rehabilitation, Plos One, BMJ Open, Physiology and Behavior, BMC Musculoskeletal Disorders, Brain Research, Computational Intelligence and Neuroscience, Journal of Motor Behavior, Journal of Applied Sport Psychology, Journal of Cognitive Psychology, Perceptual and Motor Skills, Science & Motricité, Sport Exercise and Performance in Psychology, Research Quarterly for Exercise and Sport, Translational Neuroscience.

Reviews for scientific projects:

- *Research project*: Swiss Federal Institute of Technology Zurich (ETH Zurich) (1); Research Quality Bonus (BQR), University of Bourgogne, France (3) ;
- *Doctoral grant* : doctoral school Grand-Est, France (2)
- *Post-doctoral grant* : KU Leuven, Belgium (1) ; Hasselt University, Belgium (1)

PRESENTATIONS**Invited Conferences**

May 13th – 15th 2019: **Lebon F.**

Workshop on motor preparation, response inhibition and proactive control, *Department of Psychology, Oslo, Norway.*

The neural origins of preparatory inhibition.

March 15th – 17th 2017: **Lebon F.**,

Entretiens de Médecine Physique et de Réadaptation, *Montpellier, France*

Blessure du sportif et plasticité cérébrale.

September 9th 2010: **Lebon F.**

Brainwaves presentation, Symposium on Motor Control, *Centre for Brain Research, Auckland, New Zealand.*

Imagining and/or doing: the effect on performance.

Invited Seminar

September 8th 2020 : **Lebon F.**

Séminaire du Laboratoire CognAc, Bruxelles, Belgique.

Réseau neuronal et M1 – Excitabilité corticospinale, SICI et modèle d'imagerie motrice.

July 7th 2020 : **Lebon F.**

Séminaire du Centre de Recherche en Neurosciences de Lyon (CRNL) Laboratoire IMPACT, Lyon, France.

Mécanismes d'inhibition et de plasticité dans le contrôle et le (ré)apprentissage du mouvement humain.

April 30th 2019: **Lebon F.**

Séminaire du Laboratoire de Psychologie et de NeuroCognition, Grenoble, France.

Modulations neuronales et comportementales suite à un entraînement par imagerie motrice.

June 14th 2018: **Lebon F.**

Séminaire du Laboratoire Toulouse NeuroImaging Center, Toulouse, France.

Mécanismes de l'apprentissage par imagerie motrice.

June 28th 2017: **Lebon F. & Labruna L.**

Cognition and Action Laboratory Seminar, Psychology Department, UC Berkeley, California, USA.

The origins of inhibition during movement preparation.

July 19th 2016: **Lebon F.**

Cognition and Action Laboratory Seminar, Psychology Department, UC Berkeley, California, USA.

The contribution of inhibition during movement preparation.

March 16th 2015: **Lebon F.**

Séminaire du Laboratoire de Neurosciences Cognitives, Marseille, France

Les processus neuronaux des actions réelles et mentales.

June 26th 2014: **Lebon F.**

Cognition and Action Laboratory Seminar, sPsychology Department, UC Berkeley, California, USA.

The preparation of actual and imagined movement.

July 10th 2012: **Lebon F.**

Cognition and Action Laboratory Seminar, sPsychology Department, UC Berkeley, California, USA.

Impulse control and competition resolution in motor control.

October 5th 2010: **Lebon F.**

Health Psychology Seminar Series, Department of Psychology, Auckland, New Zealand.

Benefits of Motor Imagery in the rehabilitation process.

International Congress

[O] Oral; [P] Poster communication

July 11th – 15th 2020: Dupont W., Papaxanthis C., **Lebon F.*** & Madden-Lombardi C.*

Federation of European Neuroscience Societies (FENS), Glasgow, UK.

The motor cortex wants the full story: The influence of sentence context on corticospinal excitability in action language processing. [P]

July 11th – 15th 2020: Rannaud Monany D., Barbiero M., **Lebon F.**, Babic J., Blohm G., Nozaki D. & White O.

Federation of European Neuroscience Societies (FENS), Glasgow, UK.

Better live your dreams than dream your life: impact of weightlessness on internal models. [P]

October 28th – 31st 2019: Ruffino C., Truong C., Bougila F., Michel C., **Lebon F.** & Papaxanthis C.

XVIII^{ème} International Congress of Research Fellowships in Sport and Physical Activities (ACAPS), Paris, France.

Consolidation d'un apprentissage par imagerie motrice : vers un processus différent de la pratique physique ? [O]

- October 28th – 31st 2019: Neige C., Rannaud Monany D., Stinear C.M., Byblow W.D., Papaxanthis C., & **Lebon F.**
XVIIIth International Congress of Research Fellowships in Sport and Physical Activities (ACAPS), Paris, France.
 Unravelling the modulation of intracortical inhibition during motor imagery: An adaptive threshold-hunting study. [O]
- November 3rd – 7th 2018: **Lebon F.**, Ruffino C., Gaveau J. & Papaxanthis C.
Society for Neuroscience Conference, San Diego, CA, USA
 Use-dependent learning is subject to corticospinal excitability: data from motor imagery and motor preparation. [P]
- July 04th - 07th 2018: Ruffino C., Bourrelier J., Papaxanthis C., Mourey F., & **Lebon F.**
European Congress of Sport Science, Dublin, Ireland.
 Compensation of motor memory deficit by motor imagery training in the elderly. [O]
- July 04th - 07th 2018: Traverse E., **Lebon F.**, & Martin A.
European Congress of Sport Science, Dublin, Ireland.
 Corticospinal modulations after somatosensory stimulation combined with motor imagery. [O]
- October 29th – 31st 2017: Ruffino C., Bourrelier J., Papaxanthis C., Mourey F., & **Lebon F.**
XVIIth International Congress of Research Fellowships in Sport and Physical Activities (ACAPS), Dijon, France.
 Utilisation de l'imagerie motrice pour compenser le déficit de mémoire motrice des personnes âgées. [O]
- October 29th – 31st 2017: Traverse E., **Lebon F.**, & Martin A.
XVIIth International Congress of Research Fellowships in Sport and Physical Activities (ACAPS), Dijon, France.
 Modulations induites par imagerie motrice associée à une stimulation somato-sensorielle sur l'excitabilité cortico-spinale et spinale. [O]
- October 12th – 16th 2016: **Lebon F.**, Stinear C. & Papaxanthis C.
Society for Neuroscience Conference, San Diego, CA, USA
 Modulation of primary motor cortex inhibition during motor imagery. [P]
- October 12th – 16th 2016: Labruna L., Tischler C., Cazares C., Greenhouse I., Duque J., **Lebon F.**, Levitin D.J. & Ivry R.B.
Society for Neuroscience Conference, San Diego, CA, USA
 Effector dependent levels of inhibition in response preparation. [P]
- July 06th - 09th 2016: Traverse E., Papaxanthis C., & **Lebon F.**
European Congress of Sport Science, Vienna, Austria.
 Gradual specificity during actual and imagined isometric contractions. [O]
- October 26th – 28th 2015: Ruffino C., Papaxanthis C., Collet C., Guillot A., & **Lebon F.**
XVIth International Congress of Research Fellowships in Sport and Physical Activities (ACAPS), Nantes, France.
 Evolution de la capacité d'imagerie au cours d'un entraînement mental. [O]
- October 26th – 28th 2015: Traverse E., Papaxanthis C., & **Lebon F.**
XVIth International Congress of Research Fellowships in Sport and Physical Activities (ACAPS), Nantes, France.
 Spécificité graduelle de l'imagerie motrice. [O]
- October 17th - 21st 2015: **Lebon F.**, Traverse E., Fadiga L., Pozzo T., & Papaxanthis C.
Society for Neuroscience Conference, Chicago, IL, USA
 The integration of gravity in implicit and explicit motor representations. [P]
- October 17th - 21st 2015: Ruffino C., Papaxanthis C., Greenhouse I., Labruna L., Ivry R.B., & **Lebon F.**
Society for Neuroscience Conference, Chicago, IL, USA
 Neural processes during the preparation and the mental simulation of action. [P]
- June 24th - 27th 2015: Rozand V., **Lebon F.**, Papaxanthis C., & Lepers R.
European Congress of Sport Science, Malmö, Sweden
 Influence of mental fatigue on goal-directed movements. [O]

- November 15th - 19th 2014: **Lebon F.**, Ruffino C., Greenhouse I., Labruna L., Ivry R.B., & Papaxanthis C.,
Society for Neuroscience Conference, Washington, DC, USA
 The dynamic of corticospinal excitability during the preparation of imagined movement. [P]
- October 10th 2014: **Lebon F.**
International conference on Motor Imagery and Action Observation, Dijon, France
 Cognitive processes of preparation: findings from TMS studies [O]
- July 02nd - 05th 2014: Grosprêtre S., **Lebon F.**, Papaxanthis C., & Martin A.
European Congress of Sport Science, Amsterdam, Netherlands
 Motor imagery at spinal level. [O]
- July 02nd - 05th 2014: Rozand V., **Lebon F.**, Papaxanthis C., & Lepers R.
European Congress of Sport Science, Amsterdam, Netherlands
 Does motor imagery induce neuromuscular fatigue? [O]
- May 15th – 16th 2014: **Lebon F.**, Ruffino C., & Papaxanthis C.
RIO group meeting, Brussels, Belgium
 What does TMS reveal about motor imagery and action observation? [O]
- May 15th – 16th 2014: Ruffino C., Papaxanthis C., & **Lebon F.**
RIO group meeting, Brussels, Belgium
 Corticospinal inhibition during preparation of motor imagery depends on imagery ability. [O]
- April 20th – 25th 2014: **Lebon F.**, Ruffino C., Labruna L., Ivry R.B., & Papaxanthis C.
Neural Control of Movement meeting, Amsterdam, Netherlands
 Do you prepare yourself to imagine a movement? [P]
- January 25th 2014: Grosprêtre S., **Lebon F.**, Papaxanthis C., & Martin A.
International Congress of Physiotherapy, Brussels, Belgium
 Activation of neural networks during motor imagery: from brain to muscle? [P]
- January 25th 2014: Rozand V., **Lebon F.**, Papaxanthis C., & Lepers R.
International Congress of Physiotherapy, Brussels, Belgium
 Does motor imagery induce neuromuscular fatigue? [P]
- November 09th – 13th 2013: **Lebon F.**, Greenhouse I., Labruna L., Papaxanthis C., & Ivry R.B.
Society for Neuroscience Conference, San Diego, CA, USA
 Influence of delay period duration on inhibitory processes for response preparation. [P]
- October 29th – 31st 2013: **Lebon F.**, Ruffino C., Labruna L., Ivry R.B. & Papaxanthis C.
XVth International Congress of Research Fellowships in Sport and Physical Activities (ACAPS), Symposium on Motor Imagery, Grenoble, France.
 Preparation of imagined movement and corticospinal excitability. [O]
- October 29th – 31st 2013: Rozand V., **Lebon F.**, Papaxanthis C., & Lepers R.
XVth International Congress of Research Fellowships in Sport and Physical Activities (ACAPS), Symposium on Motor Imagery, Grenoble, France.
 Une session d'entraînement mental en imagerie motrice engendre-t-elle une fatigue neuromusculaire? [O]
- October 13th - 17th 2012: **Lebon F.**, Stinear CM., Byblow WD., Papaxanthis C.
Society for Neuroscience Conference, New Orleans, LA, USA
 Variability of corticomotor excitability as an indicator of imagery ability. [P]
- May 23th - 25th 2012: **Lebon F.**, Lotze M., Stinear CM., & Byblow WD.
1st European Congress of Cognitive Stimulation (STIMCO), Dijon, France
 Task-dependant interaction between right inferior parietal and left primary motor cortices during motor imagery. [O]
- January 30th 2011: **Lebon F.**, Byblow WD., Collet C., Guillot A & Stinear CM.
Australian Neuroscience Symposium, Sensorimotor Control Satellite Meeting, Auckland, New Zealand
 The corticomotor excitability is modulated by imagery quality. [O]
- October 28th – 30th 2009: **Lebon F.**, Collet C. & Guillot A.,

XIIIth International Congress of Research Fellowships in Sport and Physical Activities (ACAPS), Symposium on Motor Imagery, Lyon, France.

Effect of motor imagery on strength increase. [O]

October 31th – November 2nd 2007: **Lebon F.**, Guillot A., Rouffet D. & Collet C.,

XIIth International Congress of Research Fellowships in Sport and Physical Activities (ACAPS), Symposium on Motor Imagery and Performance, Leuven, Belgium.

Electromyographic activity and motor imagery: the effect of the load and the contraction types. [O]

March 29th 2007 : **Lebon F.**, Guillot A., Rouffet D., Coubaud F., Champely S. & Collet C.,

XIth Scientific Congress of the Doctoral School of Sciences and Health (EDISS), Lyon, France.

Muscular activity recordings during motor imagery: the effect of charge magnitude and contraction types. [O]

TEACHING

At the Faculty of Sport and Exercise Science for undergraduate and graduate students (from 2006)

From 2012	University of Burgundy	Neuroscience, Cerebral Plasticity, Motor Learning, Psychopathology, Exercise Physiology, Biomechanics, Statistics
2010	University of Auckland	Neuroscience
2006-2009	University of Lyon	Neuroscience, Motor learning and performance, Sport training and programming, Computer science

SKILLS

Research Tools

Transcranial Magnetic Stimulation:

Magstim²⁰⁰ and BiSTim, Magstim Company Ltd;

Neuronavigation: Brainsight, combination of T1 MR images and TMS;

Neurostimulation: DS7, Digitimer stimulator;

Heart Rate Variability: Polar watch RS800;

Surface Electromyography: Flex-comp Infinity system, Thought technology; ADInstruments PowerLab Systems; CED system;

Strain gauge force transducer;

Motion capture: Vicon, Oxford Metrics

Goniometer: SG110 Biometrics.

Software

Labview AD Instrument, Signal CED, Polaris Brainsight, Polar Pro Trainer, Kubios HRV, Pack Microsoft Office, Endnote and Zotero

Languages

French: mother language,

English: fluent,

Romanian: basics.

ADMINISTRATIVE TASKS

- 2017** Organizing committee Fellow of the XVIIth International Congress of ACAPS, *October 29th-31st 2017, Dijon, France.*
In charge of the scientific abstracts in Neuroscience.
- 2014** Organizing committee Fellow of the international conference on Motor Imagery and Action Observation, *October 10th 2014, Dijon, France.*
- 2010-2011** Volunteer for the Brain Day of the Centre for Brain Research, *March 19th 2010 & 2011, Auckland, New Zealand.*
Experimenter with the motor control group in the Science Lab.
- 2009** Organizing committee Fellow of the XIIIth International Congress of ACAPS, *October 28th-30th 2009, Lyon, France.*
In charge of the sponsorship and the best junior presentation award.
- 2007-2009** Organizing committee Fellow of Scientific Day of the Health and Science Doctoral School, University of Lyon, *March 29th 2007, March 19th 2008 and March 11th 2009, Lyon, France.*
The Scientific Day was an opportunity for Master and PhD students in Health and Science of the University of Lyon to present their research.
- 2007-2009** Co-manager of the Young Researcher Network of the ACAPS: <http://www.acaps.asso.fr/>
In charge of: -the communication between PhD students and senior researchers of the association
-the student section of the website

REFERENCES

Pr Cathy Stinear, Neurology Research Group, Department of Medicine, University of Auckland, Auckland, New Zealand, c.stinear@auckland.ac.nz.

Pr Charalambos Papaxanthis, director of the INSERM unit U1093, Cognition, Action et Plasticité Sensorimotrice, Université de Bourgogne Franche-Comté, Dijon, France, charalambos.papaxanthis@u-bourgogne.fr.

Pr Richard Ivry, director of the Cognition and Action Laboratory, chair of the Department of Psychology, University of California, Berkeley, USA, ivry@berkeley.edu.