

Guillaume SESCOUSSE, PhD student

Nationality : French

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EDUCATION

- 2006-2010** PhD in cognitive neuroscience – *Centre de Neurosciences Cognitive, Lyon, France*
- 2005-2006** MSc in cognitive neuroscience – *Centre de Neurosciences Cognitive, Lyon, France*
- 2002-2005** BSc in Biochemistry and Biotechnology Engineering at the *Institut National des Sciences Appliquées (INSA: Grande Ecole), Lyon, France*
→ Final year as an exchange student at *Concordia University, Montreal*
- 2000-2002** Preparatory School at *INSA*
→ International Section "EURINSA" (section open to all European students, in which the emphasis is put on foreign languages and cultures)
- June 2000** Baccalauréat Scientifique (with distinction), majoring in Math, Physics and Biology, *International High School of Lyon, France*

RESEARCH EXPERIENCE

- 2006-2010** PhD thesis – *Centre de Neurosciences Cognitive, CNRS, Lyon, France*
→ **supervision**: J-C Dreher
→ **subject**: Neural correlates of reward processing and decision-making in healthy individuals and psychiatric patients (schizophrenia, pathological gambling, anorexia)
- 2005-2006** Master's thesis – *Centre de Neurosciences Cognitive, CNRS, Lyon, France*
→ **supervision**: J-C Dreher
→ **subject**: Processing of primary and secondary rewards in the brain
- Feb-July 2005** Training (6 months) – *Montreal Neurological Institute, McGill University, Montreal, Canada*
→ **supervision**: A. Dagher
→ **subject**: Neural correlates of gambling in healthy and pathological gamblers
- July-Aug 2003** Training (2 months) – *Institut cellule souche et cerveau, INSERM, Lyon, France*
→ **supervision**: H. M. Cooper
→ **subject**: The effect of twilights on rodents' behavior

SCIENTIFIC COMMUNICATION

Publications

Sescousse G., Redouté J. & Dreher J-C. *The architecture of reward value coding in the orbitofrontal cortex.* (Submitted)

Sescousse G., Caldù X., Segura B. & Dreher J-C. *A unique brain reward circuit for multiple rewards? A meta-analysis of the human neuroimaging literature.* (In preparation)

Sescousse G., Eche J., Saoud M., d'Amato T. & Dreher J-C. *Disruption of ventral striatal responses to primary and secondary rewards in patients with schizophrenia.* (In preparation)

Sescousse G., Barbalat G., Domenech P. & Dreher J-C. *Disturbed responses to non-monetary rewards in pathological gamblers.* (In preparation)

Book chapter

Sescousse G., Bault N. & Chambon V. *Chocolat, sexe et argent : Comment le cerveau représente-t-il les récompenses ? [Chocolate, sex and money: how does the brain represent rewards?]* In Roy, J-M (Ed.) "Peut-on se passer des représentations en sciences cognitives?". De Boeck, Bruxelles. (In press)

Oral communications

- June 2010** *Exacerbated response to monetary rewards... or disturbed response to non-monetary rewards in pathological gamblers?* 16th annual Meeting of the Organization for Human Brain Mapping, Barcelona, Spain
- January 2010** *Characterisation of loss aversion behavior in anorexia nervosa.* 7th Meeting on eating disorders, Lyon, France
- June 2007** *The representation of rewards in the brain: the examples of sex and money.* National meeting of the young investigators in cognitive Science, Lyon, France
- March 2007** *Cerebral imaging of male sexual motivation.* Brain awareness week, Lyon, France

Poster communications

- June 2010** **Sescousse G.**, Barbalat G., Domenech P. & Dreher J-C. *Exacerbated responses specific to monetary rewards in pathological gamblers.* 16th annual Meeting of the Organization for Human Brain Mapping, Barcelona, Spain
- June 2009** **Sescousse G.**, Eche J., Saoud M., d'Amato T. & Dreher J-C. *Processing of primary and secondary rewards in patients with schizophrenia.* 15th annual Meeting of the Organization for Human Brain Mapping, San Francisco, US
- October 2008** **Sescousse G.** & Dreher J-C. *Coding of reward type along an antero-posterior gradient in the human orbitofrontal cortex.* Biology of Cognition meeting (Exciting Biologies series), Chantilly, France
- June 2007** **Sescousse G.**, Redouté J. & Dreher J-C. *Comparing brain networks involved in the processing of monetary and visually erotic rewards.* 13th annual Meeting of the Organization for Human Brain Mapping, Chicago, US
- June 2006** **Sescousse G.**, Aw A., Aulakh H., Farago P., Gupta R., Derevensky J. & Dagher A. *The effect of anticipation and receipt of monetary reward on brain activation of normal controls during a gambling task: an fMRI study.* 12th annual Meeting of the Organization for Human Brain Mapping, Florence, Italy

AWARDS / FELLOWSHIPS / GRANTS

- June 2010** HBM Trainee Abstract Award
- Jan-Dec 2010** French Medical Research Foundation (FRM) fellowship
- 2008-2010** Grant from the French National Agency for Drug and Addiction Control (MILDT) (46 000 €)
- August 2007** UCLA Advanced Neuroimaging Summer School fellowship
- 2006-2009** French Research Ministry PhD fellowship
- 2005-2006** French Education Ministry MSc fellowship

STUDENT SUPERVISION

- 2008-2010** Stéphanie Rogues – MSc student in neuroscience
→ **subject:** Study of loss aversion in anorexia nervosa
- Feb-Aug 2009** Christophe Lenglos - MSc student in applied computer engineering
→ **subject:** Study of betting strategies in a roulette game

TECHNICAL SKILLS

General Matlab, Statistica, R
fMRI SPM, fmristat, GingerALE, Presentation, BrainVISA

MEDIA COVERAGE

"Pourquoi joue-t-on ?", E=M6 program, aired on national TV channel M6, December 12th 2009
[www.m6.fr/emission-e_m6/13-12-2009-jeux_de_hasard_peut_on_forcer_la_chance-14286572.html]
[www.m6bonus.fr/videos-emissions-4/videos-e_m6-122/emission_du_13_12_2009/video-pourquoi_joue_t_on_-17108.html]

"Rien ne va plus", L'Effet Papillon program, aired on national TV channel Canal+, February 20th 2010
[www.capatv.com/?p=5511]

"Rien n'arrête la fièvre du jeu", Sciences & Avenir magazine, June 2010
[www.sciencesetavenir.fr/magazine/actualite/098692/rien-n-arrete-la-fievre-du-jeu.html]

EXTRA ACADEMIC

July-Dec 2008 Consultant for l'Oréal
2003-2004 Vice treasurer of the "Club des 24 Heures de l'INSA" (organizes of one of the largest student events in France)
Vice president of "ABIL" (INSA de Lyon Association of Biochemists)