
Quentin Devignes, Ph.D.
Curriculum Vitae

Professional Contact Information:

McLean Hospital
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EDUCATION

- February 2022 – Present** **Postdoctoral Research Fellow**
McLean Hospital, Belmont, MA
Harvard Medical School, Boston, MA
Mentor: Isabelle M. Rosso, Ph.D.
- 2017 – 2021** **Doctorate Candidate in Clinical Research, Technological Innovation, and Public Health – Neuroscience**
Biology and Health Doctoral School, University of Lille, France
Mentor: Kathy Dujardin, Ph.D.
Dissertation: The dual cognitive syndrome hypothesis in Parkinson's disease: MRI studies of structural and functional correlates
- 2016 – 2017** **Master of Science in Neuroscience Research**
School of Medicine, University of Lille, France
Mentor: Kathy Dujardin, Ph.D.
Thesis: Parkinson's disease: cognitive profiles of patients eligible for deep brain stimulation – anatomical markers
- 2014 – 2016** **Master of Science in Clinical Neuropsychology**
Department of Psychology, Faculty of Psychology, Education and Training Sciences, University of Lille, France
Mentors: Kathy Dujardin, Ph.D.; Christine Moroni, Ph.D., Delphine Dellacherie, Ph.D.
Thesis during 1st year: The dual syndrome hypothesis in Parkinson's disease: clinical validity
Thesis during 2nd year: Time and dyslexia: role of attention and motor coordination in temporal perception and audio-motor synchronization
- 2011 – 2014** **Bachelor of Arts in Psychology**
Department of Psychology, Faculty of Psychology, Education and Training Sciences, University of Lille, France
Mentor: Christel Vanbesien-Mailliot, Ph.D.
Thesis: Structural and functional brain bases underlying false memories

HONORS AND AWARDS

- 2016 – 2017** **Master's degree awarded with high honors**
School of Medicine, University of Lille, France
- 2015 – 2016** **Master's degree awarded with highest honors**

Department of Psychology, Faculty of Psychology, Education and Training Sciences, University of Lille, France

2011 – 2015

Bachelor's degree awarded with highest honors

Department of Psychology, Faculty of Psychology, Education and Training Sciences, University of Lille, France

PROFESSIONAL AFFILIATIONS

2023 – Present

American Psychological Association, member

2019 – 2021

International Parkinson, and Movement Disorders Society, student member

2020 – 2021

French Neuroscience Society, student member

PEER-REVIEWED PUBLICATIONS

First and co-first author

*authors contributed equally.

Devignes, Q., Bordier, C., Viard, R., Defebvre, L., Kuchcinski, G., Leentjens, A. F. G., Lopes, R., & Dujardin, K. (2022). Resting-State Functional Connectivity in Frontostriatal and Posterior Cortical Subtypes in Parkinson's Disease-Mild Cognitive Impairment. *Movement Disorders*, *37*(3), 502–512. <https://doi.org/10.1002/mds.28888>

Devignes, Q.*, Daoudi, S.*, Viard, R., Lopes, R., Betrouni, N., Kuchcinski, G., Rolland, A.-S., Moreau, C., Defebvre, L., Bardinnet, E., Bonnet, M., Brefel-Courbon, C., Delmaire, C., El Mountassir, F., Fluchère, F., Fradet, A., Giordana, C., Hainque, E., Houvenaghel, J.-F., ... for the PREDISTIM working group. (2022). Heterogeneity of PD-MCI in Candidates to Subthalamic Deep Brain Stimulation: Associated Cortical and Subcortical Modifications. *Journal of Parkinson's Disease*, *12*(5), 1507–1526. <https://doi.org/10.3233/JPD-223232>

Devignes, Q., Lopes, R., & Dujardin, K. (2022). Neuroimaging outcomes associated with mild cognitive impairment subtypes in Parkinson's disease: A systematic review. *Parkinsonism & Related Disorders*, *95*, 122–137. <https://doi.org/10.1016/j.parkreldis.2022.02.006>

Devignes, Q., Viard, R., Betrouni, N., Carey, G., Kuchcinski, G., Defebvre, L., Leentjens, A. F. G., Lopes, R., & Dujardin, K. (2021). Posterior Cortical Cognitive Deficits Are Associated With Structural Brain Alterations in Mild Cognitive Impairment in Parkinson's Disease. *Frontiers in Aging Neuroscience*, *13*, 668559. <https://doi.org/10.3389/fnagi.2021.668559>

Other

Clancy, K. J., **Devignes, Q.**, Ren, B., Pollmann, Y., Nielsen, S. R., Howell, K., Kumar, P., Belleau, E. L., & Rosso, I. M. (2023). Spatiotemporal dynamics of hippocampal-cortical networks underlying the unique phenomenological properties of trauma-related intrusive memories (p. 2023.06.20.23291671). medRxiv. <https://doi.org/10.1101/2023.06.20.23291671> (*Under revision*)

Clancy, K. J., **Devignes, Q.**, Kumar, P., May, V., Hammack, S. E., Akman, E., Casteen, E. J., Pernia, C. D., Jobson, S. A., Lewis, M. W., Daskalakis, N. P., Carlezon, W. A., Ressler, K. J., Rauch, S. L., & Rosso, I. M. (2023). Circulating PACAP levels are associated with increased amygdala-default mode network resting-state connectivity in posttraumatic stress disorder. *Neuropsychopharmacology: Official Publication of the American College of Neuropsychopharmacology*, *48*(8), 1245–1254. <https://doi.org/10.1038/s41386-023-01593-5>

Bégel, V., Dalla Bella, S., **Devignes, Q.**, Vandenbergue, M., Lemaître, M.-P., & Dellacherie, D. (2022). Rhythm as an independent determinant of developmental dyslexia. *Developmental Psychology*, *58*(2), 339–358. <https://doi.org/10.1037/dev0001293>

Betrouni, N., **Devignes, Q.**, Bayot, M., Derambure, P., Defebvre, L., Leentjens, A. F., Delval, A., & Dujardin, K. (2022). The frontostriatal subtype of mild cognitive impairment in Parkinson's disease, but not the posterior cortical one, is associated with specific EEG alterations. *Cortex; a Journal Devoted to the Study of the Nervous System and Behavior*, 153, 166–177.
<https://doi.org/10.1016/j.cortex.2022.04.015>

Carey, G., Lopes, R., Viard, R., Betrouni, N., Kuchcinski, G., **Devignes, Q.**, Defebvre, L., Leentjens, A. F. G., & Dujardin, K. (2020). Anxiety in Parkinson's disease is associated with changes in the brain fear circuit. *Parkinsonism & Related Disorders*, 80, 89–97.
<https://doi.org/10.1016/j.parkreldis.2020.09.020>

Complete list of published work:

<https://www.ncbi.nlm.nih.gov/myncbi/quentin.devignes.1/bibliography/public/>

MANUSCRIPTS IN PROGRESS

Only first-author manuscripts are listed

Devignes, Q., Clancy, K. J., Pollmann, Y., & Rosso, I. M. The unique phenomenological properties of trauma-related intrusive memories: a systematic review. *In preparation*

Devignes, Q., Ren, B., Clancy, K. J., Howell, K., Pollmann, Y., Martinez-Sanchez, L., Kumar, P., & Rosso, I. M. Trauma-related intrusive memories and anterior hippocampus structural covariance: an ecological momentary assessment study in posttraumatic stress disorder. *Under review*

Devignes, Q., Clancy, K. J., Pollmann, Y., Howell, K., Kumar, P., Ren, B., & Rosso, I. M. Resting-state functional and effective connectivity between the right dorsolateral prefrontal cortex and right anterior and posterior hippocampi in relation to trauma-related intrusive memory properties in posttraumatic stress disorder. *In preparation*

CONFERENCE PRESENTATIONS

Oral presentations

Devignes Q., Lemaitre MP. Evolution of the cognitive profile in developmental language disorder | 21st *Lille pediatric neurology annual meeting* – Lille, France – November 2019

Devignes Q., Dellacherie D, Lemaitre MP. Dyschronia and dyslexia: conceptual hypotheses and results from an assessment in 21 dyslexic children | 19th *Lille pediatric neurology annual meeting* – Lille, France – November 2017

Poster presentations

First author

Devignes, Q., Clancy, K.J., Pollmann, Y., Howell, K., Kumar, P., Ren, B., & Rosso, I.M. Resting-state functional connectivity between the right dorsolateral prefrontal cortex and right anterior hippocampus in relation to trauma-related intrusive memory frequency and intrusiveness in posttraumatic stress disorder | Annual Meeting of the American College of Neuropsychopharmacology – Tampa, FL – December 2023 (*abstract submitted*)

Devignes Q., Ren B, Howell K, et al. Associations of anterior and posterior hippocampus volumes with frequency of trauma-related intrusive memories: an ecological momentary assessment study | Annual Meeting of the Society of Biological Psychiatry – San Diego, CA – April 2023

Devignes Q., Bordier C, Viard R, et al. The dual cognitive syndrome in Parkinson's disease: a resting-state functional connectivity study | Congress of the International Parkinson and Movement Disorder Society – Virtually – September 2021 (selected for the guided tour)

Devignes Q, Viard R, Betrouni N, et al. Posterior cortical cognitive deficits are associated with tract alterations in Parkinson's disease | Annual Meeting of the Organization for Human Brain Mapping– Virtually – June 2021

Devignes Q, Viard R, Betrouni N, et al. The dual cognitive syndrome in Parkinson's disease: volumetric, morphological and tractometric features | Congress of the International Parkinson and Movement Disorder Society – Virtually – September 2020 (selected for the guided tour)

Devignes Q, Viard R, Betrouni N, et al. The dual cognitive syndrome hypothesis in Parkinson's disease: volumetric and morphological features | 2nd Congress of Centers of Excellence for Neurodegenerative Disorders – Lille, France – October 2019

Other

Granger, S.J., **Devignes, Q.**, Pollmann, Y., et al. Trauma-related intrusive memory frequency is associated with altered macrostructure of the inferior longitudinal fasciculus and lower microstructure of cingulum tracts | Annual Meeting of the American College of Neuropsychopharmacology – Tampa, FL – December 2023 (*abstract submitted*)

Clancy, K.J., **Devignes, Q.**, Pollmann, Y., et al. Disorganization in the principal gradient of hippocampal functional connectivity tracks individual differences in sensory-perceptual properties of trauma-related intrusive memories | Annual Meeting of the American College of Neuropsychopharmacology – Tampa, FL – December 2023 (*abstract submitted*)

Betrouni, N., **Devignes, Q.**, Derambure, P., et al. Electroencephalography signatures of subtypes of mild cognitive impairment in Parkinson's disease | The 18th European Congress of Clinical Neurophysiology – Marseille, France – May 2023

Clancy, K.J., **Devignes, Q.**, Howell, K., et al. Temporal dynamics of a posterior hippocampus network are associated with the reliving properties of trauma-related intrusive memories | Annual Meeting of the Society of Biological Psychiatry – San Diego, CA – April 2023

Howell, K., **Devignes, Q.**, Pollmann, Y., et al. Insula volume correlates with greater self-reported sensory reactivity in adults with posttraumatic stress | Annual McLean Research Day – Belmont, MA – January 2023

Pollmann, Y., Clancy, K.J., **Devignes, Q.**, et al. Differences in intrusive memory qualities in relation to depression or PTSD symptom severity in trauma-exposed adults | Annual McLean Research Day – Belmont, MA – January 2023

Akman, E., Jobson, S., Lewis, M.W., **Devignes, Q.**, et al. Associations of posttraumatic stress and depression symptom severity with hippocampus volumes in trauma-exposed adults | Annual McLean Research Day – Belmont, MA – January 2023

Dujardin, K., **Devignes, Q.**, Daoudi, S., et al. PD-MCI is frequent in candidates to subthalamic deep brain stimulation and is associated with structural brain alterations | Congress of the International Parkinson and Movement Disorder Society – Madrid, Spain – September 2022

RESEARCH EXPERIENCE

Period:	February 2022 – Present
Laboratory:	Anxiety and Traumatic Stress Disorders Laboratory, Center for Depression, Anxiety and Stress Research
Role:	Postdoctoral Research Fellow
Supervisor:	Isabelle M. Rosso, Ph.D.
Collaborators:	Scott L. Rauch, MD; Kevin J. Clancy, Ph.D.; Steven J. Granger, Ph.D.; Michael W. Lewis, Ph.D.; Jennifer Urbano-Blackford, Ph.D. (University of Nebraska)
Supervisees:	Kristin Howell, BA; Yara Pollmann, BA
Setting:	McLean Hospital/Harvard Medical School, Belmont, MA
Projects:	<ul style="list-style-type: none">● Multimodal imaging of hippocampal-cortical networks and trauma memories

Duties:

- Clinical studies of stress peptide systems in adults with posttraumatic stress

 Database management (including ecological momentary assessments); literature search; preprocessing, quality check, and analyses of structural and functional MRI images; descriptive and inferential statistical analyses; presentations at international conferences; writing and publication of papers; manual segmentation of the bed nucleus of the *stria terminalis*; grant writing; co-mentoring research assistants and summer students; NIMH Data Archives (NDA) submission

Period: October 2017 – November 2021
Laboratory: Degenerative and vascular Cognitive Disorders Team, Lille Neuroscience and Cognition Research Center
Role: **Doctoral Researcher**
Supervisor: Kathy Dujardin, Ph.D.
Collaborators: Régis Bordet, MD, Ph.D.; David Devos, MD, Ph.D.; Renaud Lopes, Ph.D.; Romain Viard, Ph.D.; Grégory Kuchcinski, MD, Ph.D.; Cécile Bordier, Ph.D.; Nacim Betrouni, Ph.D.
Supervisees: Sami Daoudi, BS; Lionel Trogneux, BS; Achille Raviez, BS
Setting: Lille University Medical Center/University of Lille, Lille, France
Projects:

- Cognitive phenotypes in Parkinson’s disease
- Methylphenidate and cognitive training in elderly
- Predictive Factors and Subthalamic Stimulation in Parkinson’s Disease (PREDISTIM)

Duties: Participation in the design and implementation of a randomized controlled trial to assess the effects of methylphenidate and cognitive training on attentional performance in healthy elderly; development and administration of a computer-based neuropsychological assessment; database management; development of an algorithm to classify patients’ cognitive profile using their neuropsychological assessment; quality control and analyses of structural and functional MRI data; descriptive and inferential statistical analyses; literature search; dissertation writing and defense; publication of several papers, including four first-author articles; poster presentations at international conferences; co-supervision of three graduate students’ thesis

Period: September 2016 – September 2017
Laboratory: Regional Diagnostic Center for Learning Disorders
Role: **Researcher in Neuropsychology**
Collaborator: Marie-Pierre Lemaître, MD
Setting: Lille University Medical Center, Lille, France
Project: Evolution of the cognitive profile in children with developmental language disorder
Duties: Database management; descriptive and inferential statistical analyses; literature search; oral presentation of results at a conference; revision of the clinical research protocol to improve data quality; co-supervision of thesis of speech therapy students; providing training in statistical and scientific methodology to colleagues

Period: October 2016 – June 2017
Laboratory: Degenerative and vascular Cognitive Disorders Team, Lille Neuroscience and Cognition Research Center
Role: **Research Intern – Master’s degree in Neuroscience**
Supervisor: Kathy Dujardin, Ph.D.
Collaborators: David Devos, MD, Ph.D.; Luc Defebvre, MD; Renaud Lopes, Ph.D.; Romain Viard, Ph.D.; Nicolas Carrière, MD
Setting: Lille University Medical Center/University of Lille, Lille, France
Project: Predictive Factors and Subthalamic Stimulation in Parkinson’s Disease (PREDISTIM)
Duties: Database management (17 French centers were included in this study); revision of the clinical research protocol to improve data quality; development of an algorithm to

classify patients' cognitive profile using their neuropsychological assessment; quality control of T1-weighted MRI data; volumetric, morphological and shape analyses of cortical and subcortical brain regions; descriptive and inferential statistical analyses; literature search; thesis writing; thesis defense

Period: October 2015 – June 2016
Laboratory: Psychology: Interactions, Time, Emotions, Cognition (PSITEC)
Role: **Research Intern – Master's degree in Clinical Neuropsychology**
Supervisor: Delphine Dellacherie, Ph.D.
Collaborator: Marie-Pierre Lemaître, MD
Setting: Department of Psychology, Faculty of Psychology, Education and Training Sciences, University of Lille, France
Project: Role of attention and motor coordination in temporal perception and audio-motor synchronization in children with dyslexia
Duties: Recruitment of patients with dyslexia and healthy controls; administration of questionnaires and experimental tasks at the participant's home; database management; descriptive and inferential statistical analyses; literature search; thesis writing

RELEVANT CERTIFICATIONS AND COURSES

July 2022 – Present **Certificate – Data Scientist with R**
DataCamp, Inc.
<https://www.datacamp.com/portfolio/qdevignes>

June 2023 – Present **Machine Learning Foundational Curriculum**
Educational Activities, Data Science Office, Mass General Brigham

**September 2022 –
September 2023** **Certificate – Grant Funding for Researchers**
Harvard Catalyst | The Harvard Clinical and Translational Science Center

September 2023 **Course – Computational Psychiatry**
Translational Neuromodeling Unit, University of Zurich & ETH Zurich

April 2019 **Massive Open Online Course (MOOC) – Learn how to code with Python**
France Digital University

OTHER RELEVANT PROFESSIONAL EXPERIENCE

July 2023 – Present **Co-organizer**, Center for Depression, Anxiety, and Stress Research Speaker Series
McLean Hospital, Belmont, MA

2018 – 2022 **Elected representative of the Ph.D. students to the doctoral school board**
Biology and Health Doctoral School, University of Lille, France

Autumn 2021 **Expertise mission for a private company**
Systematic review of the scientific literature
Team of doctoral consultants (Consulid), University of Lille, France

Spring 2020 **Reviewer of a guide for open science published by the University of Lille and the French Ministry of Higher Education, Research and Innovation**
University of Lille, France

INTERNSHIPS IN CLINICAL NEUROPSYCHOLOGY

Period: September 2015 – June 2016

Setting: Department of Rare Diseases, Lille University Medical Center, Lille, France
Supervisor: Delphine Dellacherie, Ph.D.
Population: Children with neurodevelopmental disorders
Duties: Conducted clinical interviews and comprehensive neuropsychological assessments; wrote clinical reports; presented the results to the clinicians; oriented parents to appropriate care; provided recommendations to parents to improve daily life and well-being

Period: October 2015 – May 2016
Setting: Psycho-oncology Unit, Gustave Roussy Cancer Center, Villejuif, France
Supervisor: Isabelle Léger
Population: Adults with cognitive impairment due to cancer treatment
Duties: Conducted clinical interviews and comprehensive neuropsychological assessments; wrote clinical reports; presented the results to the clinicians; ran clinical research protocols; provided supportive care; oriented patients to appropriate care

Period: August 2014 – June 2016
Setting: Department of Movement Disorders, Lille University Medical Center, Lille, France
Supervisors: Kathy Dujardin, Ph.D.; Marie Delliaux; Anne-Sophie Carette
Population: Outpatients with movement disorders (e.g., Parkinson’s disease; Huntington’s disease)
Duties: Conducted clinical interviews and comprehensive neuropsychological assessments; wrote clinical reports; presented results in multidisciplinary meetings

Period: October 2014 – June 2015
Setting: Geriatric Hospital, Lille University Medical Center, Lille, France
Supervisors: Sylvie Schoenenburg; Anita Clercx
Population: Elderly with cognitive impairment of various etiologies
Duties: Conducted clinical interviews and comprehensive neuropsychological assessments; wrote clinical reports; presented results in multidisciplinary meetings

TEACHING EXPERIENCE

Teaching position

Period: 2017 – 2021
Title: **Graduate Teaching Assistant**
Setting: Department of Psychology, Faculty of Psychology, Education and Training Sciences, University of Lille, France
Supervisors: Delphine Dellacherie, Ph.D.; Kathy Dujardin, Ph.D.; Véronique Samson, Ph.D.; Christine Moroni, Ph.D.; Angèle Brunellière, Ph.D.
Courses taught: *See below for the list of courses taught during this position**
Evaluation: In France, students don’t have the opportunity to rate their teachers. Therefore, I cannot provide any quantitative data on the quality of the courses I taught.
Duties: Created learning materials; presented lectures; oversaw classroom activities; assessed students’ work and provided feedback; created and graded exams

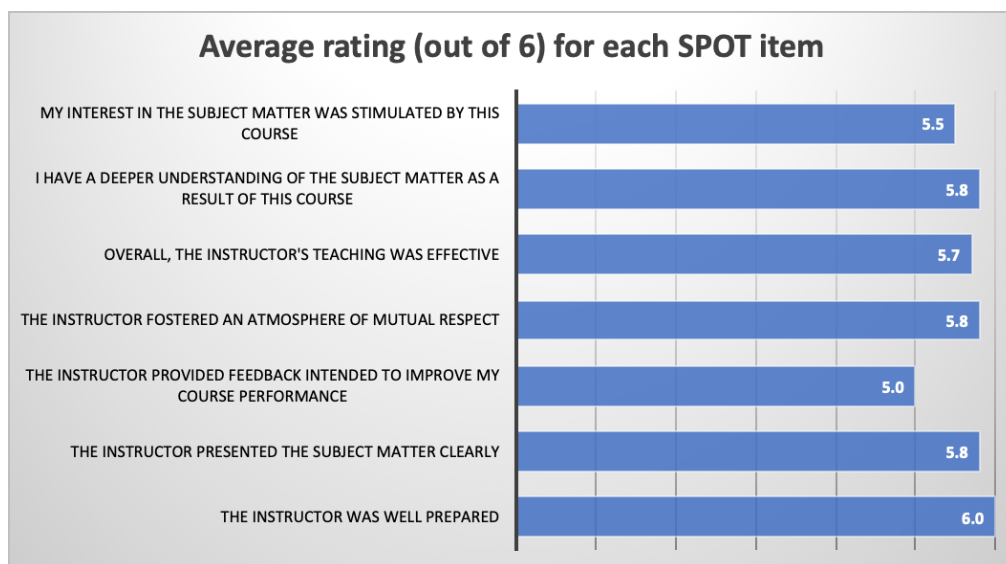
*List of courses taught as a Graduate Teaching Assistant:

Course title	Academic year	Number of hours per academic year
Bachelor’s degree in Psychology, 2nd year		
Introduction to research in Psychology	2018-2019	18
	2019-2020	
	2020-2021	

Bachelor's degree in Psychology, 3rd year		
From theory to practice: the dual cognitive syndrome hypothesis in Parkinson's disease	2019-2020 2020-2021	4
Master's degree in Psychology, 1st year		
Methods in psychological assessment	2017-2018 2018-2019	6
Cognitive remediation in attention-deficit hyperactivity disorder	2017-2018	4
Master's degree in Clinical Neuropsychology, 2nd year		
Cognitive profile of children with developmental language disorder	2018-2019 2019-2020 2020-2021	2
Introduction to systematic literature search in Psychology/Neuroscience	2018-2019 2019-2020 2020-2021	2
Parkinson's disease and cognitive impairments	2017-2021 2018-2019 2019-2020 2020-2021	2.5
How to conduct the anamnesis in clinical practice?	2017-2021 2018-2019 2019-2020	2
The French consensus procedure for cognitive assessment in Parkinson's disease	2017-2021 2018-2019 2019-2020	2
Parkinsonian syndromes and dementia	2017-2021 2018-2019 2019-2020	2

Other relevant teaching experience

Period:	September 2022 – February 2023
Title:	Instructor
Setting:	Center for Depression, Anxiety and Stress Research, McLean Hospital, Belmont, MA
Course taught:	Introduction to the programming language R
Duties:	Proposed and organized this course (1 hour per week) to help researchers (especially research assistants) (n = 16) in daily tasks requiring data science techniques; created learning materials (with examples based on typical data science tasks in psychiatric neuroscience); presented all the lectures; wrote and shared a summary and a recording of each class; developed a shiny R web application to share resources and propose practice quizzes
Evaluation:	All attendees were asked to complete the Students' Perception of Teaching (SPOT) questionnaire anonymously. The average rating (out of 6) for each item is presented below.



Period: 2020 – 2021
Title: **Private tutor**
Course taught: Descriptive and inferential statistics in Psychology
Duties: Proposed and organized multiple classes per week (2 hours per class; more than 200 hours in total) to help undergraduate and graduate students (n = 12) struggling with statistics; developed individual learning goals and programs; prepared and presented all the lectures; created practice exercises and exams

Period: 2014-2015
Title: **Tutor**
Setting: Department of Psychology, Faculty of Psychology, Education and Training Sciences, University of Lille, France
Course taught: Statistics; Biology; Neuroscience
Duties: Maintained weekly office hours (2 hours per week) to help undergraduate students struggling with any courses part of the Psychology curriculum offered by the University

REFERENCES

Isabelle M. Rosso, Ph.D.
 Associate Professor of Psychology, Harvard Medical School, Boston, MA
 Director, Anxiety and Traumatic Stress Disorders Laboratory, Belmont, MA
isabelle_rosso@hms.harvard.edu

Kathy Dujardin, Ph.D.
 Professor of Clinical Neuroscience, University of Lille, France
 Neuropsychologist, University Medical Center of Lille, France
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Delphine Dellacherie, Ph.D.
 Lecturer in Psychology, University of Lille, France
 Neuropsychologist, University Medical Center of Lille, France
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Renaud Lopes, Ph.D.
 Research Scientist, Lille In-vivo Imaging and Functional Exploration, University Medical Center of Lille, France
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