Montreal Neurological Institute, Faculty of Medicine, McGill University

Sylvain BAILLET, PhD
Full Professor, Neurology & Neurosurgery, Biomedical Engineering and Computer Science
Tier-1 Canada Research Chair of Neural Dynamics of Brain Systems
Associate Dean, Research, Faculty of Medicine, McGill University
Director, MEG Imaging Core, McConnell Brain Imaging Centre
https://www.mcgill.ca/neuro/sylvain-baillet-phd

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Profile Overview

My track record is in **leading multidisciplinary projects, programs and units** in systems and clinical neuroscience, in Europe, the USA, and now Canada. My overarching research aim is to comprehend the principles of multiscale brain dynamics and detect their earliest, altered manifestations in disease. As a scientist, **I am driven by the intention to contribute transformative approaches for systems neuroscience, education, health maintenance and clinical care**. My team contributes a wide spectrum of advances in multimodal brain imaging methods, supported by a strong and diverse portfolio of funding sources (total of **$35.3M; 14 active grants, 8 as PI or co-PI**). My group has produced in excess of 300 publications and concrete, practical solutions shared with the scientific community and **IP transfers to the biomedical industry**. I have been fortunate to train **more than 135 students and fellows so far**, who obtained academic and industry positions, or started companies in Europe, Asia and North America. I hold the **Tier-1 Canada Research Chair** of Neural Dynamics of Brain Systems.

I put a **strong emphasis on enabling and sharing open-science** resources as vectors of research productivity, reproducibility and for knowledge dissemination: I recently led a Quebec Bioimaging Network strategic initiative for **open data** (700 user accounts in 2 years)**;** my group hosts the core developments of a widely distributed (25,300 user accounts, 1,300 journal articles produced) **open-source** research software application, with continuous R01 NIH grant support since 2007.

I am also recognised for the **foundation and leadership of translational programs and platforms** – in 2008: a clinical MEG unit in the USA that now routinely sees dozens of patients annually; in 2012: the MEG core at McGill, now the second busiest research scanner at the Montreal Neurological Institute. I saw the opportunity in both projects to transfer my research methods and expertise into training programs, and to deliver concrete tools and standard operating procedures for a diverse community of 50 PIs and clinical units.

I have **led the McConnell Brain Imaging Centre** at the Montreal Neurological Institute in 2013-17. **My track record as a program leader** demonstrates my capacity to lead and develop a large and multidisciplinary research unit (in 4 years: $6.4M raised in operating funds, recruited 6 new faculty members and 9 high-qualified core staff members and contributed to bringing the first whole-body 7-T MRI in Canada ($17.84M; CFI grant to PI Shmuel)). I have proven that I can resolve and address acute challenges and seize funding and hiring opportunities for transformative developments – all with a constant focus on financial stewardship, academic integrity and collegiality.

My **leadership in research administration and management** was further recognized in February 2019, with my nomination as **Associate Dean of Research at McGill's Faculty of Medicine**. McGill is the leading research-intensive medical school in Canada (>4,000 academics), with a top-20 international reputation for excellence in teaching, clinical training and research. In this new position, I am responsible for the oversight and growth of $300M / 800 PIs / 3,000 contract academic staff research operations and the development of strategic research initiatives across 23 Departments, 38 Research Centres and a strong network of hospital affiliates, across 5 major sites.

Identification

Full Name	Sylvain BAILLET
Office Address	McConnell Brain Imaging Centre (room NW107) Montreal Neurological Institute McGill University 3801 University St Montreal QC, H3A 2B4, Canada
Email	sylvain.baillet@mcgill.ca
Telephone	+1 514 398 5469 (office) +1 438 392 5361 (cell)
Date of Birth	February 08th, 1970
Immigration Status	Permanent Resident (Canada), former US Permanent Resident, French Citizen.

Education

Undergraduate	1991 – B.Sc. Electrical Engineering Ecole Normale Supérieure de Cachan (France) 1993 – *Agrégation* in Physics (Applied Physics major) Higher-education teaching certification Ecole Normale Supérieure de Cachan, (France)
Graduate	1994 – M.Sc. Electrical Engineering Ecole Normale Supérieure de Cachan & University of Paris 11 (France) 1998 – Ph.D., Physics, *summa cum laude* University of Paris 11 (France) Supervisor: Line Garnero, PhD "*Functional Brain Imaging of Cortical Electrophysiology: Markov Models for the Estimation of the Sources of Magneto & Electroencephalography Brain Signals and Experimental Evaluation*"
Post-Graduate	2004 – Habilitation of Physics, University of Paris 11 (France)

Appointments

Apr 2020 – Present	**Member, External Advisory Committee** Cognitive Neuroscience of Development and Aging (CoNDA) Center University of Nebraska Medical Center
Jan 2020 – Dec 2022	**Member, Board of Directors** Pôle universitaire en réadaptation (PUR) & Centre de recherche interdisciplinaire en réadaptation du Montréal métropolitain (CRIR) https://crir.ca/en/
Feb 2019 – Present	**Associate Dean, Research** Faculty of Medicine, McGill University
Oct 2018 – Present	**Principal Investigator** Consortium for the Early Identification of Alzheimer's Disease CIMA-Q, http://www.cima-q.ca/
Sept 2018 – Present	**Academic Member**, *Quantitative Life Science Graduate Program*, McGill University
Jan 2018 – Present	**Member, Scientific Advisory Committee**, *Centre for Advanced Research in Experimental & Applied Linguistics*, McMaster University
Nov 2017 – Present	**Academic Associate** *School of Computer Science*, Faculty of Science, McGill University
Nov 2014 – Present	**Full Professor** Department of Neurology & Neurosurgery
Dec 2013 – Oct 2017	**Inaugural Group Leader** *Neuroimaging & Neuroinformatics* Montreal Neurological Institute
Aug 2013 – Oct 2017	**Director, McConnell Brain Imaging Centre** Montreal Neurological Institute, McGill University
Jan 2012 – Present	**Academic Associate** Department of Biomedical Engineering, Faculty of Medicine McGill University
Sept 2011 – Present	**Director, MEG Imaging Core** McConnell Brain Imaging Centre Montreal Neurological Institute, McGill University

Sept 2011 – Present	**Member**, Centre for Research on Brain, Music & Language McGill University
Sept 2011 – Oct 2014	**Associate Professor, with tenure** Department of Neurology & Neurosurgery, McGill University
Jan 2010 – Jul 2011	Secondary appointment as **Associate Professor of Biophysics** Medical College of Wisconsin, Milwaukee, WI (USA)
Sept 2008 – Jul 2011	**Associate Professor** Scientific Director, MEG Program Department of Neurology Medical College of Wisconsin, Milwaukee, WI (USA)
Jan 2000 – Sept 2008	**Principal Investigator, with tenure** (*Chargé de Recherche, 1ère classe since 2001*)
	Director, Neuroimaging Group (2005-08) Cognitive Neuroscience & Brain Imaging Laboratory National Centre for Scientific Research (CNRS, France) University of Paris (Pierre-&-Marie-Curie) La Salpêtrière University Hospital, Paris (France)
Sept 1998 – Sept 2000	**Lavoisier Post-Doctoral Fellow** Neuroimaging Group (Prof Richard M. Leahy) Signal & Image Processing Institute University of Southern California, Los Angeles, CA (USA)

Special Honors, Awards

1994-98	***Full Research & Teaching PhD Fellowship*** Allocation de Moniteur Normalien Ministry of Research (France)
1998-99	**Fellow*, Lavoisier Program for Post-Doctoral Research*** Ministry of Foreign Affairs (France)
2000	**Young Investigator Award** 10th International Conference on Biomagnetism Helsinki (Finland)
2005	**2005/06 Outstanding Publication in Biology Award** C. Sergent, S. Baillet & S. Dehaene, *Nature Neuroscience* (2005) Academy of Sciences (France)

2007 **Nominee, "Engineer of the Year" (Sciences category)**
Usine Nouvelle, a weekly news magazine for industry professionals (France)

2012-17 **Montreal Neurological Institute's Killam Scholar**
Killam Endowment to the Montreal Neurological Institute.

2013-17 **Chercheur-Boursier Senior / Senior Scientist Salary Award**
Quebec Heath Research Funds (FRQ-S)

2014 **Mid-Career Achievement Award**
19th International Conference on Biomagnetism, Halifax (Canada)
"In recognition for contribution of a scientist at the mid-career level who has shown leadership and who has made significant contributions to the field of biomagnetism."

2018-25 **Tier-1 (Senior) Canada Research Chair ($1.4M)**
In recognition of *"[my] achievements to-date [that] have strengthened and advanced (…) cutting-edge neuroimaging research."*
Referees: Profs Richard Frackowiak, Karl J Friston & Bruce Rosen

Teaching

Courses

McGill

2017 NEUR603 - COMPUTATIONAL NEUROSCIENCE
3 Hrs, including student assignments and grading

2016 NEUR603 - COMPUTATIONAL NEUROSCIENCE
3 Hrs, including student assignments and grading

2015 NEUR603 - COMPUTATIONAL NEUROSCIENCE
3 Hrs, including student assignments and grading

2013 Lecture, PSYC 410 (Special Topics in Neuropsychology)
MEG Brain Imaging (1Hr)

2012 [organized & lectured] *MEG Crash Course*
Montreal Neurological Institute (25 attendees, 9Hrs, Feb)

Lecture, McConnell Brain Imaging Centre Lecture Series:
Update on Recent MEG Brain Imaging Research: Connectivity, Functional Mapping & Therapy (1Hr, Mar 12)

Lecture, BMDE 610 (Functional Neuroimaging Fusion):
Statistical Data Analysis (2Hrs, Mar 22)

Lecture, PSYC 410 (Special Topics in Neuropsychology):
MEG Brain Imaging (1Hr, Oct 2012)

Undergraduate

2009 **[co-organized]** *Magnetoencephalography*
4Hrs, MSc. Advanced Systems Neurosciences
Medical College of Wisconsin, Milwaukee (USA)

2007 *Medical Imaging Applications*,
4Hrs, MSc. Computer Science
University of Paris: Pierre & Marie Curie (France)

[co-organized] *Electromagnetic Brain Imaging*
6Hrs**,** MSc. Mathematics, Vision & Machine Learning
École Normale Supérieure de Cachan (France)

Functional Neuroimaging
4 Hrs, MSc. Cognitive Neuroscience
Ecole Normale Supérieure, Ecole des Hautes Etudes en Sciences Sociales, University of Paris: René Descartes

2006 **[organized & lectured]** *Electromagnetic Brain Imaging*
16Hrs, MSc. Mathematics, Vision & Machine Learning
École Normale Supérieure de Cachan (France)

2004 *Functional Neuroimaging*
4Hrs, MSc. Cognitive Neuroscience
Ecole Normale Supérieure, Ecole des Hautes Etudes en Sciences Sociales
University of Paris: René Descartes

2005 *Electromagnetic Brain Imaging*
4Hrs, MSc. Engineering for Healthcare
University of Lyon: Claude Bernard (France)

2001 *Medical Imaging*
8Hrs, undergraduate lecture
Ecole Supérieure d'Optique (France)

1999 **[organized & lectured]** *Digital Image Processing*
Electrical Engineering, University of California (Los Angeles, 20Hrs)

1995-98 **[Teaching Assistant]** *Introduction to Electronics*
University of Paris 11 (France, 90Hrs/year)

1994-98 **[organized & lectured]** *Systems & Control Theory*
Fondation de l'Ecole Polytechnique, Sceaux (France, 40Hrs/year)

Graduate & Post-graduate

2019 **[organized & lectured]** *Brainstorm software course #30*
2 days**,** 30 attendees, MacQuarie University (Sydney, AUS), Dec 11-12, 2019

[organized & lectured] *Brainstorm software course #29*
Emphasis on Machine Learning for electrophysiology
1 day**,** 40 attendees, McGill University, June 5, 2019

[organized & lectured] *Brainstorm software course #28*
Emphasis on electroencephalography
2 days**,** 26 attendees, Johns-Hopkins University, March 14-15, 2019

2018 **[organized & lectured]** *Introduction to Brainstorm software course #27*
3 days**,** 35 attendees, Universidad Catolica del Maule, (Talca, Chile), Dec 4-6, 2018

[organized & lectured] *Introduction to Brainstorm software course #26*
2 hours, 30 attendees + broadcasted on Facebook Live (600 views)**,** School of Computer Science, McGill University (Montreal, Canada), May 25, 2018

[organized & lectured] *Brainstorm software training course #25*
2 days, 90 attendees**,** Concordia University (Montreal, Canada), May 14-15, 2018

[organized & lectured] *Brainstorm software training course #24*
1 day, 30 attendees**,** McGill University (Montreal, Canada), Apr 26, 2018

2017 **[organized & lectured]** MEG@McGill training week, 4th edition: Apr 27-31, 2017

[organized & lectured] *Brainstorm software training course #23*
Xuan Wu Hospital, Capital Medical U (Beijing, China), Apr 08-09, 2017

[organized & lectured] *Brainstorm software training course #22*
McGill (Montreal), May 01-02, 2017

[organized & lectured] *Brainstorm software training course #21*
Quebec City, May 16, 2017

[organized & lectured] *Brainstorm software training course #20*
Cambridge (UK), Jun 16-17, 2017

2016 **[organized & lectured]** *Brainstorm software training course #19*
2 days, 30 attendees**,** U Pittsburgh Medical Centre (USA), March 24-25

[organized & lectured] *Comprehensive MEG Training Program – 3rd edition*
Full week of lectures and hands-on experience (McGill University)
November 07-11

2015 **[organized & lectured]** *Brainstorm software training course #18*
2 days, 30 attendees**,** CEA/Minatec/Clinatec (Grenoble, France), Dec 17-18

[organized & lectured] *Brainstorm software training course #17*
2 days, 30 attendees**,** University of Geneva (Switzerland), December 14-15

[organized & lectured] *Comprehensive MEG Training Program – 1st edition*
Full week of lectures and hands-on experience (McGill University), Mar 16-20

[organized & lectured] *Brainstorm Mathworks Webinar*
60-min online broadcast sponsored by The Mathworks, Mar 26

[organized & lectured] *Comprehensive MEG Training Program – 2nd edition*
Full week of lectures and hands-on experience (McGill University), Nov 16-20

[organized & lectured] *Brainstorm software training course #16*
2 full days, 40 attendees
Marseille (France), May 26

[organized & lectured] *Brainstorm software training course #15*
2 full days, 50 attendees**,** Los Angeles (USA), Oct 26

2014 **[organized & lectured]** *Brainstorm software training course #14*
2 full days, 75 attendees**,** Taipei (Taiwan), May 26

[organized & lectured] *Brainstorm software training course #13*
1 full day, 65 attendees**,** Osaka (Japan), May 31

[organized] *Brainstorm software training course #12*
1 full day, 20 attendees**,** Halifax (Canada) Aug 23

[organized & lectured] *Brainstorm software training course #11*
1 full day, 35 attendees**,** Orlando (Florida, USA), Oct 14

[organized] *Brainstorm software training course #10*
1 full day, 25 attendees**,** Miami (Florida, USA), Oct 17

[organized & lectured] *Brainstorm software training course #9*
1 full day, 25 attendees**,** Freiburg (Germany), Dec 18

[organized & lectured] *Brainstorm software training course #8*
1 full day, 30 attendees, Oldenburg (Germany) Dec 19

2013 **[organized & lectured]** *MEG & EEG Signal Analysis*
1 full day, 15 attendees, Aarhus University Hospital, Aarhus (Denmark), Dec 10

[co-organized] *Training workshop: SPM & Brainstorm #7*
2 full days, 40 attendees
Satellite educational course
Society for Psychophysiological Research annual meeting
Florence (Italy), Oct 01-02

[organized] *Brainstorm software training course #6*
1 full day, 40 attendees
Satellite of the International Conference of the Organization for Human Brain Mapping, Seattle (USA), Jun 21

[organized] *Brainstorm software training course #5*
1 full day, 40 attendees
Moscow State University of Psychology and Education
Moscow (Russia) May 21

[organized & lectured] *Brainstorm software training course #4*
1 full day, 40 attendees
Dalhousie University, Halifax (Canada), Feb16

2012 **[organized & lectured]** *Brainstorm software training course #3*
1 full day, 40 attendees, McGill University, Montreal (Canada), Dec 06

[co-organized] *MEG Training Course*
1 full day, 40 attendees
Satellite Course to the Summer School on Cognitive Sciences
Université du Québec - Montréal, Montréal (Canada), Jul 11

[organized & lectured] *Brainstorm software training course* #2
1 full day, 50 attendees
Brain & Spine Institute (ICM),
Biomag International Satellite Symposium, Paris (France), Aug 31

[organized & lectured] *Brainstorm software training course* #1
1 full day, 90 attendees
Massachusetts Institute of Technology, Cambridge (USA), Apr 28

2011 **[organized & lectured]** *MEG Training Workshop & Brainstorm Course*
3 full days of lectures and lab rotations,
75 participants from across Canada
Montreal Neurological Institute (Nov 17-19)

2008 *Magnetoencephalography*
4Hrs, Multi-Modal Neuroimaging Short Course
A. Martinos Center for biomedical imaging
Massachusetts General Hospital, Harvard Medical School

2007 *Mathematics of Emerging Biomedical Imaging*
8Hrs, Institut Henri Poincaré, Paris (France)

2006 **[co-organized & lectured]** *Electromagnetic Brain Imaging*
16Hrs, Continuous Education Training Program,
Centre National de la Recherche Scientifique (CNRS)
Institut National de la Santé et de la Recherche Médicale (INSERM)
Paris (France)

2005 **[co-organized & lectured]** *Electromagnetic Brain Imaging*
16Hrs, Continuous Education Training Program
Institut National de la Santé et de la Recherche Médicale (INSERM)
Lyon (France)

[lectured] *MEG training course*
2Hrs, Aston University (UK)

[co-organized & lectured] Concepts and Methods for Functional Brain Imaging
Master, Cognitive Sciences (COGMASTER), 34 hours.
University Pierre-&-Marie-Curie, Paris, France

2003 **[co-organized & lectured]** *Electromagnetic Brain Imaging*
16Hrs, Continuous Education Training Program
Centre National de la Recherche Scientifique (CNRS)
Institut National de la Santé et de la Recherche Médicale (INSERM)
Paris (France)

2001 **[co-organized & lectured]** *Electromagnetic Brain Imaging*
16Hrs, Continuous Education Training Program
Centre National de la Recherche Scientifique (CNRS)
Institut National de la Santé et de la Recherche Médicale (INSERM)
Paris (France)

CME

2011 **Lecturer**
1Hr, *Clinical MEG Source Modeling*
Meeting of the International Society for the Advancement of Clinical MEG
Nov 3-5, Las Vegas (USA)

2005-11 **[co-organized 05-08, lecturer 09-11]**

MEG/EEG Educational Course
8Hrs/year
International Conferences for Human Brain Mapping

2010 *Magnetoencephalography*
1Hr, Electrophysiology Lecture Series
Department of Neurology, Froedtert Hospital, Milwaukee (USA)

2009 *Magnetoencephalography*
1Hr, Neurosurgery Grand Rounds, Froedtert Hospital, Milwaukee (USA)

2008 **[co-organized]** *Neuroimaging & Psychiatry*
16Hrs, CME workshop sponsored by Bristol-Myers-Squibb
Paris (France)

2007 *Magnetoencephalography*
1Hr, Epilepsy Grand Rounds
Cleveland Clinic, Cleveland (USA)

[lectured & co-organized]
Organization for Human Brain Mapping Educational Course on MEG and EEG
Chicago, w/ Riitta Salmelin

2006 **[lectured & co-organized]**
Organization for Human Brain Mapping Educational Course on MEG and EEG
Florence, w/ Riitta Salmelin

2005 **[lectured & co-organized]**
Organization for Human Brain Mapping Educational Course on MEG and EEG
Toronto, w/ Riitta Salmelin

Trainees

I am **affiliated with 3 graduate programs** at McGill: the Integrated Program in Neuroscience, the School of Computer Science, and the Quantitative Life Science program.

Visiting Professors & Research Scholars

1. **Jai Chen** (May 2019 – Apr 2020), Dept of Neurology, Xuanwu Hospital, Beijing (China)
2. **Marc Roig** (Sept–Dec 2019) School of Physical & Occupational Therapy, Faculty of Medicine, McGill University
3. **Paul François** (Nov 2016) Dept of Physics, McGill University
4. **Fabien Perrin** (May–July 2014) Auditory Perception in Unconscious States, Lyon-I University (France)
5. **Turky N. Alotaiby** (Sept–Nov 2014) Computer Research Institute, King Abdulaziz City for Science and Technology (Saudi Arabia)

Faculty Mentorship

1. **Tina Montreuil** (Jan 2019 – present), Assistant Professor, Dept of Educational & Counselling Psychology, McGill University
2. **Adrien Peyrache** (Sept 2018 – present), Assistant Professor, Dept of Neurology & Neurosurgery, McGill University.
3. **Boris Bernhardt** (Sept 2018 – present), Assistant Professor, Dept of Neurology & Neurosurgery, McGill University.
4. **Bratislav Misic** (May 2017 – present), Assistant Professor, Dept of Neurology & Neurosurgery, McGill University. Also, mentor on his Quebec Health Science Funds (FRSQ) Junior 1 Salary Award.
5. **Jean-Baptiste Poline** (Sept 2018 – present), Assistant Professor, Dept of Neurology & Neurosurgery, McGill University.

Graduate Student Mentorship

1. **David Tiago**, Integrated program in Neuroscience, McGill (2020 – present)
2. **Shuo Chen**, Integrated program in Neuroscience, McGill (2019 – present)
3. **Alexandra Chapleau**, Integrated program in Neuroscience, McGill (2019 – present)
4. **Jawata Afnan**, Integrated program in Neuroscience, McGill (2019 – present)
5. **Jia-Ru Chung**, Integrated program in Neuroscience, McGill (2019 – present)
6. **Keila Rojas-Garcia**, Integrated program in Neuroscience, McGill (2019 – present)
7. **Vincent Bazinet**, Integrated program in Neuroscience, McGill (2019 – present)
8. **Asmara Awada**, Integrated program in Neuroscience, McGill (2018 – 2020)
9. **Maria Jose Castellanos Montiel**, Integrated program in Neuroscience, McGill (2018 – present)
10. **Anaïs Robert**, Integrated program in Neuroscience, McGill (2018 – present)
11. **Armin Bayati**, Integrated program in Neuroscience, McGill (2018 – present)

12. **Alix Noly-Gandon**, Integrated program in Neuroscience, McGill (2018 – present)
13. **Gilberto Rojas Vite**, Integrated program in Neuroscience, McGill (2018 – present)
14. **Jessica Royer**, Integrated program in Neuroscience, McGill (2018 – present)
15. **Alexa Derksen**, Integrated program in Neuroscience, McGill (2018 – present)
16. **Qian Ren,** Integrated program in Neuroscience, McGill (2018 – present)

Post-doctoral Research Associates

1. **Micah Ahmd** (Jul 2017 – Jul 2018), National University, Maynooth (Ireland) & Universidade Federal de Sao Carlos (Brazil)

   Now: Lecturer, U of South Pacific (Fijis)

2. **[visiting] Avinash Ramyead** (Feb 2017 – May 2017), Swiss National Science Foundation Fellow, U of Basel (Switzerland)

   Now: Research Scientist, Facebook (USA)

3. **Cecile de Vos** (Sept 2016 – Dec 2018), CIHR Fellow, PhD Biomedical Technology & Technical Medicine, University of Twente (The Netherlands)

   Now: Assistant Professor, Erasmus Medical Centre (Rotterdam, Netherlands)

4. **[visiting] Matthew Masapollo** (May – Aug 2016), PhD in Communication Sciences and Disorders, McGill University

   Now: Postdoctoral fellow, Cognitive Science, Brown University

5. **[visiting] Michael Klein** (Jan – June 2015), PhD Neuroscience, McGill University

   Now: Implementation Engineer, Tamr Inc. (USA)

6. **Christian O'Reilly** (Jan 2014 – Mar 2015), PhD Biomedical Engineering, Ecole Polytechnique de Montréal (Canada); in collaboration with the Wellcome Trust Functional Brain Imaging Laboratory (K Friston)

   Now: Research Associate, Ecole Polytechnique Fédérale de Lausanne

7. **Philippe Albouy** (Sept 2014 – 2019), NSERC Banting Fellow, PhD Neuroscience, Lyon-I University (France), co-supervised with R. Zatorre

   Now: Assistant Professor of Psychology, U Laval, Québec City (Canada)

8. **Benjamin Morillon** (Sept 2014 – May 2016), PhD Neuroscience, U Pierre-&-Marie-Curie, Paris (France)

   Now: Principal Investigator, INSERM National Institute of Health Research (France)

9. **Guiomar Niso** (Sept 2013 – Dec 2016), PhD Biomedical Engineering, U of Madrid (Spain)

   Now: AXA Research Fund, Research Associate, U Politécnica de Madrid (Spain)

10. **Therese Lennert** (2012 – 2019), CIHR Fellow, PhD Neuroscience, McGill University.

11. **Esther Florin** (2011 – 13), PhD Physics, U of Jülich (Germany)

    Now: Lichtenberg Assistant Professor for Systems Neuroscience, Heinrich-Heine University, Düsseldorf (Germany)

12. **Rey R. Ramirez** (2008 – 11), PhD Neuroscience, New-York University (USA)

    Now: Scientist MEG core, University of Washington, USA

13. **William W. Graves** (2010 – 11), PhD Neuroscience, Medical College of Wisconsin (USA): co-mentor on his NIH K99 award, with Dr. Jeff Binder

    Now: Associate Professor, Psychology, Rutgers University, USA

Research Assistants & Associates

1. **Kaitlin Nuechterlein** (Sept 2018 – Aug 2019), BSc Physiology, McGill University
2. **Dannie Fu** (Jan – Aug 2019), BSc Systems Design Engineering, U Waterloo
3. **Marc Lalancette**, MSc (June 2018 - present): MEG System Manager
4. **Martin Cousineau**, MSc (Feb 2017 - present): Software Developer, Brainstorm project
5. **Elizabeth Bock**, MSc (Sept 2011 – June 2018): MEG System Manager
6. **François Tadel**, MSc (Sept 2011 – Oct 2017): Software Developer, Brainstorm project

Graduate Students

Ph.D.

1. **Justin Lessard-Wajcer** (Sept–Dec 2019 rotation), Integrated Program in Neuroscience, McGill
2. **Yong Jin Kweon** (Sept–Dec 2018 rotation), Quantitative Life Science graduate program, McGill
3. **Effie J. Pereira** (Jan 2018 – Jul 2019), Department of Experimental Psychology, McGill [role: mentor; supervisor: Jelena Ristic]
4. **[visiting] Gian Marco Duma** (May – Nov 2018), Department of Psychology, University of Padova (Italy) [supervisors: Roberto Dell'Acqua & Giovanni Mento]
5. **Zaida Martinez Moreno** (Sept 2018 – present), Integrated Program in Neuroscience, McGill University [in co-supervision with Etienne de Villers-Sidani]
6. **[visiting] Morteza Pishnamazi** (Sept – Dec 2017 rotation), Integrated Program in Neuroscience, McGill University
7. **Benjamin Levitan** (Sept 2017 – Aug 2018), PhD Physics, "Computational Models of the Functional Role of Phase-Amplitude Coupling Between Neural Oscillations" (Co-Supervisor: Paul François)
8. **Phil Dickinson** (Sept 2016 – Jul 2018, taking over from previous supervisor), Integrated Program in Neuroscience, McGill University
9. **[visiting] Golia Shafiei** (Sept – Dec 2016 rotation), Integrated Program in Neuroscience, McGill University
10. **Jérémy Moreau** (May 2016 – present), PhD Neuroscience**,** McGill, "Predictive analytics and multimodal imaging-guided decision making in neurosurgery", co-supervisor: Roy Dudley

11. **[visiting] Katharina Bauer** (Mar–Oct 2016), PhD Neuropsychology**,** U Oldenburg (Germany); Supervisor: Stefan Debener
12. **[visiting] Audrey Doualot** (Sept 2015 – Feb 2016) PhD Psychology, University of Quebec in Montreal (UQAM)**;** Supervisors: Dave Saint-Amour & Olivier Collignon
13. **Jie Dong** (Sept 2015 – present), PhD Neuroscience, McGill University / Hector & Ada China Scholarship Council; Co-Supervisor: Chris Pack
14. **[visiting] Chrysa Papadaniil** (June-July 2015) Visiting student, PhD Electrical Engineering, Aristotle University of Thessaloniki (Greece); Supervisor: Leontios Hadjileontiadis

    Now: Ongoing PhD training
15. **[visiting] Audrey Doualot** (Apr–Jul 2015) PhD Psychology, University of Quebec in Montreal (UQAM)**;** Supervisors: Dave Saint-Amour & Olivier Collignon

    Now: Ongoing PhD training
16. **[visiting] Carolina Miglorelli** (Apr–Jul 2015), Visiting student, PhD Biomedical Engineering, Technical University of Catalonia (Spain)**;** Supervisor: Miquel Angel Mañanas

    Now: Associate Professor, Universitat Politècnica de Catalunya (Barcelona, Spain)
17. **[visiting] Thomas Hinault** (Apr 2015), PhD Psychology, University Aix-Marseille (France)**;** Supervisor: Patrick Lemaire

    Now: Principal Investigator, INSERM (France)
18. **[visiting] Irina Pivneva** (Apr–Sept 2014), Visiting student, PhD Psychology, McGill University; Supervisor: Debra Titone

    Now: Economist at Analysis Group (Canada)
19. **[visiting] Mansooreh Pakravan** (Jan-Jun 2014) Biomedical Engineering, Sharif University, Iran
20. **[visiting] Hui-Ling Chan** (Apr 2013–Apr 2014), Computer Science, National Chiao Tung University, Taiwan.

    Now: Post-Doctoral Fellow, Computer Science, National Chiao Tung University (Taiwan)
21. **[visiting] Maryse Thomas** (Sept – Dec 2013, graduate school rotation) Cognitive Science & Integrated Program for Neuroscience, McGill University; supported by NSERC Summer Fellowship program.

    Now: Ongoing PhD training @ McGill
22. **Eva Chadnova** (Sept 2013 – Feb 2017), *High-resolution visual responses detected with MEG*, Integrated Program of Neuroscience, McGill University; co-supervised with Robert Hess.

    Now: Medical school student (McGill University)
23. **Peter Donhauser** (2013 – Dec 2018), *Dynamics of interhemispheric communication*, Integrated Program of Neuroscience, McGill University.
24. **Chathura Kumaragamage** (2012 – 2015), *Development and application of dynamic in vivo ^{13}C MRS in the rat brain*, Biomedical Engineering, McGill University. Supervisor: Jamie Near (Dr Near's first graduate student; my role was as co-supervisor)

25. **[visiting] Diana Escalona-Vargas** (2012-13, 6-months visit), *Neural avalanches and principles of neural communication*, Visiting from the Centro de Investigación y de Estudios Avanzados; Monterrey (Mexico)

    Now: Research Instructor, University of Arkansas for Medical Sciences, Little Rock (USA)

26. **[visiting] Chia-Hsiung Cheng** (2012–13), *Neurophysiological mechanisms of the repetition-suppression stimulus response effect*, National Yang-Ming University, Taipei (Taiwan)

    Now: Assistant Professor, Chang-Gung University, Taiwan

27. **Soheila Samiee** (2012 – 2019, incl. 6-month maternity leave), *Real-time brain imaging & neurofeedback, with large-scale computational neural modeling,* Dept of Neurology & Neurosurgery, McGill University.

    Now: Post-Doctoral Fellow, MILA, [Prof Blake Richards]

28. **Yohan Attal** (2007–10), *Computer-aided decision-making using MRI during the acute phase of stroke.* Department of Physics, University of Paris: Pierre & Marie Curie (France)

    Now: Co-Founder and CEO, MyBrainTech (France)

29. **Sheraz Khan**, (2006–09), (co-supervised with Habib Ammari) *Models for the electrophysiology of neural masses*. Ecole Polytechnique (Applied Mathematics), France

    Now: Lecturer, Harvard Medical School/Massachusetts Institute of Technology (MIT)

30. **Guillaume Auzias** (2005–09), *Sulcal-based diffeomorphic coregistration of cortical surfaces.* Department of Physics, University of Paris: Orsay (France)

    Now: Principal Investigator, Centre National de la Recherche Scientifique (CNRS, France)

31. **Florence Gombert** (2005–09), *Electromagnetic functional imaging of epilepsy.* Department of Physics, University of Paris: Orsay (France)

    Now: Project Manager, Brain & Spine Institute (ICM), Paris (France)

32. **Charlotte Rosso** (2005–09), *On the role of MRI in the evaluation of acute stroke.* Department of Neuroscience, University of Paris: Pierre & Marie Curie (France)

    Now: Assistant Professor and Stroke Neurologist, University Pierre-et-Marie-Curie and La Salpêtrière Hospital, Paris (France)

33. **Benoit Cottereau** (2004–08), *Multiresolution electromagnetic brain imaging with an application to dynamic retinotopy.* Department of Physics, University of Paris: Orsay (France)

    Now: Principal Investigator, Centre National de la Recherche Scientifique, CNRS (France)

34. **Julien Lefèvre** (2004–07), *Spatio-temporal sequencing of brain activity* Ecole Polytechnique (Applied Mathematics), France

    Now: Associate Professor, Computer Science, University of Aix-Marseille (France)

35. **Nidiyare Hevia-Montiel** (2002–06), *Anticipation of stroke outcome during the acute phase using diffusion-weighted MRI.* Department of Neuroscience, University of Paris: Orsay (France)

    Now: Research Assistant Professor, Universidad Autónoma del Estado de Morelos, (Mexico)

36. **Karim Jerbi** (2001-05) (co-supervised with Line Garnero) *Long-distance cooperation between cerebral area.* Department of Neuroscience, University of Paris: Pierre & Marie Curie (France)

    Now: Associate Professor & Canada Research Chair, University of Montreal (Canada) & Principal Investigator, National Institute of Medical Research – INSERM (France)

37. **Marie Chupin** (2000-03), (co-supervised with Line Garnero), *Image segmentation of the amygdala and the hippocampus.* Department of Physics, University of Paris (France)

    Now: Research Associate, Institut Cerveau et Moelle – ICM, Paris (France)

MSc.

1. [visiting] **Saskia van Heumen** (May-Aug 2020), MSc Technical Medicine, TU Delft, The Netherlands
2. **Sebastian Andric** (Sept 2019 - present), Integrated Program in Neuroscience, McGill
3. **Harry Glickman** (Sept 2019 - present), Integrated Program in Neuroscience, McGill
4. **Max Levinson** (Sept 2019 - present), Integrated Program in Neuroscience, McGill University
5. **Hyerang (Hannah) Jin** (Sept 2019 - present), Integrated Program in Neuroscience, McGill
6. **Jason Da Silva Castanheira** (Sept 2018 - present), Integrated Program in Neuroscience, McGill University
7. **Maxime Radmacher** (Feb – Jul 2018), MSc 2, Ecole Polytechnique (Paris) and Cognitive Neuroscience Master (U of Paris), in co-supervision with Prof Baudouin Forgeot d'Arc (U of Montreal)
8. [visiting] **Fumyia Nakai** (Jan – Mar 2018), Information Science, Nara Institute of Science and Technology, Nara (Japan)
9. [visiting] **Hector Domingo Orozco Perez** (May – Aug 2018), MSc Psychology, Neuroscience & Behaviour, McMaster U (Canada)
10. **Maxime Radmacher** (Feb – May 2017), MSc1, Ecole Polytechnique (Paris) and Cognitive Neuroscience Master (U of Paris), in co-supervision with Prof Baudouin Forgeot d'Arc (U of Montreal)
11. **Patricia Tomaszewski** (Jan 2016 – Jan 2018), MSc Neuroscience, McGill University (in co-supervision with Prof Roy Dudley, McGill Children's Hospital)
12. **[visiting] Clemens Barthold** (Sept – Dec 2015), MSc Biomedical Technologies**,** U Tübingen (Germany)
13. **[visiting] Arnaud Gloaguen** (April – Sept. 2015) Visiting student, MSc. Electrical Engineering, Supelec ParisTech (France)

    Now: Ongoing PhD training, ParisTech (France)

14. **Aurélien Weiss** (Nov 2014 – Aug 2015), Visiting student, MSc Cognitive Neuroscience, Ecole Normale Supérieure (Paris, France)**;** co-supervisor: R Zatorre

    Now: Ongoing PhD training, Paris (France)

15. **[visiting] Franziska Müller** (May – Aug 2014), MSc Neuroscience, U Copenhagen (Denmark)

Now: Medical Student, Klinikum der Universität München, Munich (Germany)

16. **Jérémy Moreau** (2014 – 2016), *Remote monitoring system for patients affected by neurological or psychiatric condition*; Integrated Program in Neuroscience, McGill, (Canada)
17. **Sébastien Déry, MSc** (Sept 2013 – Aug 2015), *Exploratory analysis of functional connectivity using non-invasive electrophysiological recording*, Biomedical Engineering, McGill University.

    Now: Data Scientist, Apple (USA)
18. **Ali Abedian-Amiri** (Feb – Mar 2012, PhD rotation), Integrated Program in Neuroscience, McGill, (Canada)
19. **Soheila Samiee** (Jan – June 2012), Biomedical Engineering Research Trainee (Canada)
20. **Lucie Luneau** (2011 – 12), MSc. Neuroscience, University of Paris 6 (France). Now PhD student, University of Montreal (Canada)

    Now: Ongoing PhD training, U of Montreal (Canada)
21. **Chiran Doshi, MSc** (2010 – 11), MSc. Biomedical Engineering, Marquette University, Milwaukee (USA).

    Now: Front End Web Developer, Tickled Media (India)
22. **Jie Song, PhD** (summer 2010), MSc. Biomedical Engineering, Marquette University, Milwaukee (USA)

    Now: Data Analyst, Stanford University (USA)
23. **Julien Denis, MD** (6 months, 2010), MSc. Medical Imaging, Université Paul Sabatier (Toulouse, France)

    Now: MD Resident, Pediatrics, Paris University Hospitals (France)
24. **Sophie Chen, PhD** (Feb – Aug 2009), MSc. Biomedical Engineering, University of Paris: Creteil (France)

    Now: Research Associate, La Timone University Hospital, Marseille (France)
25. **Maciej Jaskowski, PhD** (Apr – June 2008), MSc. Mathematics, Ecole Polytechnique (France)

    Now: Founder & CEO Rozwiązania Informatyczne (Poland)
26. **Rémi Cuingnet, PhD** (Feb – June 2007), MSc. Signal Processing, Ecole Polytechnique & SupTélécoms (France)

    Now: Image Computing Manager, Mauna Kea Technologies (France)
27. **Bertrand Godet, MD** (Jan – June 2007), MSc. Neurosciences, University of Paris: Pierre & Marie Curie (France)

    Now: Neurologist (Epilepsy), Limoges University Hospital (France)
28. **David Gorisse, PhD** (Apr – June 2007), MSc. Systems & Communication, Ecole Nationale Supérieure de l'Electronique et Applications (France)

    Now: Software Engineer, Criteo (France)
29. **Yohan Attal, PhD (**Apr – June 2006), MSc. Systems & Signal Processing, University of Paris: Orsay (France)

30. **Guillaume Auzias, PhD (**Apr – June 2006), MSc. Computer Science, University of Paris: Pierre & Marie Curie (France)
31. **Basma Touil, PhD** (Apr – June 2006), MSc. Systems & Communication, Ecole Nationale Supérieure de l'Electronique et Applications (France)
32. **Romain Bosa** (Feb – June 2005), MSc. Mathematics, Vision & Machine Learning, Ecole Normale Supérieure de Cachan (France)

    Now: Product Manager, Masa Group (France)
33. **Florence Gombert, PhD** (Feb – June 2005), MSc. Medical Imaging, University of Paris: Orsay (France)
34. **Pauline Klein** (Feb – June 2005), MSc. Mathematics, Vision & Machine Learning, Ecole Normale Supérieure de Cachan (France)
35. **Charlotte Rosso, MD PhD** (Oct 2004 – June 2005), MSc. Neurosciences, University of Paris: Pierre & Marie Curie (France)
36. **Benoit Cottereau, PhD** (April – June 2004), MSc. Systems & Signal Processing, University of Paris: Orsay (France)
37. **Julien Lefèvre, PhD** (Feb – June 2004), MSc. Mathematics, Vision & Machine Learning, Ecole Normale Supérieure de Cachan (France)
38. **Tristan Moreau, PhD** (Feb – June 2004), MSc. Medical Imaging, University of Paris: Orsay (France)
39. **Marc Maïboroda,** (Feb – June 2003), MSc. Signal, Image & Radar, University of Rennes I (France)

    Now: Senior Front Office Finance Consultant, Murex (France)
40. **Guillaume Obozinski**, **PhD** (Feb – June 2002), *Automatic segmentation and analysis of MEG images*, MSc. Mathematics, Vision & Machine Learning, Ecole Normale Supérieure de Cachan (France).

    Now: Associate Professor, Computer Science, Ecole des Ponts – ParisTech (France)
41. **Stéphane Barhami**, **MD PhD** (Feb – June 2001), MSc. Algorithmics, University of Paris: Orsay & Ecole Polytechnique (France).

    Now: Associate Professor, U Paris-Dauphine (France)
42. **Marc Castella, PhD** (Feb – June 2001), MSc. Systems & Signal Processing, University of Paris: Orsay (France).

    Now: Associate Professor, Institut Télécom, Paris (France)
43. **Sophie Tallibert, MD (**Oct 1996 – June 1997), MSc. Neurosciences, University of Paris: Pierre & Marie Curie (France).

    Now: Associate Professor, Neuro-Oncology, La Salpêtrière University Hospital (Paris)

Undergraduates

1. **Léo Nouvelle** (Mar 2020 – Jul 2020), École Centrale Paris (France)
2. **Anna Guo** (Sept 2019 – Apr 2020), U2 Neuroscience, McGill University
3. **Isidora Conic** (Sept 2019 – Apr 2020), U3 Computer Science, McGill University
4. **Michelle Wang** (Jan – May 2020), NSCI 396 Undergraduate Research Project, McGill University
5. **Rana El Khoury Maroun** (Apr- Aug 2019), BSc Engineering Sciences, Holy Spirit University of Kaslik (Lebanon)
6. **Rachel Murphy** (Apr – Aug 2019), U0 Life Sciences, McGill University
7. **Michelle Wang** (Apr – Aug 2019), U1 Neuroscience Major, McGill University
8. **Diane Lenormand** (Apr – Jul 2019), Biology, Ecole Polytechnique, Paris (France)
9. **Malo Rollin** (Apr – Jul 2019), Computer Science, Ecole Polytechnique, Paris (France)
10. **Dylan Ribeiro** (Apr-Aug 2019), Science Fair Project, Laval Senior Academy, Laval QC
11. **Myriam Lizotte** (Mar 2019), Health Sciences, CEGEP Vanier, Laval QC
12. **Chen He** (Jan 2019 – Apr 2020), BEng Software Engineering, McGill University
13. **Chaoyi Liu** (Jan 2019 – Apr 2020), BEng Software Engineering, McGill University
14. **Zeyu Chen** (Jan 2019 – Apr 2020), BEng Software Engineering, McGill University
15. **Rana El Khoury Maroun** (Jan- Feb 2019), BSc Engineering Sciences, Holy Spirit University of Kaslik (Lebanon)
16. **Hannah Jin** (Sept 2018 – Apr 2019), Honors Student, U3 Neuroscience, McGill University
17. **Weiyi Xiao** (May 2018 – Aug 2019), U2 Computer Science & Biology, McGill University
18. **Luc Wilson** (May 2018 – present), U0 Bachelor of Science, McGill University
19. **Clément Jumel** (Apr – Jul 2018), Computer Science, Ecole Polytechnique, Paris (France)
20. **Justine Hansen** (May 2018 – Jul 2019), U2 Neuroscience & Mathematics, McGill University
21. **Céline Thiriez** (Apr – Aug 2018), Biology major, Ecole Polytechnique, Paris (France)
22. **Scott Pesme** (Apr – Aug 2018), Mathematics Applied to Data Science, Ecole Polytechnique, Paris (France)
23. **Heike Schuler** (Jan – Mar 2018), U3 Psychology, Groningen University (Netherlands)
24. **Bart Wijlens** (Dec 2017 – Feb 2018, May—Jul 2018), *MEG study of the analgesic effects of spinal cord stimulation in chronic pain,* Medical Sensing & Stimulation Program, U of Twente (Netherlands)
25. **Xindi Wang** (June – Aug 2016), U3 Computer Science, Concordia U (Montreal).

26. **Judith Schmitz** (June – Aug 2016), U2 Computer Science (Cognitive Science minor), McGill University.

27. **Sandy Wong** (June – Aug 2016), U2 Neuroscience (Computer Science minor), McGill University.

28. **Rifaquat Nabi** (May – Aug 2016), U2 Honours Mathematics & Computer Science, McGill University.

29. **Zi Hui (Lily) Su** (May – Aug 2016), Mitacs GlobalLink Research Trainee, U2 Neuroscience, McGill University. Co-supervision: Jia Hong Gao (Peking U, China)

30. **Ching Wen (Jessica) Wang** (Oct 2015 – May 2018), U2-3 Neuroscience, McGill University.

31. **Rishabh Tandon** (Sept 2015 – May 2016), U3 Software Engineering, ECSE 456/7 final project (Centralized Data Repository & Associated Applications for the McConnell Brain Imaging Centre), McGill University.

32. **Hoai Phuoc Truong** (Sept 2015 – May 2016), U3 Software Engineering, ECSE 456/7 final project (Centralized Data Repository & Associated Applications for the McConnell Brain Imaging Centre), McGill University.

33. **Deepak Sharma** (Sept 2015 – May 2016) U3 Software Engineering, ECSE 456/7 final project (Centralized Data Repository & Associated Applications for the McConnell Brain Imaging Centre), McGill University.

34. **Linda Kaleis** (Apr 2015 – May 2016) Research Trainee, Honours Cognitive Science (Philosophy minor), McGill University.

35. **Diamond Yao** (May – June 2015), CEGEP Research Volunteer, Montreal (Canada).

36. **Kaleem Corbin** (May – July 2014), Research Trainee, Physiology, McGill University.

37. **Can Turkmenoglu** (May 2014 – June 2015), Research Trainee, Honours Cognitive Science (Philosophy minor), McGill University.

38. **Li Yuan (Debby) Chen** (Jan 2014–June 2015), Research Trainee, 3rd-year of Honours neuroscience degree, McGill University.

39. **Hao Yu Chen** (2012 – 14), U1 McGill Life Science Program, McGill University

40. **Marianne Bordères** (May – June 2014), Research Trainee, Bioinformatics, University of Montreal (Canada).

41. **Diamond Yao** (May – June 2014), Secondary School Research Volunteer, Montreal.

42. **Thomas Donoghue** (Apr 2013 – June 2014), Research Trainee, Honors Cognitive Science Course, McGill University.

43. **Jeremy Moreau** (May – Aug 2014), Research Trainee, NSERC Summer Trainee, U Ottawa (Canada).

44. **Christine Cahaney** (Aug 2013 – Apr 2014), Research Trainee, Neuroscience Research Project Course, *MEG imaging of the Reward System* (with Alain Dagher, McGill)

45. **Maryse Thomas** (Apr – Aug 2013), Summer Research Trainee supported by NSERC Summer Fellowship program (with Vince Gracco, McGill).

46. **Ishan Walpola** (Oct 2012 – June 2013), U3 Psychology Major, Minor in Neuroscience, McGill University.

47. **Samantha Gauvreau** (May 2012 – Apr 2013), Cognitive Science, McGill University.

48. **Sébastien Déry** (Sept 2012 – May 2013), Computer Science, Ecole de Technologie Supérieure, Montreal.

49. **Patricia Moscibrodzki** (Jan – June 2012) Cognitive Science, BSc Arts & Science, McGill University.

50. **Annie Kwan** (2012) Neuroscience, McGill University **–** 1 month.

51. **Florence Le Rudullier** (1996), BSc. Physics, Orsay Institute of Technology (France) – 3 months.

Member, Thesis Committees

Note: the years marked indicate that of the first committee meeting. Most entries required participation to follow-up meetings – typically once a year. All committees are for PhD graduate students, unless marked otherwise.

2020 **Mary Miedema,** PhD Biological & Biomedical Engineering, McGill University (supervisor: Geogios Mitsis) (Advisory Committee)

Manesh Girn, PhD Neuroscience, McGill University (supervisor: Nathan Spreng) (External Reviewer)

Ahmed Khan, PhD Neuroscience, McGill University (supervisor: Yasser Iturria-Medina) (Advisory Committee)

Lola Welsch, PhD Neuroscience, McGill University (supervisor: Reza Farivar) (Advisory Committee)

Ahmed Faraz Khan *Integrating neurotransmitter receptors and multi-modal neuroimaging for improved treatment selection in Alzheimer's disease*
PhD Neuroscience, McGill University, (Supervisor: Prof. Yasser Iturria Medina) (Advisory Committee)

Romke Hannema, PhD Neuroscience, McGill University (supervisor: Nathan Spreng) (Advisory Committee)

2019 **Marco Bulher**, PhD Neuroscience, McGill University (supervisors: Anouk Lamontagne & Joyce Feung) (Advisory Committee)

Jonas Lenhert, PhD Quantitative Life Sciences, McGill University (supervisors: Anmar Khadra, Arjun Krishnaswamy, Erik Cook) (Advisory Committee)

Careesa Liu, PhD Engineering Sciences, Simon-Fraser University (supervisor: Ryan d'Arcy) (External examiner)

2018 **Wang Siyan**, PhD Neuroscience, "Role of Parvalbumin-Positive Interneurons in Mesial Temporal Lobe Epilepsy" (supervisor: Massimo Avoli) (PhD Advisory Committee)

Rebecca Scheurich, PhD Psychology, (supervisor: Caroline Palmer) (PhD Advisory Committee)

Benjamin K. Elgie, "Sensorimotor control and learning processes during normal and perturbed speech production." Department of Neurology and Neurosurgery, McGill (supervisor: Vince Gracco & Shari Baum) (internal examiner)

Benjamin Levitan, PhD Physics, "Computational Models of the Functional Role of Phase-Amplitude Coupling Between Neural Oscillations" (Co-Supervisor: Paul François)

Laxmi Shaw, PhD Electrical Engineering, "Effect of Meditative Relaxation on the Connectivity of Human brain: a study using EEG", Electrical Engineering (supervisor: Aurobinda Routray), IIT Kharagpur (India) (External examiner)

Estefany Suarez, PhD Neuroscience, McGill University (supervisor: Bratislav Misic) (PhD Advisory Committee)

Golia Shafiei, PhD Neuroscience, McGill University (supervisor: Bratislav Misic) (PhD Advisory Committee)

Elizabeth DuPre, PhD Neuroscience, McGill University (supervisor: Nathan Spreng) (PhD Advisory Committee)

Manish Kumar, PhD Electrical & Electronics Engineering, Birla Institute of Technology (India), "*Development of Adaptive Filters based on Nature Inspired Neural Network Models for Denoising Medical Images"* (supervisor: Sudhansu Kumar Mishra) (External PhD Referee)

2017 **Marzieh Golabbakhsh**, Biomedical Engineering, McGill University (supervisor: Robert J Funell) (PhD Advisory Committee)

Mathieu Landry, PhD Neuroscience, McGill University, Montreal (Canada) (supervisor: Amir Raz) (PhD Advisory Committee)

Derek Albert, PhD Psychiatry, McGill University, Montreal (Canada) (supervisor: Thomas G. Brown) (Advisory Committee)

2016 **David Provencher**, *Imagerie de l'activité cérébrale: structure ou signal?* Biomedical imaging, U Sherbrooke (Canada) (supervisor: Kevin Whittingstall) (MSc External Reviewer)

Pascal Kropf, *Current-source density estimation from linear depth electrode recordings*, Neuroscience, McGill University, Montreal (Canada) (supervisor: Amir Shmuel) (PhD Defense Committee)

Alba Xifra Porxas, Biomedical Engineering, McGill University, Montreal (Canada) (supervisor: Georgios Mitsis) (Advisory Committee)

Clara Moreau, Neurosciences, University of Montreal (Canada) (supervisors: Sébastien Jacquemont & John Lewis) (PhD Advisory Committee)

Bennett Csorbar, Neurosciences, McGill University, Montreal (Canada) (supervisor: Chris Pack) (MSc Advisory Committee)

Johanna Metsomaa, *Data-driven methods for analyzing TMS-evoked EEG responses*, Aalto University (Finland) (supervisor: Riisto Ilmoniemi) (Pre-examination of PhD thesis)

2015 **Michalis Kassinopoulos**, *Effect of neural and physiological factors on resting-state fMRI dynamic functional connectivity*, Biomedical Engineering, McGill (Finland) (supervisor: Georgios Mitsis) (Advisory Committee)

Prokopis Prokopiou, Neuroscience, McGill University, Montreal (Canada) (supervisor: Georgios Mitsis) (Advisory Committee)

Hassan Hakhavein, *Dorsal-Ventral integration in object recognition*, Neuroscience, McGill University, Montreal (Canada) (supervisor: Reza Farivar) (External Examiner)

Alexander Barton (MSc), *Coupling between cortical activity and heart rate variability,* Integrated Program in Neuroscience, McGill University (Montreal) (Supervisor: Jens Pruessner)

2014 **Jonathan Côté**, *"Mechanisms of Adaptation in Auditory Perception",* Neuroscience, McGill University, Montreal (Canada) (supervisor: Etienne de Villers-Sidani) (PhD Advisory Committee)

Mona Maneshi, *"Resting-state Functional Connectivity: Methods and Application in Epilepsy",* Biomedical Engineering, McGill University, Montreal (Canada) (supervisors: Christophe Grova & Jean Gotman) (external reviewer)

Kangjoo Lee, "*Stable Functional Connectivity in Sparse Brain Network Model for Resting-State fMRI"*, Integrated Program in Neuroscience, McGill University, Montreal (Canada) (supervisors: Christophe Grova & Jean Gotman)

Emily Coffey, *"Experience-dependent Plasticity of Auditory-motor Systems in the Human Brain"*, Integrated Program of Neurosciences, McGill University (supervisor: R. Zatorre) (advisory committee)

Tanguy Hedrich, Dept of Biomedical Engineering, McGill University (supervisor: C. Grova) (advisory committee)

Marc-Philippe Lafontaine, *"Marqueurs électrophysiologiques et comportementaux associés au développement de troubles d'apprentissage chez les enfants avec antécédent de convulsion fébrile"*, Dept of Psychology, Université de Montréal (Canada) (supervisor: S. Lippé) (external examiner)

Younes Zerouali, "*Localisation de l'activité cérébrale synchrone en neuroimagerie électromagnétique et connectivité fonctionnelle*", Dep of Engineering, Ecole de Technologie Supérieure, Montreal (Canada) (supervisor: J-M. Lina) (external examiner)

Rezwan Ghassemi, "*MRI measures of brain injury in children with Multiple Sclerosis*", Integrated Program in Neuroscience, McGill University, Montreal (Canada) (supervisor: D. Arnold) (internal examiner)

Yimin Xiao, "*Locating Surgical Target by Accounting for Brain Shift During Deep Brain Stimulator Implantation*", Biomedical Engineering, McGill University, Montreal (Canada) (supervisor: L. Collins)

Jordan O'Byrne (MSc), *Coupling of neuronal oscillations in sleep, in relation to cognition and aging*, Dept of Exercice Science, Concordia University (Montreal) (Supervisor: Thien Thanh Dang-Vu)

2013 **Ian Gerard**, "*Ultra-sound imaging techniques for per-surgical neuronavigation and tissue characterization*", Biomedical Engineering Grad School, McGill University, Montreal (Canada) (supervisor: L. Collins)

Michael Lifschitz, "Neural Dynamics of Compassion", Integrated Program in Neuroscience, McGill University, Montreal (Canada) (supervisor: A. Raz)

Lisa Kluen, "*Uncovering the implicit and explicit markers of decision-making*", Integrated Program in Neuroscience, McGill University, Montreal (Canada) (supervisor: F. Jollant)

Benjamin Elgie, "*Sensorimotor control and learning processes during normal and perturbed speech production.*", Integrated Program in Neuroscience, McGill University, Montreal (Canada) (supervisors: V Gracco & S. Baum)

David Maillet, "*Investigating the role of default-mode network during memory formation in young and older adults*", Integrated Program in Neuroscience, McGill University, Montreal (Canada) (supervisor: Natasha Rajah)

Kangjoo Lee, *"Stable Functional Connectivity in Sparse Brain Network Model for Resting-State fMRI*, Integrated Program in Neuroscience, McGill University, Montreal (Canada) (supervisor: Christophe Grova)

Kuwook Cha, *Common Aspects of Functional Connectivity between Tonotopy and Retinotopy in the Human Brain*, Integrated Program in Neuroscience, McGill University, Montreal (Canada) (supervisor: Robert Zatorre)

Seok Jun Hong, *Advanced Multimodal Imaging in Epileptogenic Malformations of Cortical Development (MCD)*, Integrated Program in Neuroscience, McGill University, Montreal (Canada) (supervisor: Andrea Bernasconi)

Jérôme Courtemanche (Msc), *La caractérisation neuromagnétique de l'état d'attension sans réflexion chez les méditants zen dans un contexte d'émotions visuelles négatives*. Dept of Biomedical Engineering, University of Montreal

2012 **Shiyan Hu**, *Automatic Image Analysis & Structure Segmentation for Brain Medial Temporal Lobe*, Dept of Biomedical Engineering, McGill University, Montreal (Canada)

Hyunwoo Lee, Dept of Biomedical Engineering, McGill University, Montreal (Canada)

Rasheeda Arman Chowdhuri, *MEG/EEG Source Imaging of Epileptiform Activity*, Dept of Biomedical Engineering, McGill University, Montreal (Canada) (supervisor: Christophe Grova)

Ruth Swedler (MSc), *Cortical activity during pedaling movements*, Dept of Biomedical Engineering, Marquette University, Milwaukee (USA)

Christian Langlois Dansereau (MSc), *Modification of Functional Connectivity in Patients with Epilepsy: a Clustering Technique for Subject vs. Group*, Dept of Biomedical Engineering, McGill University, Montreal (Canada)

2011 **Hosung Kim**, *Advanced morphometry of mesiotemporal structures in temporal lobe epilepsy*, Dept of Biomedical Engineering, McGill University, Montreal (Canada)

2010 **Katrina Wendel**, *Measurement Sensitivity of EEG Leads: The Effect of Electrodes, Age and Growth, and Gender and Head Shape*, Dept of Electrical Engineering, Tampere University of Technology (Finland)

2009 **Alexandre Gramfort**, *Mapping, timing and tracking cortical activations with MEG and EEG: Methods and application to human vision,* Dept of Electrical Engineering, Ecole Nationale Supérieure des Télécoms, (France)

2008 **Outi Väisänen**, *Multichannel EEG methods to improve the spatial resolution of cortical potential distribution and the signal quality of deep brain sources*, Dept of Physics, University of Tampere (Finland)

Aapo Nummenmaa, *Hierarchical Bayesian Aspects Of Distributed Neuromagnetic Source Models*, Dept of Computational Engineering, Helsinki University of Technology (Finland)

2007 **Maha Farah**, *Algebraic solutions to source localization*, Dept of Mathematics, University Technologique de Compiègne (France)

Ardalan Aarab, *Detection & spatio-temporal classification of EEG events in newborns*, Biomedical Engineering, University of Picardie–Jules Verne (France)

2006 **Marco Buiatti**, *Long-distance correlations in biological time series*, Dept of Physics, University of Paris V (France)

Martine Gavaret, *Localization of interictal activity using high-resolution EEG and evaluation using intra-cranial depth recordings*, Dept of Neuroscience, University of Marseille (France)

2005 **Geoffray Adde**, *Image processing techniques applied to the MEG inverse problem*, Dept of Applied Mathematics, École Nationale Supérieure des Ponts & Chaussées (France)

Ville Mäkinen, *Analysis of the Structure of Time–Frequency Information in Electromagnetic Brain Signal*, Dept of Physics, Helsinki University of Technology (Finland)

Joan Glaunès, *Transport by diffeomorphisms of points, measures and currents for shape comparison and computational anatomy*, Dept of Mathematics, University of Paris 13 (France)

Pro-Dean or Chair Representative at PhD Oral Defenses

2017 **Jenna Wong**, Department of Epidemiology, McGill University, Montreal (Canada) (supervisor: R. Tramblyn)

2016 **Véronique Fortier**, Department of Biomedical Engineering, McGill University, Montreal (Canada) (supervisor: I. Levesques)

Camellia Ganjoury, Department of Biomedical Engineering, McGill University, Montreal (Canada) (supervisor: D. Nicolau)

2015 **Anastasia Sares**, Department of Neurology & Neurosurgery, McGill University, Montreal (Canada) (supervisor: V. Gracco)

Mina Amiri, Department of Biomedical Engineering, McGill University, Montreal (Canada) (supervisor: J. Gotman)

Nathan Jowett, "*Design and implementation of a neural prosthesis for facial reanimation in a rat model"*, Department of Biomedical Engineering, McGill University, Montreal (Canada) (supervisor: R.E. Kearney)

2014 **Jarrett Quin**, Department of Mining & Materials Engineering, McGill University, Montreal (Canada) (supervisor: J. Finch)

Management & Service

McGill

Feb 2019 – present

Associate Dean, Research
Faculty of Medicine
McGill University

Major duties and responsibilities:

- Oversight of research administration in the Faculty of Medicine, including development and application of research policies;
- Participation in development of the strategic research plan and oversight of ongoing initiatives;
- Annual review of research centres and core facilities within the Faculty;
- Oversight of internal grant review, bridge funding, and major funding competitions;
- Review of matching fund and sponsorship requests, international collaboration MOUs, and conflict of interest declarations;
- Oversight of the Institutional Review Board and Responsible Conduct of Research in the Faculty.

Aug 2013 – Oct 2017

Director, McConnell Brain Imaging Centre
Montreal Neurological Institute
McGill University

The McConnell BIC is a major research platform and centre for brain imaging, featuring 7 imaging core units (MRI, PET, MEG, SPECT, Cyclotron, Electrophysiology, for humans and disease models, and high-performance informatics), with prominent expertise in biomedical image analysis. Overall, the McConnell Centre is a research hub for 150 Principal Investigators (19 core faculty members), hundreds of students and 20 support staff. As acting Director, my primary goal consists in developing the BIC's international leadership as a research platform and a hub of excellence for translational neuroimaging research center, while securing the financial health and sustainability of all our operations.

Major achievements (in chronological order):

1. Compiled a full 5-year report and led the center through **external review** (Sept 11-12, 2013);
2. (2014/15) As I took office, **addressed acute operating budget issues** affecting this $4.5M operation:
    - **Re-organized governance** and financial management of all core units, improved billing and payment collection;

- **Within 18 months:** Decreased operating expenses by $1.4M, increased revenues by $100K, decreased operating deficit by $1.76M, balanced operating budget, improved cost-recovery from user fees from 55% to 90%; collected $750K of outstanding payments, **raised $6.2M** from affiliated institutions, user communities, hospital partners, foundations and private donors;
- **Present financial situation is healthy and sustainable** (achieved financial surplus in 2016).

3. (2014-15) Coordinated the **recruitment of 6 new core Principal Investigators** (new McGill Faculty Members): Director of MRI Unit (Dr. Rick Hoge) and Director of Cyclotron (Dr. Gassan Massarweh); Junior Principal Investigators (Dr. Bratislav Misic & Dr. Boris Bernhardt (this latter in joint appointment with the MNI's Epilepsy Research Group); 2 additional MRI expert PIs have been recruited and joined our core faculty in May 2017 (Drs Christine Tardif and David Rudko).
4. Facilitated the **scientific development** of the platform:
    a. Contributed to the write-up (Budget, Scientific Priority for Quebec, organized grant preparation meetings) of a **$17.84M grant** from the Canadian Foundation for Innovation and the Province of Quebec to acquire the first large-bore 7-T MRI in Quebec (granted in May 2015; project now in execution phase).
    b. **PI of a $4.2M** Brain-Canada Platform Support Grant application to support and develop the BIC infrastructure (granted in January 2016)
5. **Coordinated the BIC PET Unit** (15 staff) in the interim of recruiting a new scientific leader (May 2014 – present)
6. Organized the BIC's 30th anniversary (Feb 11, 2015): 350 attendees, international keynote speakers (e.g., PI of the Human Connectome Project; Project Coordinator of the Human Brain Project); raised $40K from sponsors for the event
7. Coordinated the design and editing of the BIC website (mcgill.ca/bic; 200 unique visits/day)
8. **Authored a comprehensive blueprint** for new cyclotron, new radiochemistry labs, integrated PET/MR scanners for humans (3T) and small-animals (9.4T), new labs for MRI probes and contrast agents; collected 26 project headers from 30 co-investigators team members towards this aim.
9. **Measurable outcomes** in increased platform usage since 2014: MEG (+300%), MRI (+30%), PET (+60%).

Dec 2013 – Oct 2017

Inaugural Group Leader

Neuroimaging & Neuroinformatics **Research Group**
Montreal Neurological Institute
McGill University
(Associate Group Leader: Dr. Alan C. Evans)

The research activities at the MNI have been re-organized in thematic groups in December 2013. I was nominated by Dr. Guy Rouleau (MNI Director) to lead the group of Principal Investigators engaged in brain imaging research at the MNI, with faculty at the McConnell Brain Imaging Centre and about 45 affiliated faculty members at McGill and elsewhere.

Sept 2013 – Sept 2014

Interim Director, MRI Core
McConnell Brain Imaging Centre
Montreal Neurological Institute
McGill University

The MRI core at the McConnell BIC is the workhorse of imaging research at McGill, with about 2,000 scans performed every year and serving 100 unique investigators. My role as Interim Director of the core was to supervise a team of 4 imaging technicians and 2 Research Assistants, as core staff and manage operations to facilitate access and optimize the scientific productivity of core users. I have been acting as Director in the interim of recruiting a full-time MR Physicist as new core Director (Dr. Rick Hoge), who joined McGill and became the permanent MRI Core Director in September 2014.

May 2014 – Oct 2017

Coordinator, PET/Cyclotron Unit
McConnell Brain Imaging Centre
Montreal Neurological Institute
McGill University

I have led an in-depth re-organization of the PET and Cyclotron program, in collaboration with its Medical Director (Dr. J-P Soucy) and the newly recruited Head of Cyclotron (Prof G. Massarweh). This program is the largest at the BIC (3 PIs, 1 Manager, 7 Research Assistants, 2 Technicians). I am presently acting as Coordinator of the Program, facilitating communication between the PET and Cyclotron Units and the rest of the BIC, leading monthly meetings with the entire staff and mobilizing the user community on special programs.

Sept 2011 – present

Director, MEG Research
McConnell Brain Imaging Centre
Montreal Neurological Institute
McGill University

As Director of MEG Research, my missions are:

1. To supervise, organize and promote the development of the MEG as a new research instrument, as part of the Brain Imaging Centre at the MNI;
2. To develop collaborations and synergy with physicians and investigators interested in accessing the MEG for their patients and/or basic research;
3. To organize an optimize the MEG data flow (from acquisition to publication, data management, retrieval and reporting);
4. To educate and train a community of new users to MEG acquisition and software usage;
5. To assist MEG users in the design of their protocols and data analysis;
6. To develop an original research program/laboratory and ensure the scientific visibility of the MEG program;
7. To obtain extramural funding to support my own MEG research program and projects.

With about 40 projects and hundreds of sessions within 3 years of operation, the MEG Unit at the MNI has become the second busiest scanner at the McConnell Brain Imaging Centre (800 scan hours in 2016).

Sept 2008 – June 2011

Scientific Director, MEG Program
Froedtert Hospital & Medical College of Wisconsin, Milwaukee (USA)

My role consisted in founding a new MEG program at the Medical College of Wisconsin and Froedtert Hospital and in bringing it to clinical standards and state-of-the-art research. The MEG program was dedicated to clinical investigations with the presurgical evaluation of epilepsy cases and to neuroimaging research, as an instrument platform available to the scientific community of south-eastern Wisconsin and beyond. I also led a series of research projects with my own research group.

Today, the MEG Program at Froedtert and MCW remains very active and sees about 120 patients and dozens of research sessions per year.

2005–08

Group Leader, Neuroimaging Research Group
Cognitive Neuroscience & Brain Imaging Laboratory
La Salpêtrière Hospital, Paris (France)

My research group consisted of 5 faculty members (1 Senior Scientist, 2 staff Scientists, 2 Professors), and 2 core staff research associates, 1 post-doc and a yearly average of 10 graduate students under my supervision.

Committees

2019 – present

Chair, Committee for the Oversight of Core Facilities, Faculty of Medicine, McGill University

Chair, Committee for the Oversight of Research Units, Faculty of Medicine, McGill University

Chair, Standing Committee on Research, Faculty of Medicine, McGill University

Member, **Admission Committee,**
Quantitative Life Sciences Graduate Program McGill University
The QLS program is a new multidisciplinary graduate school at McGill. The recruitment committee reviews and ranks applications from applicants, for admission.
2 meetings per year + reviews of dossiers: 15 hours/year.

2019 – present

Founding Chair, Grassroot Open-Science Initiatives Committee, Montreal Neurological Institute, McGill University

2018-2020 Member, **Scientific Advisory Committee**
Centre for Advanced Research in Experimental & Applied Linguistics
McMaster University, Hamilton ON, Canada

2015 – 2017

Member, **Executive Committee CFI-8 Quebec High-Field MRI Platform**
The Committee (3 members) supervises the execution of the $17.8M project to install and operate the first 7-T human magnet in Quebec; works in coordination with the project's Scientific Committee and in close collaboration with the project's PI.

2015 – 2016

Member, **Montreal Neurological Institute's Retreat Committee**
The Committee organizes the annual scientific retreat of the Montreal Neurological Institute (about 150 participants): fund raising, program, social activities.

2013 – 2017

Founding Chair, **Council of the McConnell Brain Imaging Centre**
The BIC Council features all 19 core Faculty members and 10 elected staff and trainee representatives. It acts as a steering committee to assist the BIC Director. I initiated the BIC Council as part of new terms of governance of our Centre, as I became interim Director.

2013 – 2017

Member, **Montreal Neurological Institute's Executive Committee**
The MNI's EC consists of the Director's Executive Office supplemented by 3 Principal Investigators nominated by the MNI Director. The mandate of the EC is to assist the Director with strategic decision-making concerning the MNI's operations (monthly meetings).

2012 – present

Founding Chair, **MEG Research Committee**
10 members, McGill University (monthly meetings)
Co-chair since September 2013.
Organize the scientific review of MEG projects to be performed at the MEG Unit of the MNI, and before they are submitted to ethics evaluation.

2009 –11 Member, **Steering Committee**
Center for Imaging Research, Medical College of Wisconsin; 12 days/year

2008 – 09 Member, **Recruitment Committee**
INRIA-Saclay (National Institute for Systems and Computer Science Research); 2 days/year

INRIA is a French government-operated national research institute that focuses on research on systems and computer science. INRIA research scientists are recruited through a series of regional competitions and are evaluated by committees of elected and designated members who are considered as experts in the fields covered by the projects covered by INRIA. I was nominated member of this selection committee for my expertise in the field of biomedical imaging.

2008 – 09 Member, **Faculty Recruitment Committee**
Statistical Modeling & Image Processing
Academy of Sciences (Finland); 3 days/year

My role consisted in evaluating applications of faculty candidates to Academy-sponsored positions, and in participating to the associated study section.

2007 – 08 Member, **Faculty Recruitment Committee**
Electrical Engineering Dept
University of Paris: Orsay (France); 2 days/year

My role consisted in reviewing a yearly average of 4 to 5 applications of candidates to faculty positions opened of the Department of Computer Science and Electrical Engineering at the University of Paris: Orsay. I was involved in the audition of faculty candidates and participated in the decision process for candidate selections.

2007– 08 Member, **Management Committee**
European Science Foundation: “Advanced Methods for the Estimation of Human Brain Activity & Connectivity (COST: Neuromath)”; 4 days/year

I was nominated as one of the 2 French representatives for this program of the European Science Foundation. The COST-Neuromath initiative was a 4-year program aiming at facilitating research, collaborations and education across the European Union in the field of computational and experimental neuroscience.

2006 – 08 Member, **Advisory Board**
Federative Institute for NeuroImaging
Paris (France); 5 days/year

2005 – 08 Member, **Expert Committee**
"Multidimensional & Multimodal Signal Processing"
Centre National de la Recherche Scientifique (CNRS, France); 4 days/year

As a committee member, I was required to provide reports and technical advisory to the operating direction of the Computer Science department of the CNRS about the status and scientific priorities of Computer Science research in France.

2001, 03 & 06 Member, **Organization committee**
National Neuroimaging Training Program (France); 10 days/year

This program consisted in the nationwide training of scientists and research engineers in state-of-the-art techniques for neuroimaging. My role consisted in participating to the coordination of the scientific and educational programs.

2000 – 08 Member, **Laboratory Advisory Board**
Cognitive Neuroscience & Brain Imaging Laboratory
La Salpêtrière Hospital, Paris (France); 12 days/year

Boards, Scientific Reviews & Organizations

Journal Editorial Boards

2006 – 09	*NeuroImage*
2007 – present	*Computational Intelligence & Neuroscience*
2007 – 2017	*The Open NeuroImaging Journal*
2008 – 2015	*The Open Medical Imaging Journal* *The Open Cardiovascular Imaging Journal*
2008 – present	*Brain Topography*
2009	Guest Lead Editor, Special Issue of *Human Brain Mapping*
2011 – present	Founding Associate Editor: *Brain Connectivity*
2011	Guest Lead Editor Special Issue of *Computational Intelligence & Neuroscience*
2012 – 2019	Founding Associate Editor *Frontiers in Neuroscience, Brain Imaging Methods section*
2017 – present	Founding Editorial Board Member *British Medical Journal - Open Science (BMJ Open Science)*
2018 – present	Founding Editorial Board Member *Neurons, Behavior, Data Analysis & Theory* (an open, community journal of computational neuroscience with no pay walls for authors and readers: https://nbdt.scholasticahq.com/)
2018 – present	Founding Member, Content subcommittee *Aperture* *Aperture* is the publishing platform being developed by the Organization for Human Brain Mapping: goal is to host high-quality research objects (text, data, interactive plots, code, notebooks, etc.) using web solutions, and to promote reproducible and open science.
2019 – present	Associate Editor, Neuroscience & Psychology area *Science Advances* *Science Advances* is published by the AAAS and is the largest and highest-ranked multidisciplinary open-access journal.

Ad-hoc Reviewer

Nature
Nature Neuroscience
Nature Communications
Proceedings of the National Academy of Sciences of the USA
Neuron
Journal of Neuroscience
Current Biology
eLife
Brain
PLoS Computational Biology
IEEE Transactions on Signal Processing
IEEE Transactions on Image Processing
IEEE Transactions on Medical Imaging
IEEE Transactions on Biomedical Engineering
Human Brain Mapping
NeuroImage
Neuroscience & Biobehavioral Reviews
Cerebral Cortex
Frontiers in Neuroscience
Inverse Problems
Journal of Physiology
European Journal of Neuroscience
PloS One
Psychometrika
Physics in Medicine & Biology
Medicine & Biology Engineering & Computing
EURASIP Journal on Applied Signal Processing
Experimental Brain Research
Brain Topography

Panel Member, Grant Review Committees

2020, 2022 — Member, Evaluation Panel
ERC Starting Grant Program: "The Human Mind and Its Complexity: Cognitive science, psychology, linguistics, philosophy of mind"
ERC, Social Sciences and Humanities
European Commission

2020 — Reviewer
Canada Research Chairs program

Member, Review Committee
Doctoral Fellowships Program
Basic Neurosciences
FRQ-S (Fonds de Recherche du Québec – Santé)

2019 Ad hoc reviewer
Healthy Brains for Healy Lives (McGill CFREF)
Neuro-Partnerships Program

Member, Review Committee
Graduate Fellowships Program
Bourses d'excellence TransMedTech
University of Montreal, Ecole Polytechnique de Montreal

Chair, ad-hoc review committee
Development of theme-based groups
Douglas Institute for Mental Health Research
McGill University

Member, Review Committee
Doctoral Fellowships Program
Basic Neurosciences
FRQ-S (Fonds de Recherche du Québec – Santé)

Member, Review Committee
Behavioural Sciences - C: Behavioural Studies, Neuroscience and Cognition
Project Grant Program
Canadian Institutes of Health Research (CIHR)

2018 Ad Hoc Member, **NIH** Study Section
Special Emphasis Panel: *Biomedical Imaging Technology*; 2 days

Member, selection committee:
ACFAS & Léo-Pariseau Prizes
Association Francophone pour le Savoir (ACFAS), QC, Canada

Member, review committee:
Canada Foundation for Innovation, Leader's Fund

Member, Review Panel
Quebec Research Funds, Health (FRS-Q)
Salary awards (Junior 2 & Senior), Clinical & Epidemiology

Member, College of Reviewers
Canada Institutes of Health Research (CIHR)

2017 Ad Hoc Member, **NIH** Study Section
Special Emphasis Panel: *Biomedical Imaging Technology*; 2 days

Ad Hoc Member, **NIH** Study Section
Special Emphasis Panel: *Cognition and Perception* Study Section

NIH Initiative - BRAIN 2025: A Scientific Vision
Standards to Define Experiments Related to the BRAIN Initiative
&
Data Archives for the BRAIN Initiative

Member, Review Panel
Quebec Research Funds, Health (FRS-Q)
Salary awards (Junior 2 & Senior), Clinical & Epidemiology

2016 Member, Interview Panel
Wellcome Trust
Collaborative Awards

Member, Advanced Grants Panel
European Research Council (ERC)
Diagnostic Tools, Therapies and Public Health

Member, Review Group
Canadian Institutes of Health Research (CIHR)
Spring 2016 Project Scheme competition

Member, Review Panel
Natural Sciences and Engineering Research Council of Canada (NSERC)
Electrical and Computer Engineering Discovery Grant Program.

Ad Hoc Reviewer,
NIH Center for Scientific Review
Special Emphasis Panel: *Clinical and Translational Imaging Applications*

2015 Member, Review Panel
European Research Council (ERC)
Advanced Grant Program

Member, Review Panel
Quebec Research Funds, Health (FRS-Q)
Salary awards, Clinical & Epidemiology

2014 Member, Review Panel
Canadian Institutes of Health Research (CIHR)
Social & Developmental Aspects of Children's & Youth's Health

Ad-Hoc Reviewer
NIH, Surgical Sciences, Biomedical Imaging and Bioengineering: Clinical Pediatric and Fetal Applications

Ad-Hoc Reviewer
NIH, Academic Research Enhancement Award

2013 Member, Site Review Committee : CERMEP
Institut National pour la Santé et la Recherche Médicale (INSERM), Lyon, France

2011-14 Member, Study Section
NIH Center for Scientific Review
Special Emphasis Panel: *Imaging Technology*; 2 days

2010 Member, Study Section
NIH Center for Scientific Review
Special Emphasis Panel: *Magnetic Devices*; 2 days

2010 Member, Site Visit Committee
Agence d'Evaluation de la Recherche et de l'Enseignement Supérieur
(AERES, France: National Agency for the Review of Research and College Education); 3 days

2005 Member, Study Section
Academy of Finland
Neuroscience program

Ad-hoc Reviewer for Funding Agencies, Academic Recruitments

A* Research Agency (Singapore)
Aalto University School of Science (Finland)
Academy of Sciences (Finland)
Academy of Medicine & Health Sciences (Australia)
Agence Nationale pour la Recherche (France)
The Canadian Partnership for Stroke Recovery, *Catalyst & Training Grants*
Canadian Research Chairs
Fonds Erasme pour la Recherche Médicale (Belgium)
French Foundation for Research on Epilepsy (France)
Fund for Scientific Research – FNRS, *Project Grants & Fellowships* (Belgium)
Heart and Stroke Foundation, Centre for Stroke Recovery (Canada)
High Council for Scientific & Technological Cooperation (France, Israel)
Human Frontier Science Program (International)
The Leverhulme Trust, *Physics* (UK)
Michael Smith Foundation for Health Research (BC, Canada)
Ministry of Research Programs (France)
MITACS Accelerate Program (Canada)

Natural Science & Eng. Research Council: E.W.R. Steacie Fellowship (Canada)
Natural Science & Eng. Research Council: 2018 Discovery Grant competition
NWO Investment Grant Large (The Netherlands)
Organization for Health Research & Development (ZonMw, The Netherlands)
Research Foundation Flanders, *Project Grants & Fellowships* (FWO, Belgium)
Swedish Research Council, *International Recruitment of Leading Researchers*
Swiss National Science Foundation (Switzerland)
University College of London, *Promotion of Research Staff* (UK)
Wellcome Trust, *Centres* (UK)
Wellcome Trust, *Collaborative Awards* (UK)
Wellcome Trust, *Equipment, Biomedical Resources* (UK)
Wellcome Trust, *Neuroscience & Mental Health* (UK)
Wellcome Trust, *Strategic Awards* (UK)

Organization of Workshops, Conferences

2020 **Member, Scientific Program Committee**
22nd International Conference on Biomagnetism: Biomag2020
Birmingham (UK), Aug 31, Sept 04 2020

2019 **Member, Organization Committee**
Symposium, Open Science in Action
Montreal Neurological Institute
Montreal, QC (Canada), Nov 18, 2019
350 participants

Chair, Program Committee
McGill MEG-Dayz
Montreal, QC (Canada), Jun 4—5, 2019
100 participants

2018 **Member, Program Committee**
International Conference on Brain Informatics
Arlington, TX (USA), Dec 7—9, 2018

Member, Scientific Program Committee
International Conference on Biomagnetism: Biomag2018
Philadelphia (USA), Aug 26-30, 2018

2016 **Member, Scientific Program Committee**
International Conference on Biomagnetism: Biomag2016
Seoul (South Korea), Aug 24-28, 2016

2015 **Member, Scientific Committee**
International Conference on Brain Engineering and Neurocomputing: IC-BrainEngine

Mykonos (Greece), June 01-04, 2015

Organizer
BIC30: 30th anniversary of the McConnell Brain Imaging Centre
One full day, 400 attendees.
Montreal, February 11, 2015

2014 **Member, Scientific Program Committee**
International Conference on Biomagnetism: Biomag2014
Halifax (Canada), Aug 24-28, 2014

2012-13 **Founding Organizer**, MEG Study Competition

30 teams from the Montreal area contributed entries consisting of original research projects featuring MEG to win a full study (n=20 subjects), free of charge. Organized competition, voting event, peer-review, provided technical assistance to the 3 winning teams.

2012 **Co-organizer**
Symposium, *Resting Event-Unrelated Imaging: Electrophysiological: Evidence of the Dynamics of the Resting Brain*
16th International Conference on Biomagnetism: Biomag2012
Aug 26-30, Paris (France)

Chair, Awards Committee
18th International Conference on Biomagnetism
BIOMAG 2012, Paris (France), August 26-30, 2012.

2011 **Member, International Advisory Board**
International Society for Bioelectromagnetism

2010 **Member, Scientific Program Committee**
International Conference on Biomagnetism: Biomag2010, Dubrovnik (Croatia), Mar 28 - Apr 1

2009 - 16 **Editor**, Education Section, http://megcommunity.org: a web portal to MEG

2009 **Member, Technical Program Committee**
11th World Congress on Medical Physics and Biomedical Engineering
Munich (Germany), Sept 7-12, 2009

2009 **Co-organizer, Workshop: Inverse Problem in Brain Imaging & Multimodal Fusion**, Centre de Recherches Mathématiques Worskhop Series
Université de Montréal (Canada), Aug 24-29

2007 **Track Chair**, NeuroImaging program
29th International Conference of the IEEE Engineering in Medicine & Biology Society, Lyon (France)

2001 - present **Founding Developer and Project Co-Ordinator**, BrainStorm software project: neuroimage.usc.edu/brainstorm; see Publications

RESEARCH

Activities

My track record is in leading multidisciplinary projects in systems and clinical neuroscience. I contributed a wide spectrum of advances in brain imaging methods that led to over 300 publications and concrete, practical solutions shared with the scientific community and transferred to the biomedical industry. I put strong emphasis on **enabling open-science** resources as vectors of research productivity and reproducibility: these include leading a Quebec network strategic initiative for open data and hosting an international open-software NIH project.

My team has been **recognised by multiple awards** for its expertise in multimodal, computational neuroimaging and experimental systems neuroscience. My 93 highly qualified trainees have successfully transferred to permanent academic and industry positions in Europe, Asia and North America.

My overarching objective is to **comprehend the principles of functional brain dynamics** and their alteration in disease. Perception and behaviour do not emerge from isolated, specialized brain areas: they require coordination between regions, forming networks based on rapid mechanisms that are not understood. Further, an increasing number of disorders are now studied as impairments of neural communication. Therefore, the ability to capture the complexity of brain dynamics is significant and can yield transformative clinical approaches.

I propose an integrative vision on the role of ubiquitous neural oscillations in dynamically shaping brain activity and behavior. Conceptually, we put forward that brain rhythms at multiple frequencies are interdependent, and that such couplings are a source of uncharted markers of neural integrity, excitability, activity and connectivity. Our recent results in human perception, cognition and in the resting-state provide such evidence.

My goal is to generalize our findings to reveal subtle forms of dysrhythmia arising and developing **early in disorders affecting multiple brain systems** – e.g., pre-clinical AD, prodromal epilepsy, depressive and schizophrenic bouts, or more elusively, in reading impairments. With a multidisciplinary network of collaborators, we (1) predict with computational models how insults to neural integrity/excitability and connectivity affect oscillatory cross-frequency coupling, (2) test these predictions in rodent models where integrity/excitability can be manipulated directly, (3) observe concordant phenomena in patients with depth recordings (epilepsy) and MEG imaging, and (4) propose therapeutic interventions based on modulations of oscillatory markers with biofeedback MEG imaging and portable devices.

My lab delivers data repositories and practical, translational tools under the principles of open science.

Funding

Total funds granted so far as PI, co-PI, co-I and Collaborator: $36.3M, 15 active (9 as PI/coPI), 43 completed.

Note that in addition to the grants listed below, the students and fellows applying to work with me have obtained above $3M via fellowships (for which I co-authored the applications) – See *Teaching*.

Active

1) Title: *Neural Correlates of Vocal Fatigue.*
Grant Number: N/A
Grant Type: Research Incubator Award
Source: Centre for Research on Brain, Language and Music
Period: June 2020 – May 2021
Role: co-PI (with Nicole Li-Jessen)
Total budget: $10,000

2) Title: *Cognitive Control of Auditory Environment.*
Grant Number: IT17547
Grant Type: Accelerate
Source: MITACS & AAVAA
Period: June 2020 – May 2025
Role: co-PI (in partnership with TandemLaunch Inc.)
Total budget: $480,000

3) Title: *Active Inference in Hierarchical Brain Networks: Mechanisms, Functions, Modulation.*
Grant Number: RGPIN-2020-06889
Grant Type: Discovery Grants Program
Source: Natural Sciences & Engineering Research Council of Canada (NSERC)
Period: Apr 2020 – May 2025
Role: PI
Total budget: $390,000

4) Title: *Decoding "replay" during working memory manipulation in humans*
Grant Number: Project 18.13
Grant Type: Pilot Project
Source: Quebec Bioimaging Network
Period: Sept 2019 – Oct 2020
Role: co-PI (with P Albouy)
Total budget: $12,000

5) Title: *Neuroplastic Mechanisms Underlying the Pathophysiology of Tinnitus*
Grant Number: N/A
Grant Type: Project

Source: CIHR
Period: Sept 2019 – Sept 2023
Role: co-I (PI E de Villers-Sidani with co-I S Hébert, P Voss, A Zeitouni)
Total budget: $413,101

6) Title: *Next-Generation Non-Surgical Neurotechnology*
Grant Number: SI N65236-9C8013
Grant Type: N/A
Source: DARPA, Teledyne
Period: Sept 2019 – Sept 2020
Role: co-I (PI Patrick Connelly)
Total budget: $79,756 (direct funds to my group)

7) Title: *The Rocking Bed: an Audacious Solution to Sleep Disorders in Aging*
Grant Number: N/A
Grant Type: Audace
Source: Quebec Health Research Funds (FRQS)
Period: Sept 2019 – Sept 2020
Role: co-I (PI Thanh Dang-Vu)
Total budget: $127,000

8) Title: *From Cells to Brain Systems: Active Inference in Hierarchical Brain Networks*
Grant Number: (to be announced)
Grant Type: Innovative Ideas Program
Source: CFREF-APOGEE Healthy Brains for Healthy Lives
Period: Sept 2019 – Aug 2021
Role: PI (with co-I AVOLI, de-VILLERS-S, FRANCOIS, FRAUSCHER, MISIC, PACK, PEYRACHE)
Total budget: $200,000

9) Title: *Spatiotemporal dynamics of the cerebellum in sleep-dependent memory consolidation*
Grant Number: 35450
Grant Type: Pilot Projects
Source: Quebec Bioimaging Network
Period: Sept 2019 – Aug 2021
Role: co-I (PI: E Coffey, with TO Bergmann, C Steele)
Total budget: $17,500

10) Title: *Neural Dynamics of Brain Systems*
Grant Number: N/A
Grant Type: Tier-1 Canada Research Chair
Source: Canada Research Chair Program
Period: Apr 2018 – Mar 2025
Role: PI
Total budget: $1.4M

11) Title: *Brainstorm: Highly Extensible Software for Advanced Electrophysiology and MEG/EEG Imaging*
Grant Number: 1R01EB026299-01
Grant Type: RO1
Source: NIH NIBIB
Period: Apr 2018 – Mar 2022
Role: Co-Investigator (PI: RM Leahy)
Total budget: $3.4M USD ($141,822 USD/year, direct costs to my group)

12) Title: *Brain Plasticity Mediating Improved Memories through Online and Offline Stimulation Methods in Healthy Adults and Patients with a Chronic Neurological Condition*
Grant Number: N/A
Grant Type: Discovery Fund for Interdisciplinary Research, Healthy Brain for Healthy Lives
Source: Canada First Research Excellence Fund (CFREF), McGill University
Period: Mar 2018 - Mar 2021
Role: co-PI (PI: J Doyon (McGill))
Total budget: $1,499,850

13) Title: *CREATE in Complex Dynamics: Accelerating Discoveries in Brain and Behavior*
Grant Number: N/A
Grant Type: Collaborative Research and Training Experience
Source: NSERC
Period: Apr 2017 - Apr 2023
Role: co-PI (PI: C Palmer (Psychology); S Amir (Concordia), J Carrier (U Montreal), L Glass (Physiology), J Grahn (U Western Ontario), J Mogil (Psychology), D Titone (Psychology), L JJ Trainor (McMaster U))
Total budget: $1.65M

14) Title: *McConnell Brain Imaging Centre: a Hub of Scientific Excellence for Translational Neuroimaging*
Grant Number: PSG15-3755
Grant Type: Platform Support Grant
Source: Brain Canada Foundation
Period: 04/2016 – 04/2021
Role: PI
Total funds: $4,200,000 (incl. matching funds from the MNI and Webster Family Foundation)

15) Title: *Cerebral Cortical Neural Mechanisms of Motor and Non-Motor Decisions.*
Grant Type: Operating Grant
Source: CIHR
Period: 10/2015 – 09/2020
Role: Co-Investigator (PI: John Kalaska, University of Montreal)
Total funds: $977,736
I am the only co-investigator on this grant, collaborating with PI Kalaska on his first human imaging effort. John is a world-renowned expert of primate motor systems.

16) Title: *The McConnell Brain Imaging Centre: a Hub of Scientific Excellence for Translational Neuroimaging*

Grant Type: Private Donation
Source: R.H. Webster Family Foundation
Period: 10/2015 – 09/2021
Role: PI
Total funds: $1,000,0000
This grant is to support developments and upgrades at the McConnell BIC PET Unit and the launch of an open, multimodal data banking initiative: The BIC Open Data Warehouse.

17) Title: *Early Alterations of Brain Rhythms in Mild-Cognitive Impairment and Alzheimer's Disease.*
Grant Type: Stop-AD Pilot Grants
Source: Centre for Studies on Prevention of Alzheimer's Disease
Period: 11/2015 – 03/2021
Role: co-PI, with John Breitner (McGill), Thanh Dang-Vu (Concordia), Sylvain Williams (McGill)
Total funds: $95,000
This pilot project is to investigate new indices of predisposition and early AD onset based on electrophysiological markers of altered cross-frequency coupling. I am responsible for the coordination of the study and all MEG data collection and analysis (60 participants)

Completed

18) Title: *Real-time Functional Brain Imaging with Neurofeedback Technology: Concepts, Methods and Applications*
Grant Type: Discovery Grant
Grant Number: 436355-13
Source: Natural Sciences and Engineering Research Council of Canada (NSERC)
Project Period: 04/2013 – 03/2020
Role: PI
Direct funds: $294,000 (total for all years)
Methods and experiments to enable and develop neurofeedback applications of MEG.

19) Title: *Magnetoencephalography (MEG) – Based Biomarker for Chronic Pain*
Grant Number: N/A
Grant Type: Pilot Project Grant
Source: Quebec Pain Research Network
Period: Feb 2018 - Jan 2019
Role: co-PI (with M Roy (McGill Psychology))
Total budget: $25,000

20) Title: *The Open Brain Imaging Databank*
Grant Number: N/A
Grant Type: Research Portals and Platforms
Source: Compute Canada
Period: 01/2016 – 04/2019
Role: PI (co-PIs: N Rajah (Douglas), R Farivar (RI-MUHC))
Total budget: $259,500 (500TB of cloud storage over 3 years)

21) Title: *CBRAIN: A National High-Performance Computing Platform for Brain Research*
Grant Number: N/A
Grant Type: Cyberinfrastructure Program
Source: Canadian Foundation for Innovation
Period: 07/2016 – 06/2019
Role: Principal User (PI: Alan C. Evans)
Total budget: $2,400,000

22) Title: *BrainTrack: Dynamic Identification of Functional Brain Networks by Bayesian Tracking of Electrophysiological Data*
Grant Number: 289108
Grant Type: Academy Projects
Source: Academy of Finland
Period: 09/2015 – 08/2019
Role: Collaborator (PI: L. Parkkonen)
Total funds: $763,870

23) Title: *Montreal Integrated Neuropsychiatric Cohort: Investigating Mechanisms Underlying Autism and Schizophrenia*
Grant Type: Multi-Investigator Research Initiative
Source: Brain Canada
Period: 01/2016 – 12/2019
Role: co-PI, with S Jacquemont (Leader), L Mottron (U Montreal), R Joober (McGill), G Rouleau (McGill), A C Evans (McGill), C Ernst (Douglas, McGill), M Elsabbagh (Douglas, McGill), P Pavlidis (U British Columbia)
Total funds: $1,540,000

24) Title: *Electrophysiological Signal Markers of A-beta and Tau Deposition in AD Pathophysiology*
Grant Number: N/A
Grant Type: McConnell Brain Imaging Centre Collaborative Projects
Source: Montreal Neurological Institute
Period: May 2018 – May 2019
Role: Co-PI (with Sylvia Villeneuve, Douglas Institute, McGill)
Total budget: $25,000

25) Title: *The Value of "Negative" MEG Studies: Defining the Functional Deficit Zone Using Spontaneous MEG in Children with Intractable Epilepsy*
Grant Number: N/A
Grant Type: Project Grant
Source: Foundation of the Montreal Children's Hospital Neurosurgery Department
Period: Mar 2018 - Mar 2019
Role: co-PI (with Roy Dudley)
Total budget: $50,000

26) Title: *Investigation of the Brain and Physiological Changes Induced by the Neuroforce Stress Relief Program – a Pilot Study*
Grant Number: N/A
Grant Type: Project Grant
Source: MEDTEQ
Period: Sept 2018 – Sept 2019
Role: co-PI (with Francine Therrien @ Neuroforce)
Total budget: $39,244

27) Title: *Streamlining of MEG Data Analysis in the Clinic*
Grant Number: N/A
Grant Type: Service Agreement
Source: Elekta Oy
Period: Mar 2018 - Mar 2019
Role: PI
Total budget: $31,926

28) Title: *The Role of Nested Oscillations in Shaping Long-Range Coupling in the Human Brain*
Grant Number: N/A

Grant Type: Resource Allocations
Source: Compute Canada
Period: 01/2014 – 12/2018
Role: PI
Market value: $233,016
Allocation of 1,230,000 processor hours on Canada's high-performance computing grid to conduct experimental computational neuroscience modeling.

29) Title: *McGill's Neuroimaging Computing Platform*
Grant Number: 69910
Grant Type: Research Technology & Instruments
Source: NSERC
Period: 04/2016 – 03/2018
Role: PI (Co-I: R Farivar (RI-MUHC), A Bernasconi, DL Collins, A Shmuel)
Total budget: $139,000

30) Title: *Multimodal Neuroimaging Methods for Time-Resolved Functional Connectivity: Application to Motor Control*
Grant Number: 2016-PR-191780
Grant Type: Team Grant
Source: FRQ-NT (Quebec Funds for Nature & Technology Research)
Period: 05/2015 – 04/2018
Role: Co-PI, with G. Mitsis, R. Hoge, M-H Boudrias
Total funds: $212,680

31) Title: *Determining the Effect of Adaptive Training on Age-related Changes in Auditory Cortical Processing*
Grant Number: 242197
Grant Type: Pilot Project Program
Source: Quebec Research Network on Aging
Period: 09/2015 – 12/2017
Role: Co-PI (PI: E. deVillers-Sidani; co-PI: S. Belleville)
Total funds: $15,000

32) Title: *Localization of Epileptogenic Zone in Children Using Spontaneous Magnetoencephalography*
Grant Number: N/A
Grant Type: New Directions in Research Competition
Source: Montreal Children's Hospital Foundation
Period: 05/2016 – 04/2017
Role: co-Investigator (PI: R Dudley (Neurosurgery, Montreal Children's Hospital))
Total budget: $50,000

33) Title: *Neurofeedback Training of ADHD College Students: Evaluation of Neuroimaging Effects*
Grant Type: Community and College Social Innovation Fund
Source: Social Sciences and Humanities Research Council
Period: 09/2015 – 08/2017

Role: Co-Investigator (PIs: Hélène Brisebois & Andrea Szabo, College Montmorency)
Total funds: $223,580
I was responsible for implementing the MEG/MRI imaging protocol and data analysis for this project. We evaluated effects of EEG biofeedback in the management of ADHD in junior college students.

34) Title: *A Unified Approach for Diagnostic &Therapy of Neurological and Psychiatric Disorders*
Grant Number: 27605
Source: FRQS Chercheur-Boursier Senior / Senior Researcher Salary Award
Project Period: 07/01/2013 – 06/30/2017
Role: PI
Direct funds: $239,515
Salary support, with no equipment and no operational costs.

35) Title: *Tools for Large-Scale Platform-Independent MEG Data Analysis*
Grant Number: 2R01EB009048-05
Source: NIH
PI: Matti Hämälainen (MGH/Harvard Medical School)
Richard M. Leahy (University of Southern California)
Project Period: 04/15/2013 – 03/31/2018
Role: Co-Investigator
Direct funds: $2,466,769 (total for all years; $214,284 to my group)
This research is to provide well-documented and well-tested novel analysis software to promote both basic neuroscience and clinical research applications using MEG and EEG, in combination with anatomical MRI and intracranial EEG data.

36) Title: *Auditory Cortex: Pathways, Processes and Plasticity*
Grant Number: 312775
Grant Type: Operating Grant
Source: Canadian Institutes for Health Research
Period: 05/2014 – 04/2018
Role: Co-investigator (PI: R. Zatorre)
Direct funds: $117,448
I contribute MEG experimental design and analytical methods.

37) Title: *Auditory-motor connectivity induced by music-supported therapy in stroke survivors*
Grant Number: N/A
Grant Type: Research Incubator Award
Source: Centre for Research on Brain, Language & Music
Period: 03/2016 – 03/2017
Role: Co-Investigator (PI: V. Penhune, Co-I: A. Lamontagne, MH Boudrias)
Total funds: $10,000

38) Title: *Understanding the Impact of Age on the Basic Mechanisms of Auditory Perceptual Learning: a MEG Pilot Study*
Grant Number: 240255

Grant Type: Pilot Project program
Source: Quebec Research Network on Aging
Period: 09/2014 – 01/2016
Role: Co-PI (PIs: E. deVillers-Sidani & S. Belleville)
Direct funds: $17,525

39) Title: *Sleep Spindle and K-Complex Activation and Duration In Patients With Circadian Rhythm Disorders*
Grant Number: N/A
Grant Type: Globalink Research Award
Source: MITACS Inc.
Period: 05/2016 – 08/2016
Role: PI
Total budget: $5,000
Award to fund Ms Zi Hui Su's, undergraduate student in my lab, travels to Peking U, to start collaboration with Prof Jia Hong Gao.

40) Title: *Millisecond in vivo Imaging of Nanoparticle Circulation and Uptake in Brain Cancer Therapy*
Grant Type: Collaborative Research in Biomedical Engineering
Source: Department of Biomedical Engineering, McGill University
Period: 07/2015 – 07/2016
Role: Co-PI, with J. Matt Kinsella
Total funds: $15,000

41) Title: *Modulating Auditory Perception with Rhythmic Stimulations*
Grant Number: 5886
Grant Type: Pilot Project program
Source: Quebec Bioimaging Network
Period: 11/2014 – 10/2015
Role: Co-PI, with R. Zatorre & P. Albouy
Direct funds: $10,000

42) Title: *Regulation of Brain Rhythms in Early Development*
Source: Quebec Ministry of International Relations: Samuel-de-Champlain Program
Project Period: 08/01/2013 – 07/31/2015
Role: Co-PI (w/ Ghislaine Dehaene, CEA/Neurospin, Orsay (France))
Direct funds: $8,300
Seed funds to initiate new international collaboration: EEG markers of functional development in infants.

43) Title: *The Montreal MEG Hub: Shared Tools & Resources for Studying Time-Resolved Mechanisms of Human Brain Functions & Dysfunctions.*
Grant Type: Strategic Initiative
Grant Number: QBIN 5886
Source: Quebec Biomaging Network
Project Period: 01/2013 – 08/2015
Role: PI (with Pierre Jolicoeur, University of Montreal)

Direct funds: $100,000
Collaborative project with University of Montreal to create an online database of MEG data as a new academic resource, with open access.

44) Title: *Knowledge Representation as Experienced-based Abstractions: Theory and Experimental Validations*
Grant Number: IARPA-BAA-12-05 (FA8650-14-C-7357)
Grant Type: Knowledge Representation in Neural Systems (KRNS) Program
Source: Intelligence Advanced Research Projects Activity (IARPA, USA)
Period: 08/2013 – 01/2015
Role: Co-Investigator
Total granted: $8.4M (Direct funds to my group: $241,794)
Multi-site project. My role consists in contributing the optimal experimental design and data analysis for MEG.

45) Title: *The Large-Scale Mechanisms and Dynamics of Spontaneous Brain Activity.*
Source: Oxford-McGill Neuroscience Collaboration Program
Project Period: 08/01/2013 – 07/31/2014
Role: Co-PI (w/ Mark Woolrich, U. of Oxford)
Direct funds: $25,500
Two-site project on the mechanisms of resting-state brain activity and associated imaging methods.

46) Title: *Experience-Related Plasticity of Auditory Evoked Brainstem Responses Measured with Combined EEG/MEG*
Grant Type: Research Incubator Grant
Source: Center for Research on Brain Language & Music
Project Period: 06/2012 – 06/2013
Role: Co-PI (w/ Robert Zatorre)
Direct funds: $15,000
This project is to fund pilot studies and data acquisition to elucidate the dynamics of early auditory responses generated within the brainstem and their interplay with later cortical activations.

47) Title: *Neural Systems for Word Recognition in Space and Time*
Grant Number: K99 HD065839
Source: NICHD
PI: William Graves (Medical College of Wisconsin)
Project Period: 08/2010 – 08/2013
Role: Mentor (with Jeff Binder, MD)
Direct funds: $120,000
Dr Baillet provides mentorship and guidance in the course of Dr Graves' project to acquire expertise in MEG imaging and data analyses.

48) Title: *Multimodal Neuroimaging of Rapid Brain Processes in the Human Visual System*
Source: ANR: National Research Agency (French equivalent of NSF)
Role: PI
Dates: September 2008 – June 2013

Direct Funds: $573,000 (total for all years)
Coordination of a multisite project to elucidate the processes ruling fast visual responses in the Human brain.

49) Title: *Center for Functional Neuroimaging Technologies*
Grant Number: 5 P41 RR014075-12
Source: NIH/NCRR
PI: Bruce Rosen (MGH/Harvard Medical School)
Project Period: 9/1/2009 – 08/31/2013
Role: Consultant
Direct Funds: $1,167,144 (total for all years)
Support for continued efforts to develop innovative neuroimaging technologies within the highly integrated multimodal framework of the Martinos Centre for Bioimaging, an NIH P41 Regional Resource of the Harvard Medical School.

50) Title: *A Real-time Neuroimaging Therapeutic Approach to Amusia*
Grant Type: Research Incubator Grant (Center for Research on Brain Language & Music)
Source: Center for Research on Brain Language & Music
Period: 05/2012 – 05/2013
Role: co-PI (w/ Isabelle Peretz)
Direct funds: $15,000
In collaboration with Dr Isabelle Peretz at the University of Montreal, we seek to demonstrate that the condition of amusic patients can be improved with biofeedback techniques based on real-time MEG imaging of their cortical dynamics in response to harmonic auditory stimulus presentations.

51) Title: *Tools for Large-Scale Platform-Independent MEG Data Analysis*
Grant Number: 1R01EB009048-01
Source: NIH Project Grants
PI: Matti Hämälainen (MGH/Harvard Medical School)
Project Period: 02/15/2009 – 01/31/2013 (renewed in 2013)
Role: Collaborator
Direct funds: Total grant $2,329,688

52) Title: *Signal & Source Space Independent Component Analysis of Electrophysiological Data*
Source: CNRS Neuroinformatics program (France)
Project Period: 09/1/2009 – 08/31/2011
Role: Co-PI
Direct Funds $35,000 (total for all years)

53) Title: *Brain Noise and Transient Dynamics in the Resting Brain*
Source: CNRS Neuroinformatics Program (France)
PI: Viktor Jirsa
Role: Co-Investigator
Dates: September 1, 2008 – August 30, 2009
Direct Funds: $45,000 (total for all years)

54) Title: *The Neuroimaging Problem of Interindividual Anatomo-Functional Coregistration: An Approach Using Diffeomorphic Transports Of Measures*
Source: CNRS Neuroinformatics Program (France)
Role: PI
Dates: 2008 – 2009
Direct Funds: $40,000 (total for all years)

55) Title: *The Origins of the Human Brain: Neural Bases of Language in Infants Studied with Neuroimaging*
Source: ANR: National Research Agency (French equivalent of NSF)
PI: Ghislaine Dehaene
Role: Co-Investigator
Dates: January 1, 2007 – December 31, 2010
Direct Funds: $600,000 (total for all years)

56) Title: *Electromagnetic Functional Brain Imaging*
Grant Number: R01 EB002010
Source: NIBIB
Role: Consultant
Dates: 2006 – 2009
Direct Funds: $40,000 (consulting fees for all years)

57) Title: *Dynamic Interaction between Neural Cell Assemblies*
Source: French Ministry of Research
Role: PI
Dates: 2001 - 2003
Direct Funds: $120,000 (total for all years)

58) Title: *Time-resolved Neuroimaging Investigations of Brain Activity*
Source: French Ministry of Research
Role: PI
Dates: 2003 - 2007
Direct Funds: $60,000 (total for all years)

59) Title: *Stroke Imaging Software*
Source: CNRS Support-Staff Salary Award
Role: PI
Dates: November 1, 2006 - October 30, 2007
Direct Funds: $30,000

Publications & Outreach

See Appendix

Publications

Sylvain BAILLET
McConnell Brain Imaging Centre
Montreal Neurological Institute
McGill University

[July 2020]

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1 Publications in Journals

1.1 Peer-reviewed journal articles

Note: [∗] marks articles first-authored by a graduate student or post-doctoral fellow in my group. [Baillet S, XYZ] indicates shared senior authorship.

106. Lam J, Tomaszewski P, Guillaume G, Moreau J, Guiot MC, Albrecht S, Farmer JP, Atkinsson J, Saint-Martin C, Wintermark P, Bernhardt B, Baillet S, Dudley RWR (in press) *The Utility of Arterial Spin Labeling (ASL) in the Pre-Surgical Evaluation of Poorly-Defined Focal Epilepsy in Children*, in second round of revisions, **Journal of Neurosurgery: Pediatrics** [∗]

105. Moreau JT, Simard-Tremblay E, Albrecht S, Rosenblatt B, Baillet S, Dudley RWR (in press) *Overnight Ictal Magnetoencephalography*, **Neurology: Clinical Practice** [∗]

104. Moreau JT, Baillet S, Dudley RWR (in press) *Biased Intelligence: on the Subjectivity of Digital Objectivity*, **BMJ Health & Care Informatics** [∗]

103. Ouellette H, Toussay X, Comin CH, da F. Costa L, Ho M, Lacalle-Aurioles M, Freitas-Andrade M, Yan Liu Q, Leclerc S, Pan Y, Liu Z, Thibodeau JF, Yin M, Carrier M, Morse CJ, Van Dyken P, Bergin CJ, Baillet S, Kennedy CR, Tremblay ME, Benoit YD, Stanford WL, Burger D, Stewart DJ, Lacoste B (2020) *Vascular Contribution to 16p11.2 Deletion Autism Syndrome Modeled in Mice*, **Nature Neuroscience**, https://doi.org/10.1038/s41593-020-0663-1

102. Moreau JT, Hankinson TC, Baillet S, Dudley RWR (2020) *Individual-patient Prediction of Meningioma Malignancy and Survival Using the Surveillance, Epidemiology, and End Results database* **npj: Digital Medicine**, 3, 12 [∗]

101. Hirschmann J, Baillet S, Woolrich M, Schnitzler A, Vidaurre D, Florin E (2020) *Spontaneous Network Activity Accounts for Variability in Stimulus-Induced Gamma Oscillations*, **Neuroimage**, 207, 116264

100. Diers M, de Vos CC, Gandhi W, Hoeppli ME, Becker S, Bock EA, Baillet S, Schweinhardt P (2020) *Induced Oscillatory Signaling in the Beta Frequency of Top-down Pain Modulation*, **PAIN Reports**, 5, e806 [∗]

99. Donhauser P & Baillet S (2020) *Two distinct neural time scales for predictive speech processing*, **Neuron**, 105(2): 385-393 [∗]

98. Müller F*, Niso G*, Samiee S, Ptito M, [Baillet S, Kupers R] (2019) *A Thalamocortical Pathway for Fast Rerouting of Tactile Information to the Occipital Cortex in Congenital Blindness*, **Nature Communications**, 10, 5154 [∗]

97. Duma GM, Mento G, Cutini S, Sessa P, Baillet S, Brigadoia S, Dell'Acqua R, (2019) *Functional dissociation of anterior cingulate cortex and intraparietal sulcus in visual working memory*, **Cortex**, 121: 277-291 [∗]

96. Nasiotis K, Cousineau M, Tadel F, Peyrache A, Leahy RM, Pack C, Baillet S (2019) *Integrated open-source software for multiscale electrophysiology*, 231, **Scientific Data** [∗]

95. Xifra-Porxas A, Niso G, Larivière S, Kassinopoulos M, Baillet S, Mitsis GD, Boudrias M-H, (2019) *Older Adults Exhibit a More Pronounced Modulation of Beta Oscillations When Performing Sustained and Dynamic Handgrips*, 201:116037, **Neuroimage**

94. Larivière S, Xifra-Porxas A, Kassinopoulos M, Niso G, Baillet S, Mitsis GD, Boudrias M-H, (2019) *Functional and Effective Reorganization of the Aging Brain During Unimanual and Bimanual Hand Movements*, **Human Brain Mapping** 40(10): 3027-40

93. Bock EA, Fesi JD, Baillet S, Mendola JD (2019) *Tagged MEG Measures Binocular Rivalry in a Cortical Network that Predicts Alternation Rate*, **PLoS ONE** 14(7): e0218529, https://doi.org/10.1371/journal.pone.0218529 [∗]

92. Niso G, Tadel F, Bock EA, Cousineau M, Santos A, Baillet S (2019) *Brainstorm Pipeline Analysis of Resting-State Data from the Open MEG Archive*, **Frontiers in Neuroscience**, 13:284 [∗]

91. Amd M, Baillet S (2019) *Neurophysiological Effects Associated With Subliminal Conditioning of Appetite Motivations*, **Frontiers in Psychology**, 10:458 [∗]

90. Tadel F, Bock EA, Niso G, Mosher JC, Cousineau M, Pantazis D, Leahy RM, Baillet S (2019) *MEG/EEG Group Analysis with Brainstorm*, **Frontiers in Neuroscience**, 13: 76 [∗]

89. Puschmann S, Baillet S, Zatorre RJ (2019) *Musicians at the Cocktail Party: Neural Substrates of Musical Training During Selective Listening in Multi-speaker Situations*, **Cerebral Cortex**, 29: 3253-3265

88. Niso G, Gorgolewski KJ, Bock E, Brooks TL, Flandin G, Gramfort A, Henson RH, Jas M, Litvak V, Moreau J, Oostenveld R, Schoffelen JM, Tadel F, Wexler J, Baillet S (2018) *MEG-BIDS: an Extension to the Brain Imaging Data Structure for Magnetoencephalography*, **Scientific Data**, Jun 19;5:180110 [∗]

87. Hari R, Baillet S, Barnes G, Burgess R, Forss N, Gross J, Hämäläinen M, Jensen O, Kakigi R, Mauguière F, Nakasato N, Puce A, Romani GL, Schnitzler A, Taulu S (2018) *IFCN-endorsed practical guidelines for clinical magnetoencephalography (MEG)*, **Clinical Neurophysiology**, 129:8, 1720–47, [review invited by the International Federation of Clinical Neurophysiology]

86. Albouy P, Baillet S, Zatorre RJ (2018) *Driving Working Memory with Frequency-Tuned Non-Invasive Brain Stimulation*, **Annals of the New-York Academy of Sciences**, 1423: 126-137. doi:10.1111/nyas.13664 [∗]

85. Florin E & Baillet S (2018) *Commentary: Evaluation of Phase-Amplitude Coupling in Resting State Magnetoencephalographic Signals: Effect of Surrogates and Evaluation Approach*, **Frontiers in Computational Neuroscience**, 12:26 doi.org/10.3389/fncom.2018.00026 [∗]

84. Samiee S, Levesque M, Behr C, Avoli M, Baillet S (2018) *Phase-amplitude Coupling and Epileptogenesis in an Animal Model of Mesial Temporal Lobe Epilepsy*, **Neurobiology of Disease**, 114:111-119 [∗]

83. Donhauser P, Florin E, Baillet S (2018) *Imaging of Neural Oscillations with Embedded Inferential and Group Prevalence Statistics*, **PLoS Computational Biology** 14(2):e1005990. doi.org/10.1371/journal.pcbi.1005990 [∗]

82. Chadnova E, Reynaud A, Clavagnier S, Baker DH, [Baillet S & Hess RF] (2017) *Interocular Interaction of Contrast and Luminance Signals in Human Primary Visual Cortex*, **Neuroimage**, 167:23-30 [∗]

81. Morillon B & Baillet S (2017) *Motor Origin of Temporal Predictions in Auditory Attention*, **Proc Natl Acad Sci** 114 (42):E8913-E8921 [∗]

80. Coffey EBJ, Chepesiuk A, Herholz S, Baillet S & Zatorre RJ, (2017) *Neural Correlates of Early Sound Encoding and their Relationship to Speech in Noise Perception*, **Frontiers in Neuroscience**, 11:479 doi:10.3389/fnins.2017.00479

79. Samiee S & Baillet S (2017) *Time-Resolved Phase-Amplitude Coupling in Neural Oscillations*, **Neuroimage** 159:270–79 [∗]

78. Florin E, Vuvan D, Peretz I & Baillet S (2017) *Pre-Target Neural Oscillations Predict Variability in the Detection of Small Pitch Changes*, **PLoS ONE**, May 12(5):e0177836 [∗]

77. Albouy P, Weiss A, [Baillet S & Zatorre RJ] (2017) *Selective Entrainment of Theta Oscillations in the Dorsal Stream Causally Enhances Auditory Working Memory Performance*, **Neuron**, Apr 94(1):193–206 [∗]

76. Baillet S (2017) *MEG for Brain Electrophysiology & Imaging*, **Nature Neuroscience**, 20(3): 327–339

75. Hinault T, Badier JM, Baillet S & Lemaire P (2017) *The Sources of Sequential Modulations of Control Processes in Arithmetic Strategies: A Magnetoencephalography Study*, **J Cognitive Neuroscience**, Feb 14:1–11 [∗]

74. Das S, Glatard T, Rogers C, Saigle J, Paiva S, Leigh L, Safi-Harab M, Rousseau ME, Stirling J, MacFarlane D, Kostopoulos P, Rioux P, Madjar C, Lecours-Boucher X, Vanamala S, Adalat R, Mohaddes Z, Khalili-Mahani N, Fonov VS, Milot S, Leppert IR, Degroot C, Durcan TM, Campbell T, Moreau J, Dagher A, Collins DL, Karamchandani J, Bar-Or A, Fon EA, Hoge RD, Baillet S, Rouleau GA, Evans AC (2017) *Cyberinfrastructure for Open Science at the Montreal Neurological Institute*, **Frontiers in Neuroinformatics**, 10:53, doi:10.3389/fninf.2016.00053

73. Graves WW, Boukrina O, Mattheiss SR, Alexander EJ & Baillet S (2017) *Reversing the Standard Neural Signature of the Word-Nonword Distinction in Lexical Decision: A Multimodal Neuroimaging Study*, **J Cognitive Neuroscience**, 29(1):79–94 [∗]

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71. Pathak Y, Salami O, Baillet S, Li Z & Butson CR (2016) *Longitudinal Changes in Depressive Circuitry in Response to Neuromodulation Therapy*, **Frontiers in Neural Circuits**, 10:50. doi: 10.3389/fncir.2016.00050

70. Soto J, Lachaux JP, Baillet S & Jerbi K (2016) *A Multivariate Method for Estimating Cross-Frequency Neuronal Interactions and Correcting Lin-*

ear Mixing in MEG Data, Using Canonical Correlations, **J Neuroscience Methods**, 271: 169–181

69. Coffey EBJ, Herholz SC, Chepesiuka QP, Baillet S, Zatorre RJ (2016) *Cortical Contributions to the Auditory Frequency-Following Response Revealed by MEG*, **Nature Communications**, Mar, 7: 11070

68. Niso G, Rogers C, Moreau JT, Chen L-Y, Madjar C, Das S, Bock E, Tadel F, Evans AC, Jolicoeur P, Baillet S (2016) *OMEGA: The Open MEG Archive*, **Neuroimage** Jan, 124(Pt B):1182–7 [∗]

67. Cheng CH, Baillet S, Lin YY (2015) *Region-Specific Reduction of Auditory Sensory Gating in Older Adults*, **Brain & Cognition**, Dec, 101:64–72. [∗]

66. Cheng CH, Chan PY, Baillet S, Lin YY (2015) *Age-related Reduced Somatosensory Gating is Associated with Altered Alpha Frequency Desynchronization*, **Neural Plasticity**, Jan, 104:48–55 [∗]

65. Florin E, Baillet S (2015) *The Brain's Resting-State Activity is Shaped by Synchronized Cross-Frequency Coupling of Neural Oscillations*, **Neuroimage**, May, 111:26–35 [∗]

64. Cheng CH, Baillet S, Hsiao FJ, Lin YY (2015) *Effects of aging on the neuromagnetic mismatch detection to speech sounds*, **Biological Psychology**, 104:48–55 [∗]

63. Balderston NL, Schultz DH, Baillet S, Helmstetter FJ (2014) *Rapid Amygdala Responses during Trace Fear Conditioning without Awareness*, **PLoS ONE** 9(5): e96803

62. Khan S, Lefèvre J, Baillet S, Michmizos KP, Ganesan S, Kitzbichler MG, Zetino M, Hämäläinen M, Papadelis C, Kenet T (2014) *Encoding Cortical Dynamics in Sparse Features*, **Front. Hum. Neurosci.**, 8(334): doi: 10.3389/fnhum.2014.00338 [∗]

61. Florin E, Bock E, Baillet S (2014) *Targeted Reinforcement of Neural Oscillatory Activity with Real-time Neuroimaging Feedback*, **Neuroimage**, Mar, 88:54-60 [∗]

60. Ossadtchi A, Pronko P, Baillet S, Pflieger M & Stroganova TA (2014) *Mutual Information Spectrum for Selection of Event-related Spatial Components. Application to Eloquent Motor Cortex Mapping.*, **Frontiers in Neuroinformatics** 7:53. doi: 10.3389/fninf.2013.00053

59. Balderston NL, Schultz DH, Baillet S, Helmstetter FJ (2013) *How to Detect Amygdala Activity with Magnetoencephalography using Source Imaging*, **J Visual Experiments**, Jun 3;(76)

58. Cheng CH, Baillet S, Hsiao FJ, Lin YY (2013) *Effects of aging on neuromagnetic mismatch responses to pitch changes.* **Neuroscience Letters**, Jun 7; 544:20-4 [∗]

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1.2 Manuscripts submitted to peer review

1. Matsushita R, Puschmann S, Baillet S, Zatorre RJ *Inhibitory effect of tDCS on auditory evoked response: simultaneous MEG-tDCS reveals causal role of right auditory cortex in pitch learning*, submitted to **Journal of Neuroscience**

2. Lennert T, Samiee S, Baillet S *Coupled Oscillations Enable Rapid Recalibration to Audiovisual Asynchrony*, in revision, **PLoS Biology** [∗]

3. Bock EA, Fesi JD, Baillet S, Mendola JD, *Coherence Analysis of Tagged Cortical Activity Distinguishes Binocular and Pattern Rivalry*, submitted to **Journal of Neuroscience** [∗]

1.3 Non peer-reviewed articles

10. Michel CM, Baillet S, Benar C, Bertrand O, Gotman J, He B, Huiskamp GJ, Lemieux L, Makeig S, Pascual?Leone A, Salmelin R, Seri S, Valdes-Sosa P, Wendling F (2019) *Memoriam: Fernando Lopes da Silva (1935–2019)*, **Brain Topography**, https://doi.org/10.1007/s10548-019-00720-0.

9. Baillet S, Seyller A, Rouleau GR (2019), *Ouvrir les Neurosciences*, in: Recherche et communs : vers des sciences ouvertes, Revue **Découvrir** (ACFAS), Mar 10.

8. Hirschmann J, Baillet S, Schnitzler A, Woolrich M, Vidaurre D, Florin E (2018) *Spontaneous network activity accounts for variability in stimulus-induced gamma responses*, **bioRxiv** 381236; doi: https://doi.org/10.1101/381236

7. Hari R, Baillet S, Barnes G, Forss N, Gross J, Hämäläinen M, Jensen O, Kakigi R, Mauguière F, Nakasato N, Puce A, Romani GL, Schnitzler A, Taulu S (2018) *Letter to the Editor: Reply to "Clinical practice guidelines or clinical research guidelines?"*, **Clinical Neurophysiology**, 129(9): 2056

6. Baillet S (2018) *Brain Training*, **Scientia Global**, https://doi.org/10.26320/SCIENTIA163, June 12, 2018

5. Niso G, Gorgolewski KJ, Bock E, Brooks TL, Flandin G, Gramfort A, Henson RH, Jas M, Litvak V, Moreau J, Oostenveld R, Schoffelen JM, Tadel F, Wexler J, Baillet S (2017) *MEG-BIDS: an Extension to the Brain Imaging Data Structure for Magnetoencephalography*, **bioRxiv** doi.org/10.1101/172684 [∗]

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2. Baillet, S.; Brunol, J.; Chavel, P.; Colliot, O.; Cuniot-Ponsard, M.; Dormont, D.; Lalanne, P.; Martinerie, J.; Renault, B.; Tallon-Baudry, C. & Zalc, B. (2011) *Line Garnero (1955-2009) : la pluridisciplinarité au coeur. Hommage à Line Garnero, directrice de recherche de première classe au CNRS (in memoriam)*, **IRBM**, 32:1–7.

1. Baillet, S.; Brunol, J.; Chavel, P.; Colliot, O.; Cuniot-Ponsard, M.; Dormont, D.; Lalanne, P.; Martinerie, J.; Renault, B.; Tallon-Baudry, C. & Zalc, B. (2010) *Line Garnero (1955-2009) : la pluridisciplinarité au coeur. Hommage à Line Garnero, directrice de recherche de première classe au CNRS (in memoriam)*, **Traitement du Signal**, 3:251–264.

2 Book Chapters

1. Gelinas, J. N., Baillet S., Bertrand O., Galván A., Kolling T., Lachaux J.-P., Lindenberger U., Ribary U., Sawa A., Uhlhaas P. J (2018) *Late Adolescence*. In: **Manifestations and Mechanisms of Dynamic Brain Coordination over Development**, edited by A. A. Benasich and U. Ribary. Strüngmann Forum Reports, vol. 25, J. Lupp, series editor, MIT Press (Cambridge, MA)

2. Baillet, S. (2015), *Forward/Inverse Problems of EEG/MEG*, In: **Encyclopedia of Computational Neuroscience**, Dieter Jaeger & Ranu Jung (eds), Springer, pp.11226–33

3. Euler, M.; Baillet, S. & Swanson S. (2015) *MEG in the Presurgical Epilepsy Evaluation*, In: **Handbook on the Neuropsychology of Epilepsy**, William B. Barr & Chris Morrison (eds), Springer (New York), pp.195–212

4. Baillet, S. (2011), *Magnetoencephalography*, In: **Brain Mapping: From Neural Basis of Cognition to Surgical Applications**, Hugues Duffau (ed.), Springer, pp. 77–90.

5. Baillet, S. (2011), *Electromagnetic Brain Imaging with EEG and MEG*, In: **Handbook of Social Neuroscience**, Jean Decety & John Cacioppo (eds), Oxford University Press, 97–133

6. Ramirez, R. R.; Wipf, D. & Baillet, S. (2010) *Neuroelectromagnetic Source Imaging of Brain Dynamics*, In: **Computational Neuroscience**, Chaovalitwongse W., Pardalos P.M. & Xanthopoulos, P. (eds.), Springer, 2010, 38, 127–155. [∗]

7. Baillet, S. (2010), *The Dowser in the Fields: Searching for MEG Sources*, In: **The MEG Handbook**, Hansen, P.; Kringelbach, M. & Salmelin, R. (eds.), Oxford University Press, pp. 83–123.

8. Baillet, S. (2009), *Magnetoencephalography*, In: **The Oxford Companion to Consciousness**, Wilken, P.; Bayne, T. & Cleeremans, A. (eds.), Oxford University Press, pp. 417–18.

9. Lefèvre, J. & Baillet, S. (2009) *Estimation of Velocity Fields and Propagation on Non-Euclidian Domains: Application to the Exploration of Cortical Spatiotemporal Dynamics*, In: **Mathematical Modeling in Biomedical Imaging I** , Ammari, H. (ed.), Springer, 1983/2009:203-26. [∗]

3 PhD Thesis

- Baillet, S. *Vers une imagerie fonctionnelle de l'électrophysiologie corticale modélisation markovienne pour l'estimation des sources de la magnéto/électroencéphalographie et évaluations expérimentales.* Université Paris Sud-Paris XI, 1998 (300 pages, in French) pastel.archives-ouvertes.fr/pastel-00713794

4 Software & Data Sharing

- co-Founder (1999) of *BrainStorm*: An open-source software application for electrophysiology signal processing and electromagnetic brain imaging

(MEG, EEG and MRI):neuroimage.usc.edu/brainstorm (25,300 registered users; since 2011: 1,300 journal articles published by Brainstorm users, 1,600 attendees to 30 international training workshops.)

- co-Founder (2016), *OMEGA*: The Open MEG Archives – world first, free, open data repository for MEG (250 data volumes, with individual MRIs available); 700 user accounts, 50 journal articles published www.mcgill.ca/bic/resources/omega).

- *NEURiNFARCT*: Computer-aided prediction of infarct growth during the acute stage of stroke using diffusion-weighted MRI: cogimage.dsi.cnrs.fr/neurinfarct. Software was used in clinical trials, has obtained CE and FDA certifications, and is now marketed by a biomedical company.

5 Patents

- *Non-invasive estimation of intracranial electrical potentials from MEG recordings*, PCT 08/02305, WO 2009/136021 A1; Filing date: Apr 23, 2009

- *Prediction of infract growth during acute phase from diffusion MRI*, World-wide patent: PCT/FR 2007/001111 & WO 2008/000973; Filing date: Jun 29, 2007

- *Method And Device For Representing A Dynamic Functional Image Of The Brain, By Locating And Discriminating Intracerebral Neuroelectric Generators And Uses Thereof*, WO 2007/01011; Filing date: Jul 10, 2006

6 Keynote & Invited Lectures

6.1 International

1. [Keynote] Workshop on Australasian Magnetoencephalography, Macquarie University (Australia), Dec 10-13, 2019

2. [Keynote] Annual Meeting of the Brain Imaging Association of China, Nanjing (China), Oct 20, 2019

3. [Keynote] "Brain science & its societal impact", Zhongguancun Forum "Frontier Science, Technology and Future Industry", Beijing (China), Oct 16-18, 2019

4. Seminar of the Centre for MRI Research, Peking University, Beijing (China), Jul 16, 2019
5. [Keynote] "Brain network mechanisms of predictive inference in perception", Brain & MEG Symposium, Beijing Language & Culture University, Beijing (China), Jul 14, 2019
6. [Invited speaker] Dept of Psychological and Brain Sciences, Johns-Hopkins University, Baltimore (USA), Mar 13, 2019
7. [Invited speaker] Department of Psychology, Universidad Catolica del Maule, Talca (Chile), Dec 03, 2018
8. [Invited speaker] Queensland Brain Institute Neuroscience Seminar Series, Brisbane (Australia), Nov 9, 2018
9. [Keynote] Australian Hearing Hub MEG Workshop, ARC Centre of Excellence in Cognition and its Disorders, Macquarie University, Sidney (Australia), Nov 6–7, 2018
10. [Keynote] MEG-BIDS workshop, Australian Hearing Hub MEG Workshop, ARC Centre of Excellence in Cognition and its Disorders, Macquarie University, Sidney (Australia), Nov 6, 2018
11. Seminar of the National Institute of Physiological Sciences, Okasaki (Japan), Oct 23, 2018
12. [Keynote] Tübingen Systems Neuroscience Symposium, Tübingen (Germany), Oct 18-19, 2018
13. [Keynote] MEG & Brain Science workshop, School of Communication Sciences, Beijing Language & Culture University, Beijing (China), June 09-10, 2018
14. Guest speaker of the seminar series of the Institute of Clinical Neuroscience and Medical Psychology, Heinrich-Heine University Düsseldorf (Germany), Apr 17, 2018
15. [Keynote] "Initiatives for Enabling MEG Open Science", Plenary Lecture at MEG UK: the annual conference of the UK MEG community, Ulster University, Derry-Londonderry (UK), Mar 26-28, 2018
16. [Keynote] International Workshop of Brain Oscillations, Center for Information and Neural Networks, National Institute of Information and Communications Technology, Osaka (Japan), Feb 25-28, 2018

17. [Keynote] "Mechanisms & dynamical structure of brain rhythms: from rest to perception", Symposium on 27th "Human Brain Dynamics Research in Connectome Era", International Advanced Telecommunication Research Institute (ATR), Kyoto (Japan), Nov 27, 2017

18. [Invited speaker] *"Oscillatory Neural Dynamics of Brain Systems"*, Human Cortical Physiology & Neurorehabilitation Section, National Institutes of Health, Bethesda (USA), Nov 10, 2017

19. [Keynote] *"Imaging the Neural Dynamics of Brain Systems"*, 2017 International Conference on Medical Imaging Physics and Engineering, Beijing (China), Nov 04-05, 2017

20. [Keynote] Salzburg Mind-Brain Annual Meeting, Centre for Cognitive Neuroscience, University of Salzburg (Austria), Jul 14, 2017

21. Seminar Series, Cognition & Brain Science Unit, Cambridge University (UK), June 12, 2017

22. [Keynote] First Chinese MEG Meeting, Academy for Advanced Interdisciplinary Studies, Peking University (China), Apr 08, 2017

23. [Group Moderator] Ernst-Strugmann Forum on *Manifestations & Mechanisms of Dynamic Brain Coordination over Development*, Frankfurt Institute for Advanced Studies (Germany), Mar 5-10, 2017

24. [Keynote] Institut de Neurosciences des Systèmes Keynote Seminar Series, *Possible mechanisms underlying the polyrhythmic activity of the brain: from rest to perception*, Marseille (France), Mar 2, 2017

25. [Keynote] University of Geneva's Alpine Brain Imaging Meeting, Champéry (Switzerland), Jan 8-12, 2017

26. [Keynote] NIH MEG-North America Workshop, Bethesda (USA), Nov 1-2, 2016

27. [Keynote] *Mechanisms and dynamical structure of brain rhythms*, Cognitive Control, Communication & Perception Seminar Series, Centre for Cognition & Decision Making, Moscow Higher School of Economics (Russia), Sept 28-29, 2016

28. NIPS Workshop on Machine Learning & Interpretation in NeuroImaging, Convention Centre, Montreal (Canada), Dec 11, 2015

29. Brain Connectivity Workshop, University of California San Diego (USA), Jun 11, 2015

30. [Hanse Lecture Series in Neurosciences] *Dynamics of Cross-Frequency Coupling in the Resting & Active State* Hanse-Wissenschaftskolleg (HWK), Institute for Advanced Study, Delmenhorst (Germany), Dec 18, 2014

31. *Possible mechanisms enabling functional connectivity in the resting and active brain*, brainLinks-brainTools Cluster of Excellence, Freiburg (Germany), Dec 15, 2014

32. Florida Hospital Brain Connectivity & MEG Workshop, Orlando (USA), Oct 16-17, 2014

33. *Possible mechanisms of functional integration*, Symposium "The 'How' and 'Why' of real-time neuroimaging in MEG: Implementation and clinical applications", 19th International Conference on Biomagnetism (BIOMAG2014), Halifax (Canada), Aug 24-28, 2014

34. *Targeted reinforcement of neural oscillatory activity with real-time neuroimaging feedback*, Symposium "Mechanisms of integration/segregation in the resting brain", 19th International Conference on Biomagnetism (BIOMAG2014), Halifax (Canada), Aug 24-28, 2014

35. *Dynamics of cross-frequency coupling in the resting & active states*, Symposium "The functional role of cross frequency coupling", 19th International Conference on Biomagnetism (BIOMAG2014), Halifax (Canada), Aug 24-28, 2014

36. Special Seminar of Aarhus University Hospital (Denmark), Dec 10 2013

37. [Keynote] Annual Conference of the Society of Clinical Neurophysiology of Taiwan, Taipei (Taiwan), Apr 15, 2013

38. Computational Neuroscience Seminar Series, Dept of Neuroscience, University of Chicago (USA), Mar 12, 2013

39. International Workshop on Scale-free Dynamics, Centre de Recherche Mathématiques, University of Montreal, Oct 20, 2013

40. W.H. Coulter Foundation Biomedical Engineering Lecture Series, Florida International University, Miami (USA), Feb 08, 2013

41. [Keynote] *The Practice of Source Imaging in the Epilepsy Clinic*, Annual Conference of the American Clinical MEG Society, Miami (USA), Feb 07, 2013

42. [Keynote] *MEG Evidence of Electrophysiological Mechanisms Enabling Resting-State Networks*, MEG-UK annual conference, Cambridge (UK), Jan 10, 2013

43. Center for Neuroengineering Seminar Series, University of Minnesota, Minneapolis (USA), Apr 12, 2012

44. Centre for Magnetic Resonance Research Seminar Series, University of Minnesota, Minneapolis (USA), Apr 11, 2012

45. *(Brain)Storming through Connectivity*, 16th International Conference on Biomagnetism: Biomag2012, Paris (France), Aug 26-31, 2012

46. *Perspectives on the Clinical Value of MEG Source Modeling for Epilepsy*, 16th International Conference on Biomagnetism: Biomag2012, Paris (France), Aug 26-31, 2012

47. [Keynote] MEG Conference of the Moscow State University of Psychology and Education, Moscow (Russia), May 22-24, 2012

48. *Dynamic Imaging of Ongoing Brain Activity: the Healthy and Diseased Brain at Rest*, McGovern Institute at M.I.T. Annual Symposium, Cambridge (USA), Apr 27, 2012

49. *Real-time brain imaging and neurofeedback: the potentials for new therapeutic approaches*, Design of Medical Devices Conference, Minneapolis (USA), Apr 10-12, 2012

50. *Clinical MEG Source Modeling*, Meeting of the International Society for the Advancement of Clinical Magnetoencephalography, Las Vegas (USA), Nov 4-5, 2011

51. Brain Imaging Center Lecture Series, Montreal Neurological Institute, McGill University, Montreal (Canada), Sept 30, 2010

52. *From ongoing brain rhythms to resting-state networks: Evidence from MEG*, Second biannual International Conference on Resting-State Functional Brain Connectivity, Milwaukee (USA), Sept 16-19, 2010

53. The Mathworks MATLAB seminar series: "BrainStorm & NEURiNFARCT: Matlab Applications for Brain Functional Imaging & Critical Therapeutic Evaluation", Paris (France), Jun 26, 2008

54. *Statistical Modeling in Functional Brain Imaging*, Statistical Modeling of Images Workshop, International Center for Mathematical Meetings, Marseille (France), May 5-9, 2008

55. *Origins of MEG-EEG Signals*, 14th International Conference on Human Brain Mapping, Melbourne (Australia), Jun 12-15, 2008

56. Multi-Modal Neuroimaging Short Course, A. Martinos Center for Neuroimaging, Massachusetts General Hospital, Harvard Medical School, Charlestown (USA), May 12-23, 2008

57. *Neurology & Neurosurgery of Epilepsy* Research Seminar Series, University of Patras (Greece), May 30, 2008

58. 'Méthodes Mathématiques du Traitement d'Image' Seminar Series, Laboratoire Jacques-Louis Lions, Dept of Mathemathics, Université UPMC Paris6 & CNRS, Paris (France), Feb 19, 2008

59. BRAIMAP seminar series, A. Martinos Centre, Massachusetts General Hospital, Harvard Medical School, Charlestown (USA), Jan 2008

60. [Keynote] *Cortical Activation Flows Revealed by Time-Resolved Electromagnetic Brain Mapping*, 1^{st} Neuromath Workshop, European Union COST Action, Rome (Italy), Dec 4-5, 2007

61. US-France Young Engineering Scientists Symposium, French Embassy, Washington D.C. (USA), Oct. 22-24, 2007

62. [Keynote] Joint Meeting of the 6^{th} International Symposium on Noninvasive Functional Source Imaging of the Human Brain and Heart and the International Conference on Functional Biomedical Imaging (NFSI & ICFBI), Hangzhou (China), Oct 12-14, 2007

63. Epilepsy Grand Rounds, Cleveland Clinic (USA), Jun 16, 2007

64. Organization for Human Brain Mapping Conference Series: HBM2005–2007 MEG/EEG course coordinator & speaker (Toronto, Florence, Chicago).

65. Laboratory of Neurology & Imaging of Cognition Seminar Series, Department of Neurology, University Hospital & Department of Neurosciences, Geneva (Switzerland), Nov 28, 2006

66. *Mining Sequences of Functional Images for Time-Resolved Topography of Brain Activations*, 17th International Symposium of Brain Electromagnetic Tomography, Chieti (Italy) Sept 27-30, 2006

67. Signal & Image Processing Institute Seminar Series, University of Southern California, Los Angeles (USA), Feb 15, 2006

68. [Keynote] UK-MEG course, Aston University, Birmingham (UK), Sept 12, 2005

69. Workshop on Optimization in Medicine, Centre International for Mathematics: Thematic Term on Optimization, Coimbra (Portugal), Jul 20-22, 2005

70. [Keynote] Imaging Symposium, Kyung Hee University, Seoul (South Korea), Jul 12, 2005

71. *Electromagnetic Brain Mapping using BrainStorm*, IEEE International Symposium on Biomedical Imaging: From Nano to Macro, ISBI'04, Arlington (USA), Apr 15-18, 2004

72. *Challenging MEG Source Imaging with Simultaneous Depth Recordings in Epilepsy*, 13th International Congress of the International Society for Brain Electromagnetic Topography, Santa Fe (USA), Nov 19-24, 2003

73. Inverse Problems: Computational Methods and Emerging Applications workshop, UCLA Institute of Pure & Applied Mathematics, Los Angeles (USA), Oct 16-23, 2003

74. [Keynote] 4th International Symposium on Noninvasive Functional Source Imaging within the Human Brain and Heart, University "G. d'Annunzio", Chieti (Italy), Sept 10-13, 2003

75. [Keynote] *Introduction to Electromagnetic Brain Mapping*, Applied Mathematics and Applications of Mathematics Conference, Nice (France), Feb 10-13, 2003

76. Department of Mathematics Seminar Series, Ecole Polytechnique Fédérale de Lausanne (Switzerland), Nov 22, 2002

77. *Advances in MEG and EEG Source Imaging / Practical evaluation of MEG-EEG imaging techniques*, 12th International Congress of the International Society for Brain Electromagnetic Topography, Naples (Italy), Oct 27-29, 2002

78. *Models & Methods for MEG/EEG Source Mapping*, 1st neuroBIRCH Meeting, Brain Research Unit, Low-Temperature Lab., Maijvik (Finland), Sept 14-16, 2001

79. *From New Approaches to FEM Volume Modeling to the Mapping of Source Interactions*, 3rd International Symposium on Non-Invasive Functional Source Imaging, Innsbruck (Austria), Sept 6-9, 2001

80. Cortical Neurophysiology & Brain Imaging Dept. Seminar Series, Scuola Internazionale Superiore di Studi Avanzati (International School for Advanced Studies), Trieste (Italy), Mar 9-10, 2001

81. *Some Advances in MEG and EEG Source Imaging Methods*, 11th International Congress of the International Society for Brain Electromagnetic Topography, Frankfurt (Germany), Nov 19, 2000

82. *Hybrid MEG/EEG Source Characterization by Cortical Remapping and Imaging of Parametric Source Models*, 12th International Conference on Biomagnetism, Helsinki (Finland), Aug 13-17 2000

83. *Critical Evaluation of MEG Inverse Methods*, 12th International Conference on Biomagnetism, Helsinki (Finland), Aug 13-17 2000

84. *MEG/EEG Source Localization, a Subjective Review*, Electrical Geodesics Inc./ University of Oregon, Eugene (USA), May 12, 2000

85. Cognitive Neuroscience Dept Seminar Series, University of California San Diego, La Jolla (USA), Mar 7 2000

86. *Advances in Dynamic Brain Imaging using M/EEG*, Maxine Dunitz Neurosurgical Institute, Cedars Sinai Medical Center, Los Angeles (USA), Sept 13, 1999

87. *Information-Driven Multidimensional Independent Component Analysis of MEG Data*, Workshop on Methods and Modeling in MEG, 1st Annual Conference of the National Foundation for Functional Brain Imaging, Albuquerque, New Mexico (USA), Dec 9-11, 1999

88. *Multimodality Imaging of the Sensori-Motor Cortex Using MEG/EEG and fMRI*, Satellite workshop of the 5th International Conference on Human Brain Mapping, "The art of MEG/EEG source analysis", Dusseldorf (Germany), Jun 23-26, 1999

89. *Electromagnetic Functional Brain Imaging*, Neurophysiology Laboratory, H. Vanegas, Institute for Scientific Research (IVIC), Caracas (Venezuela), Aug 1996

90. *Does fusion between EEG & MEG bring about some improvement to the inverse problem solving in a distributed source model?*, 6th International Conference on Cognitive Neuroscience - ICON VI, Monterey (USA), May 28–Jun 2, 1996

6.2 National & Regional

1. [Keynote] Healthy Brains for Healthy Lives Trainee Meeting Series, Canada Research Excellence Fund, McGill University, Montreal (QC, Canada), May 14, 2019

2. [Invited Lecture] Feindel Brain Imaging Lecture Series, Montreal Neurological Institute, Montreal (QC, Canada), Feb 25, 2019

3. [Invited Lecture] 4th Annual Research Symposium, McGill Integrative Bioscience Society, McGill University (Montreal), Jan 17, 2019

4. [Invited Lecture] Retreat of the McConnell Brain Imaging Centre, Montreal (QC, Canada), Dec 10, 2018

5. [Keynote] Symposium on Machine Learning For Brain Health, McMaster University, Hamilton (ON, Canada), Sept 07, 2018

6. [Invited Lecture] Colloquium Series of the School of Computer Science, McGill University (Canada), May 25, 2018

7. Healthy Brains for Healthy Lives Neuroinformatics workshop (Canada First Research Excellence Fund), McGill University, (Montreal, Canada), Aug 18, 2017

8. Centre de Recherche en Neuropsychologie & Cognition, U of Montreal (Canada), Apr 21, 2017

9. Centre NeuroQAM Lecture Series, University of Quebec in Montreal (Canada), Jan 29, 2016

10. SickKids Neuroimaging Rounds, University of Toronto (Canada), May 07, 2015

11. Brain Imaging Centre, Douglas Mental Health University Institute, Montreal (Canada), Jan 28, 2015

12. Cognition and Circuits Lecture Series, Montreal Neurological Institute, McGill University (Canada) Sept 17, 2014

13. Consortium for Imaging in Quebec (CINQ) Seminar Series, Laval University, Quebec (Canada), Dec 5, 2013

14. Biomedical Imaging Symposium, University fo Montreal & Ecole Polytechnique, Montreal (Canada), Mar 10, 2013

15. *Capturing Multi-Scale Neural Dynamics with MEG Electromagnetic Brain Imaging*, Neuroscience Division Seminar Series, Douglas Mental Health University Institute, Montreal (Canada), Feb 25, 2013

16. Seizure Conference, Montreal Children's Hospital (Canada), Jan 23, 2013

17. Neurology & Neurosurgery Grand Rounds, Department of Neurology & Neurosurgery, Montreal Neurological Institute and Hospital (Canada), Oct 3, 2012

18. Center for Sleep & Consciousness Seminar Series, Department of Psychiatry, School of Medicine, University of Wisconsin-Madison (USA), Jan 18, 2011

19. *Update on Functional Imaging*, Dept of Neurology, Columbia St Marie Hospital, Milwaukee (USA), Dec 14, 2010

20. Clinical Neurophysiology Lecture, Department of Neurology, Froedtert Hospital, Milwaukee (USA), Nov 3, 2010

21. Lectures Series, Department of Radiology, Froedtert Hospital, Milwaukee (USA), Oct 13, 2010

22. *A Tribute to the Legacy of Line Garnero*, Institut du Cerveau et de la Moelle, Hôpital de la Salpêtrière, Paris (France), Nov 25, 2010

23. Workshop on Inverse Problems in Brain Imaging and Multimodal Data Fusion, Montreal (Canada), Aug 24-29, 2009 [co-organizer]

24. Department of Physiology Seminar Series, Medical College of Wisconsin, Milwaukee (USA), Jan 27, 2010

25. Digestive Disease Center, Froedtert Hospital/Medical College of Wisconsin, Milwaukee (USA), Jun 29, 2009

26. Neurosurgery Grand Rounds, Froedtert Hospital, Milwaukee (USA), Mar 13, 2009

27. Department of Neuroscience Seminar Series, Medical College of Wisconsin, Milwaukee (USA), Mar 4, 2009

28. *Electromagnetic Brain Mapping*, Functional Imaging Research Center Lecture Series, Medical College of Wisconsin, Milwaukee (USA), Jan–Feb, 2009

29. Biomedical Engineering Dept Seminar Series, Marquette University, Milwaukee (USA), Feb 6, 2009

30. Froedtert Hospital President Advisory Committee, Milwaukee (USA), Feb 2, 2009

31. MEG imaging & Analysis Workshop, Hôpital de La Salpêtrière, Paris (France), Dec 12, 2008

32. Bristol-Myers-Squibb's Neuroimaging & Psychiatry Workshop, Paris (France), May 30-31, 2008 [co-organizer]

33. Department of Neurology Seminar Series, Medical College of Wisconsin, Milwaukee (USA), Feb 25, 2008

34. CNRS Research Group (GDR) 'Statistiques & Santé', Hôpital Cochin, Paris (France), Nov 27, 2007

35. Neuroimaging National Training Program (JIRFNI), *'At the Origins of MEG/EEG Signals'*, Caen (France), Sept 21, 2007

36. *Multiple Hypotheses Testing in Functional Neuroimaging Applications*, Pascal Workshop & Pascal Challenge: *Type I and Type II Errors for Multiple Simultaneous Hypothesis Testing*, Paris (France), Jun 15-16, 2007

37. Workshop MEG Applications to Epilepsy, 74^{me} Congrès de l'ACFAS, Montreal (Canada) May 17-19, 2006

38. Unité de Neuroimagerie Cognitive Seminar Series, INSERM U562, Orsay (France), Jan 11 2006

39. Séminaire Odyssée, 'Nouveaux Modèles Physiques pour la MEG et l'EEG', École Normale Supérieure, Paris (France), Nov 17, 2004

40. *Démonstration de BrainStorm : logiciel dédié à l'imagerie électromagnétique cérébrale*, UPR640, CNRS, Hôpital de la Salpêtrière, Paris (France), Jan 30, 2004

41. Centre de Mathématiques Appliquées Seminar Series, École Polytechnique, Palaiseau (France), Jan 21, 2004

42. *Problèmes inverses en imagerie médicale: localisation de sources en EEG & MEG*, Groupe de recherches 'ONDES' du CNRS – "Imagerie et inversion", Laboratoire deMathématiques Appliquées de Compiègne, Université de Technologie de Compiègne (France), Nov 28, 2003

43. *Imagerie fonctionnelle cérébrale à haute résolution temporelle et Magnétoencéphalographie*, Colloque "Imagerie du cerveau : de la molécule au comportement", Regional Federative Institute for Neuroimaging (IFR47), Caen (France), Sept 19, 2003

44. *MEG-EEG et Activités Interictales in Vivo*, Première journée du Club Épilepsie, Journées satellites du Congrès National des Neurosciences, Rouen (France), May 13, 2003

45. Journée "Statistiques et EEG", Institut de Statistiques, Université Catholique de Louvain, Louvain-la-Neuve (Belgium), Apr 11, 2003.

46. *MEG-EEG et Activités Interictales in Vivo*, Atelier de Recherche "Épilepsie" de l'Institut Fédératif de Neurosciences, Hôpital de la Salpêtrière, Paris (France), Jan 29, 2003

47. Workshop, Epilepsy Research, Hôpital de la Salpêtrière, La Clusaz (France), Jan 16-18, 2003

48. Odyssée Seminar Series, INRIA, Sophia Antipolis (France), Jan 11, 2003

49. Biomedical Engineering Masters Program Seminar Series, Pierre-et-Marie Curie Universiy, Paris (France), Dec 19, 2002

50. "Fusion de données MEG-EEG", Journée de la Société de Psychophysiologie Cognitive, Hôpital de la Salpêtrière, Paris (France), Nov 29, 2002

51. Second USC-NeuroImage Workshop, University of Southern California, Catalina Island (USA), Sept 25-28, 2002

52. Laboratoire de Neurophysiologie et Neuropsychologie Seminar Series, INSERM E9926, Faculté de Médecine, Université de la Méditerranée, Marseille (France), Sept 17, 2002

53. Ecole d'été ACI "Neurosciences Intégratives et Computationnelles, Plasticité Neuronale & Adaptation Fonctionnelle" Station de Biologie Marine Muséum National d'Histoire Naturelle et Collège de France, Concarneau (France), Aug 18-22, 2002

54. Clinical Neuroscience Seminar Series, La Salpetriere Hospital, Paris (France), Jun 6, 2002

55. Ecole pratique MEG-EEG, Hôpital de la Salpêtrière: Outils de traitement du signal pour le pré-traitement des données MEG et EEG, *Modèles et Méthodes pour le problème inverse MEG/EEG* , Jun 8, 2001

56. *Avancées récentes en imagerie électromagnétique fonctionnelle cérébrale*, Réunion annuelle de la Société d'Anatomie Fonctionnelle Cérébrale, Ecole Nationale Supérieure des Télécommunications, Paris (France), May 10-11, 2001

57. Institut de Physique Biologique Seminar Series, Hôpital Civil, Université Louis-Pasteur, Strasbourg (France), Mar 16, 2001

58. Workshop, Epilepsy Research, La Salpetriere Hospital, Les Saisies (France), Feb 1-3, 2001

59. *Advances in MEG and EEG Source Imaging Methods*, MEG & Audition Workshop, IRCAM, Paris (France), Mar 29-30, 2001

60. Unité de Neuro-Imagerie Anatomo-Fonctionnelle Seminar Series, Commissariat à l'Energie Atomique, Service Hospitalier, Frédéric Joliot, Orsay (France), Dec 18, 2000

61. *Imagerie des Générateurs de lŠEEG et de la MEG: Méthodes et Évaluations Associées*, Service Hospitalier Frédéric Joliot Seminar Series, CEA, Orsay (France), Apr 6, 1998

62. *Evaluations Expérimentales des Méthodes Directes & Inverses pour l'Estimation des Générateurs de la MEEG*, Journée d'Šinformation sur la MEG, Hôpital de la Salpêtrière, Paris (France), Jan 26, 1998

63. *Combinaison Optimisée des Données MEG et EEG pour l'Estimation de leurs Générateurs*, Journée d'Šinformation sur la MEG, Hôpital de la Salpêtrière, Paris (France), Jan 26, 1998

64. *An Experimental Step Toward Validation of the Forward and Inverse Problems in EEG & MEG: the Real-Skull Phantom-Head Experiment*, Séminaire de Méthodologie en Imagerie Cérébrale Fonctionnelle, Laboratoire du GANIL, Caen (France), Nov 11-12, 1997

65. *Apports du traitement simultané des données MEG et EEG dans un modèle distribué de sources en imagerie électrique cérébrale*, "Methodologie en Imagerie Fonctionnelle Cérébrale" Workshop, GDR-PRC ISIS, Lyon (France), Dec 10-11, 1996

66. *Reconstruction de l'activité électrique cérébrale: introduction d'informations spatio-temporelles a priori*, 15ème Colloque GRETSI sur le traitement du signal et des images, Juan-les-Pins (France), Sept 18-22, 1995

7 Conference Proceedings

2020

1. Whittaker H, Zatorre R, Baillet S, Albouy P, *Cognitive Training with Information Based Neuromodulation to Enhance Working Memory*, Annual Meeting of the Organization for Human Brain Mapping, Montreal (Canada; held online due to COVID19 pandemic), June 23, July 03 2020

2. Albouy P, Zatorre R, Baillet S *Entrainment of theta oscillations with visual rhythmic stimulation boosts auditory working memory*, Annual Meeting of the Organization for Human Brain Mapping, Montreal (Canada; held online due to COVID19 pandemic), June 23, July 03 2020

3. Da Silva Castanheira J, Orozco Perez H, Misic B, Baillet S *Identifying individuals from resting-state MEG*, Annual Meeting of the Organization for Human Brain Mapping, Montreal (Canada; held online due to COVID19 pandemic), June 23, July 03 2020

4. Cousineau M, Tadel F, Baillet S *Functional Connectivity Visualization with Virtual White Matter Fibers in Brainstorm*, Annual Meeting of the Organization for Human Brain Mapping, Montreal (Canada; held online due to COVID19 pandemic), June 23, July 03 2020

5. Moreau J, Saint-Martin C, Baillet S, Dudley R *MNI SISCOM: An Open-Source Tool for Subtraction Ictal Single-photon emission CT Coregistered to MRI*, Annual Meeting of the Organization for Human Brain Mapping,

Montreal (Canada; held online due to COVID19 pandemic), June 23, July 03 2020

6. Bock EA, Baillet S, Fesi J, Mendola J *Binocular Rivalry Dominance & Suppression Preferentially Rely on Dorsal & Ventral Stream Connections*, Annual Meeting of the Organization for Human Brain Mapping, Montreal (Canada; held online due to COVID19 pandemic), June 23, July 03 2020

7. Jin H, Witjes B, Roy M, Baillet S, de Vos C *Distinct Brain Oscillatory Patterns during Conditioned Pain Modulation in Chronic Pain*, Annual Meeting of the Organization for Human Brain Mapping, Montreal (Canada; held online due to COVID19 pandemic), June 23, July 03 2020

2019

1. Mameri-Arab, I., Weiner, O., O'Byrne, J., Lachapelle, E., Seguin, L., Likoudis, M., Ercolanese, A., Krixian Colada, A., Cross, N., Williams, S., Baillet, S., Dang-Vu, T.T. *Theta-gamma cross-frequency coupling during rapid-eye-movement sleep is associated with declarative memory retention and working memory performance in seniors but not young adults*, Sleep Medicine

2. Mameri-Arab, I., Weiner, O., O'Byrne, J., Lachapelle, E., Seguin, L., Likoudis, M., Ercolanese, A., Krixian Colada, A., Cross, N., Williams, S., Baillet, S., Dang-Vu, T.T. *Theta-gamma cross-frequency coupling during rapid-eye-movement sleep is associated with declarative memory retention and working memory performance in seniors but not young adults.* WorldSleep2019, Vancouver, Canada.

3. Puschmann S, Regev M, Baillet S, Zatorre RJ, *Musical training enhances cortical phase-locking while listening to continuous natural speech*, Society for Neuroscience, Chicago (USA), Oct 19-23, 2019

4. Matsushita R, Puschmann S, Baillet S, Zatorre RJ, *MEG reveals neurophysiological evidence of tDCS effect on the auditory system*, 5th Annual Brain Stimulation and Imaging Meeting, Rome (Italy), June 5-7, 2019

5. Matsushita R, Puschmann S, Baillet S, Zatorre RJ, *Asymmetric neurophysiological responses of auditory cortices to tDCS during resting state*, International conference of the Organization for Human Brain Mapping, Rome (Italy), June 9-13, 2019

6. Witjes B, Roy M, Bock EA, Oostenveld R, Baillet S, de Vos C, *Towards a Magnetoencephalography Signal Marker of Chronic Pain*, 11th congress of the European Pain Federation, Valencia (Spain), Sept 4-7, 2019

7. Duma GM, Mento G, Cutini S, Sessa P, Baillet S, Brigadoi S, Dell'Acqua R, *On the contribution of Anterior Cingulate Cortex in Visual Working Memory: A High Density EEG study*, Cracow Cognitive Science Conference, Cracow (Poland) May 11-12, 2019

8. Hirschmann J, Baillet S, Woolrich M, Schnitzler A, Vidaurre D, Florin E,*Spontaneous network activity accounts for variability in stimulus-induced gamma responses*, MEG UK Conference, Birmingham (UK) Apr 15-17, 2019

9. Coffey E, Arseneau-Bruneau I, Zhang X, Baillet S, Zatorre R, *Transient oscillatory entrainment mechanisms in auditory cortex*, Annual Meeting of the Organization for Human Brain Mapping, Rome (Italy), June 09-13, 2019

10. Matsushita R, Puschmann S, Baillet S, Zatorre R, *Asymmetric neurophysiological responses of auditory cortices to tDCS during resting state*, Annual Meeting of the Organization for Human Brain Mapping, Rome (Italy), June 09-13, 2019

2018

11. Weiner, O., O'Byrne, J., Bolanis, D., Giraud, J., Homer, L., Tarelli, L., Yue, V., Walker, K., Tamaddon, R., Carbone, R., Lumia, J., Eddebbarh, K., Chhuon, K., Smith, D., Mograss, M., Cross, N., Dang-Vu, T.T. (2018), *Associations between brain oscillation cross-frequency coupling during sleep and declarative learning in healthy older adults* Journal of Sleep Research, 27(Suppl. S1):e12751, P-086

12. Nasiotis K, Cousineau M, Tadel F, Peyrache A, Pack CC, Baillet S, *Make Electrophysiology Great Again (MEGA)*, Society for Neuroscience Meeting, San Diego (USA), Nov 03-07, 2018

13. Moreau J, Vinaik R, Simard-Tremblay E , Rosenblatt B, Saint-Martin C, Albrecht S, Baillet S, Dudley R *T1/T2 Ratio MRI and Diffusion Imaging of Oligodendrocyte Hyperplasia and Focal Cortical Dysplasia in Children with Drug-Resistant Epilepsy*, Canadian League Against Epilepsy Scientific Meeting, St-John NFL (Canada), Sept 22, 2018

14. Moreau J & Baillet S, *Practical Tutorial on Analyzing Grid and SEEG data in Brainstorm*, Canadian League Against Epilepsy Scientific Meeting, St-John NFL (Canada), Sept 22, 2018

15. Moreau J, Albrecht S, Tomaszewski P, Simard-Tremblay E, Farmer J-P, Atkinson J, Rosenblatt B, Baillet S, Dudley R, *Magnetoencephalography in Mild Malformations of Cortical Development with Oligodendroglial Hyperplasia*, 21st International Conference on Biomagnetism, Philadelphia (USA), Aug 26-30, 2018

16. Dong J, Xiao W, Baillet S, Pack CC, *Spatio-temporal Dynamics Underlying Visual Processing of Time-to-contact in the Human Brain*, 21st International Conference on Biomagnetism, Philadelphia (USA), Aug 26-30, 2018

17. Donhauser P, Baillet S, *Electrophysiological Signatures of Predictive Coding in Natural Speech Listening*, 21st International Conference on Biomagnetism, Philadelphia (USA), Aug 26-30, 2018

18. Moreau J, Tomaszewski P, Simard-Tremblay E, Farmer JP, Atkinson J, Rosenblatt B, Baillet S, Dudley R, *Imaging the temporal spread of seizures for surgical planning with ictal magnetoencephalography in children with drug-resistant epilepsy*, 46th Annual Meeting of the International Society of Pediatric Neurosurgery, Tel Aviv (Israel), Oct 7–11, 2018

19. Vincent T, Caia Z, Tadel F, Spilkina S, Machado A, Baillet S, Lina JM, Grova C, *NIRSTORM, a Brainstorm plugin inspired by electrophysiology dedicated to fNIRS data analysis, advanced 3D reconstructions and optimal probe design*, fNIRS: Biennial Meeting of the Society for Functional Near-Infrared Spectroscopy, Tokyo (Japan), Oct 5-8 2018

20. Donhauser P, Baillet S, *Electrophysiological Signatures of Predictive Coding in Natural Speech Listening*, Healthy Brains for Healthy Lives Research Day, Montreal (Canada), May 09, 2018

21. Radmacher M, Daunizeau J, Ruff C, Baillet S, Forgeot D'Arc B, *Exploring reciprocal social interactions in Autism using Artificial Intelligence: meta-Bayesian models*, Artificial Intelligence in Medicine, Faculty of Medicine, University of Montreal, May 05, 2018

22. Bauer AKR, Bleichner MG, Baillet S, Debener S, *Integration of cross-modal information over time improves auditory gap detection performance*,

Society for Neuroscience Annual Meeting, San Diego (USA), November 03-07 2018

23. Puschmann S, Baillet S, Zatorre RJ *Musicians at the cocktail party: Neural substrates of musical training on selective listening in multi-speaker situations*, Quebec Bioimaging Network Annual Conference, Montreal (Canada), Mar 09, 2018

24. Witjes B, de Vos C, Roy M, Bock E, Oostenveld R, Baillet S, *A Magnetoencephalography (MEG) Signal Marker of Chronic Pain*, 39th Annual Meeting of the Canadian Pain Society, Montreal (Canada), May 22–25, 2018

25. Witjes B, de Vos C, Roy M, Bock E, Oostenveld R, Baillet S, *An MEG Signal Marker of Chronic Pain*, 22nd Annual McGill Pain Day, Montreal (Canada), Jan 25, 2018

26. Witjes B, de Vos C, Roy M, Bock E, Oostenveld R, Baillet S, *MEG to Image the Brain's Role in the Analgesic Effects of Spinal Cord Stimulation (SCS)*, 1st joint Congress of the International Neuropsychological Society European Chapters: Neuromodulation: Technology to improve patients' lives, Nijmegen (The Netherlands), Sep 17–19, 2018

27. Samiee S, Lévesque M, Avoli M, Baillet S *Phase-Amplitude Coupling and Epileptogenesis in an Animal Model of Mesial Temporal Lobe Epilepsy*, Analysis and Modeling of Complex Oscillatory Systems, Barcelona (Spain), Mar 19-23, 2018

28. Coffey EBJ, Baillet S, Zatorre RJ, *Exploring the Oscillatory Nature of the Frequency-Following Response (FFR) with MEG*, 58th Annual Meeting of the Society for Psychophysiological Research, Quebec City (Canada), Oct 3-7, 2018

2017

29. Coffey EBJ, Arseneau-Bruneau I, Qin A, Baillet S, Zatorre RJ, *Modulation of the frequency-following response (FFR) via transcranial magnetic stimula on (TMS)*, International Conference on Auditory Cortex, Banff (Canada), Sept 10–15 2017

30. Donhauser P, Thomas M, Morillon B, Gracco V, Baillet S *Predictive Coding during Natural Speech listen ing Studies using MEG and Recurrent*

Neural Networks, Retreat of the McGill Integrated Program in Neuroscience, Montreal (Canada), Sept 21-22, 2017

31. Samiee S, Levesque M, Behr C, Avoli M, Baillet S *Hippocampus Cross-Frequency Coupling is Associated with Seizure Activity in Mesial Temporal Lobe Epilepsy*, Retreat of the McGill Integrated Program in Neuroscience, Montreal (Canada), Sept 21-22, 2017

32. Bauer AK R, Baillet S, Debener S *Cross-modal phase entrainment improves auditory gap detection performance*, HBM 2017 – International Conference of the Organization for Human Brain Mapping, Vancouver (Canada), Jun 25-29, 2017

33. Donhauser P, Thomas M, Morillon B, Gracco V, Baillet S *Predictive coding during natural speech listening studied using MEG and deep recurrent neural networks*, HBM 2017 – International Conference of the Organization for Human Brain Mapping, Vancouver (Canada), Jun 25-29, 2017

34. Donhauser P, Florin E, Baillet S, *Detection and localization of oscillatory sources in MEG using subspace scanning*, HBM 2017 – International Conference of the Organization for Human Brain Mapping, Vancouver (Canada), Jun 25-29, 2017

35. Mendola J, Fesi J, Bock E, Baillet S, *Using frequency tagged MEG to compare binocular rivalry to monocular pattern rivalry*, HBM 2017 – International Conference of the Organization for Human Brain Mapping, Vancouver (Canada), Jun 25-29, 2017

36. Puschmann S, Baillet S, Zatorre RJ, *MEG reveals neural correlates of successful "cocktail party" listening*, International Conference on Auditory Cortex, Banff (Canada), Sept 10–15 2017

2016

37. Moreau J, Tomaszewski P, Farmer JP, Atkinson J, Rosenblatt B, Baillet S, Dudley R. *Valeur ajoutée de la magnétoencéphalographie pour l'évaluation pré-chirurgicale d'enfants souffrant d'épilepsie réfractaire: Expérience avec les premiers 18 cas de l'Hôpital de Montréal pour enfants*, Congrès Annuel de l'Association de Neurochirurgie du Québec (ANCQ), Estérel, QC, Nov 11-12 (2016) [oral presentation]

38. Moreau J, Tomaszewski P, Farmer JP, Atkinson J, Rosenblatt B, Baillet S, Dudley R. *Imaging Epilepsy in Motion: Novel contributions of MEG*

and Magnetic Source Imaging to the Presurgical Evaluation in Pediatric Intractable Epilepsy. MNI Neurosurgical Research Day, Montreal, QC Jun 17 (2016) [oral presentation]

39. Moreau J, Tomaszewski P, Farmer JP, Atkinson J, Rosenblatt B, Baillet S, Dudley R. *Magnetoencephalography Without Spikes: Can MEG Still Provide Useful Information when no Epileptiform Events are Recorded?* 7th Annual H. Bruce Williams Pediatric Surgical Research Day, Montreal, QC, Jun 2 (2016) [oral presentation]

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8 In the Media

8.1 Printed & Online

1. Interview for **Le Journal de Montréal** newspaper (Canada), *Le cerveau multitâche, un mythe?* (Can we truly multitask?), September 21, 2017 & June 13, 2018

2. Interview for **Agence Science Presse** online media (Canada), *Le cerveau multitâche, un mythe? Plutôt vrai* (Can we truly multitask?), June 21, 2017

3. Interview for **Quebec-Science** magazine (Canada), *Le Cerveau Aussi a Besoin de Vacances* (brain activity in the resting state), June-July 2016

4. Interview for **McGill News** Alumni magazine (Canada), *A Bold Experiment in Open Science*, May 26, 2016

5. Contributed illustration (with S Dery, Grad student in my lab) *Montreal institute going "open" to accelerate science*, **Science**, Jan 21, 2016

6. **Montreal en Santé** (Canada): feature article *Training Your Brain using Neurofeedack*, Spring 2014 issue

7. Interview for **Brain Awareness Montreal** (blog) (Canada) *The Underpinnings of Neuroscience: Exploring Brain Imaging with Dr. Sylvain Baillet*, Mar 2014

8. Interview for **MIT's Technology Review** (USA) magazine, June 2010.

9. *New tools to map brain activity*, article in **Milwaukee Magazine** (USA), Sep 2009, 36–39.

10. Editorial: *'L'imagerie fonctionnelle, à la vitesse du cerveau'*, **CulturePSY Neurosciences** (France), June 2009

11. Feature cover story in **Milwaukee Journal Sentinel**: *'New brain imaging method shows promise for epilepsy'* (USA), May 17, 2009

12. **Le Point** (national news magazine; France): report on our research 'Neurones sous surveillance', Ap 2007

13. **La Recherche** (national science culture magazine, France): consulting for a feature report on high-temperature magnetometers

14. **Selection of Reader's Digest** (France): report on our research

15. **Le Monde de l'Intelligence** (national magazine) (France): consulting for a feature article on neuroimaging techniques, September 2006

8.2 Television & Online Broadcasts

1. **Chinese CCTV 13**, Interview on National TV News Report in the context of Zhongguancun Forum "Frontier Science, Technology and Future Industry" (Oct 18, 2019)

2. **La Science de l'Art**, Documentary series, Eurêka Production, for savoir.emedia (2019)

3. Baillet S (2018) *Brain Training*, **Scipod**, https://soundcloud.com/user-893219845-416859637/brain-training, Sept 2018

4. ***Nature* Podcast** (UK) – *Making MEG smaller* interview on Boto et al. (2018) *Nature* article, which I had reviewed for the journal, Mar 22, 2018

5. **TV-Quebec** – 6-min special feature on our research for the program *Electrons Libres*, February 09, 2018

6. **Serious Science** – Scientific dissemination web portal (Russia): 15-min interview on *Computational Modeling of the Brain*, Nov 22, 2016

7. **Serious Science** – Scientific dissemination web portal (Russia): 15-min interview on *Clinical Brain Imaging*, Oct 14, 2016

8. **Serious Science** – Scientific dissemination web portal (Russia): 15-min interview on *Brain Networks*, Oct 07, 2016

9. Interview **TVA** (Canada): *Salut Bonjour Weekend* program (brain activity in the resting state), Jun 2016

10. **Eureka channel (Canada)**: Special feature (3mins): *Real-time brain imaging using MEG*, 2013
11. **ABC Good Morning America** (USA): Special 'Cutting-edge' feature (5mins): *Sixty Seizures to None: Young Girl Overcomes Epilepsy*, Feb 3, 2010
12. **France 24** International news channel (France): special TV report, May 2008
13. **France 5** (National TV Channel) 'Mondes & Merveilles' program: movies & illustrations; May 20, 2007
14. **France 5** "L'Œil & la Main" program : special report on neuroimaging techniques; Dec 2006
15. Interview, **LCI** (National cable news; France), May 2006

8.3 Radio

1. **Radio-Canada** (Canada): Moteur de Recherche radio show, *Quelles conséquences les sonneries et les notifications ont-elles pour la santé?*, Apr 12, 2019 [https://bit.ly/2ULgCAT]
2. **Radio-Canada** (Canada): La Sphère radio show, *The Opportunities & Challenges of Artificial Intelligence in Biomedicine*, Apr 29, 2017 [goo.gl/w69Hpx]
3. **WUWM - National Public Radio Network** (USA): Lake Effect program, *Magnetoencephalography: A New Way to View the Brain*, Oct 7, 2009
4. **France-Info** (National Public Radio), Interview *Chronique des Sciences*, Marie-Odile Monchicourt, Apr 24, 2007
5. **France-Info**, Interview *Chronique des Sciences*, Marie-Odile Monchicourt, July 04, 2007

8.4 Public events

1. Contributed one display ("*Atlas du Cerveau*", with G Auzias & O Colliot) at *La Couleur de la Pensée*, public outdoor exhibition, Paris (France), Oct 10-31, 2012
2. Meeting keynote speaker: *Les Mystères du XXI^{eme} siècle: le Cerveau*, Saint-Tropez (France), Dec 01-03, 2006