Personal Information

Name; Nationality	Clara James; Dutch, Swiss working permit Ci
Date of Birth	21.08.1962
Address	Avenue de Champel 47 - 1206 Genève
Telephone; email	+41 22 388 5677; clara.james@hesge.ch

Professional career

May 2012 - current	Full Professor and coordinator of R&D[1]	Haute école de santé de Genève[2] HES-SO[3]
August 2013-current	Privat Docent	FPSE[4] UNIGE[5]
August 2011-April 2012	Junior Lecturer	FPSE UNIGE
2003-2011	Assistant /Head assistant	FPSE UNIGE
1988-1999	Musician (violinist); performer, teacher	Inter alia member *Amsterdam Sinfonietta*

Diplomas

2008	PhD in neuroscience	Lemanic Neuroscience Doctoral School, UNIGE[5] & UNIL[6]
2004	Master in cognitive psychology	FPSE[4] UNIGE
2002	Bachelor in psychology	FPSE UNIGE
1987; 1989	Professional musician: Teacher; Soloist	Amsterdam & Rotterdam Conservatories
1980	Gymnasium diploma (scientific)	Vossius gymnasium Amsterdam

Grants & Prices

2007-2017	Dalle Molle Price 2017 "Best research project"; Research and travel grants for a total of ~850'000.- CHF comprising SNSF[7] grant no.100014_125050 (2009-2014) & no. 100019E-170410 (2017-2020)	Accademia d'Archi, Genève; HES-SO[3]; swissuniversities; SNSF[7]; Société Académique de Genève; Swiss Neuroscience Society; Fondation Dalle Molle

Scientific conferences

2004-2017	34 posters & 12 oral presentations at national and international scientific conferences	Switzerland - Europe - USA - Canada - China

Reviews for journals and funding agencies

2008-2017		Cerebral Cortex, Neuropsychologia, NeuroImage; Frontiers in auditory cognitive neuroscience; Brain Topography; Acta Psychologia, SNSF[7] grant application;

Direction of Master theses

2011-2016	7 Master's theses in cognitive, developmental, affective & clinical Psychology and Medicine	FPSE[4] UNIGE[5] (5), UNIL[6] (2)

Oral presentations

Scientific	2004-2017	HES@CampusBiotech; 4th International Conference on Music & Emotion; Geneva Aging Series; BBL[8]/CIBM[9] research day; Seminar Neurosciences cliniques CHUV[11]; Interdisciplinary Colloquium Affective Sciences; Alpine Brain Imaging Meeting; Colloques Neuropsychologie/Psychiatrie; Neuroclub de Genève	Campus Biotech Genève; FPSE[4] UNIGE[5]; HUG[10]; CHUV[11]; Swiss Center for Affective Sciences, Geneva
Public	2007-2017	Salon Planète Santé Life; Université du troisième âge; Festival de Jazz de Montreux; International Brain week, Geneva; Fédération écoles genevoises de musique; Conférence et spectacle l'art et l'épilepsie	Swisstech Convention Center (EPFL[12]); Connaissance 3, Morges; Festival de Jazz, Montreux; Uni Dufour Genève; Institut Jaques-Dalcroze; HUG[10]

Media presentations

2007-2017 Revue "Générations"; Télévision Suisse Romande TSR (*Specimen*; *Téléjournal; Sport Dimanche*); Radio Suisse Romande RSR (*Babylone*; *Les Temps qui courent*; *Espace 2*; *Impatience*, *la 1ère*; *CQDF* -science et santé- *la 1ère*); Magazine *Science et Vie* – France; Quotidien *Tribune de Genève*; Magazine *Campus* UNIGE[5].

Other

2013 – 2016	Member Editorial board journal "Hémisphères"	HES-SO[3]
2014 – current	Member Comité directeur « PhD en science biomédicale mention santé globale »	Medical faculty of the University of Geneva
2015 – current	Advisor and member of research committee	Geneva Emotion and Music laboratory

Research Interests

- Neuronal substrates at the root of perceptual, cognitive and motor functioning
- Experience-driven brain and behavioral plasticity, following musical activity over the lifespan
- Links between general and musical cognition and their neuronal substrates
- Developing musical training regimens that 1) combat age-induced cognitive and sensorimotor decline and brain degeneration 2) boost cognitive and sensorimotor development in children

[1] Research and Development
[2] School of Health Sciences, Geneva
[3] Haute Ecole Spécialisée de Suisse occidentale/University of Applied Sciences and Arts Western Switzerland
[4] Faculté de Psychologie et des Sciences de l'Education
[5] Université de Genève/University of Geneva
[6] Université de Lausanne/University of Lausanne
[7] Swiss National Science Foundation
[8] Brain and Behavior Laboratory, Centre Médical Universitaire, Genève
[9] Centre d'Imagerie BioMédicale/Center for Biomedical Imaging
[10] Hôpitaux Universitaires de Genève
[11] Centre Hospitalier Universitaire Vaudois
[12] Ecole Polytechnique Fédérale de Lausanne

PUBLICATIONS (PEER REVIEWED)

Lehmann, S., Morand, S., **James, C.,** & Schnider, A. (2007). Electrophysiological correlates of deficient encoding in a case of post-anoxic amnesia. *Neuropsychologia, 45*(8), 1757-1766. doi: 10.1016/j.neuropsychologia.2006.12.018). Impact Factor 3.48. Swiss National Science Foundation; Grant number: 32000-113436 (A. Schnider)

James, C. E., Britz, J., Vuilleumier, P., Hauert, C. A., & Michel, C. M. (2008). Early neuronal responses in right limbic structures mediate harmony incongruity processing in musical experts. *Neuroimage, 42*(4), 1597-1608. doi: 10.1016/j.neuroimage.2008.06.025. Impact Factor 5.69.

James, C., Morand, S., Barcellona-Lehmann, S., Michel, C. M., & Schnider, A. (2009). Neural transition from short- to long-term memory and the medial temporal lobe: a human evoked-potential study. *Hippocampus, 19*(4), 371-378. doi: 10.1002/hipo.20526. Impact Factor 3.91. Swiss National Science Foundation; Grant number: 32000-113436 (A. Schnider)

Tallet, J., Barral, J., **James, C.,** & Hauert, C. A. (2010). Stability-dependent behavioural and electro-cortical reorganizations during intentional switching between bimanual tapping modes. *Neuroscience Letters, 483*(2), 118-122. doi: 10.1016/j.neulet.2010.07.074. Impact Factor: 2.06.

James, C. E., Michel, C. M., Britz, J., Vuilleumier, P., & Hauert, C. A. (2012). Rhythm evokes action: Early processing of metric deviances in expressive music by experts and laymen revealed by ERP source imaging. *Human Brain Mapping, 33*(12), 2751-2767. doi: 10.1002/hbm.21397. Impact factor 6.26.

James, C. E., Dupuis, E., Hauert, C.-A. (2012). Appraisal of musical syntax transgression by primary-school children: Effects of age and practice. *Swiss Journal of Psychology 71*(3) (161–168). doi: 10.1024/1421-0185/a000084. Impact Factor: 0.64.

Oechslin, M.S., Van De Ville, D., Lazeyras, F., Hauert, C.A., **James, C.E.** (2013). Degree of musical expertise modulates higher order brain functioning. *Cerebral Cortex 23*, 2213-2224. doi: 10.1093/cercor/bhs206. Impact Factor: 8.31. Swiss National Science Foundation; Grant number: 100014_125050 (C.James)

Oechslin, M.S., Descloux, C., Croquelois, A., Chanal, J., Van De Ville, D., Lazeyras, F., **James, C.E.** (2013). Hippocampal volume predicts fluid intelligence in musically trained people. *Hippocampus 23*, 552-558. Impact Factor: 4.30. Swiss National Science Foundation; Grant number: 100014_125050 (C.James)

James, C.E., Oechslin, M.S., Van De Ville, D., Hauert, C.A., Descloux, C., Lazeyras, F. (2014). Musical training intensity yields opposite effects on grey matter density in cognitive versus sensorimotor networks. *Brain Structure and Function*, 219, 353-366. doi: 10.1007/s00429-013-0504-z Impact Factor: 5.62. Swiss National Science Foundation; Grant number: 100014_125050 (C.James)

James, C. E., Cereghetti, D. M., Roullet Tribes, E., & Oechslin, M. S. (2015). Electrophysiological evidence for a specific neural correlate of musical violation expectation in primary-school children. *NeuroImage, 104*, 386-397. doi: 10.1016/j.neuroimage.2014.09.047. Impact Factor 5.46. Swiss National Science Foundation; Grant number: 100014_125050 (C.James)

De Pretto, M., **James, C. E.** (2015). Principles of Parsimony: fMRI Correlates of Beat-Based Versus Duration-Based Sensorimotor Synchronization. *Psychomusicology: Music, Mind and Brain, 25(4)*, 380-391. doi: 10.1037/pmu0000122

Lovis, C., **James, C.,** 2016. Santé digitale: petit guide du néophyte. *Rev Med Suisse 12*(521), 1108-1112. PMID: 27487680.

Oechslin, M. S., Gschwind, M., & **James, C. E.** (2017). Tracking Training-Related Plasticity by Combining fMRI and DTI: The Right Hemisphere Ventral Stream Mediates Musical Syntax Processing. *Cerebral Cortex, 1-10*. doi:10.1093/cercor/bhx033 Impact Factor: 8.29. Swiss National Science Foundation; Grant number: 100014_125050 (C.James)

Jenni, R., Oechslin, M. S., & **James, C. E.** (2017). Impact of major and minor mode on EEG frequency range activities of music processing as a function of expertise. *Neurosci Lett, 647*, 159-164. doi:10.1016/j.neulet.2017.03.022. Impact Factor: 2.12. Swiss National Science Foundation; Grant number: 100014_125050 (C.James)

James, C.E., Oechslin, M.S., Michel, C. M., & De Pretto M. (2017). Electrical Neuroimaging of Music Processing Reveals Mid-Latency Changes with Level of Musical Expertise. *Frontiers in Neuroscience* 11, 613. Impact factor 3.7. Swiss National Science Foundation; Grant number: 100014_125050 (C.James)

EDITORIALS

James, C. E. (2012). Music and language processing share behavioral and cerebral features. *Frontiers in Psychology, 3*, 52. doi: 10.3389/fpsyg.2012.00052. Impact Factor: 2.80.

OTHER PUBLICATIONS (WITHOUT PEER REVIEW)

James, C. E. (2012). La musicalité humaine au travers du cycle de vie; Perspectives comportementales et neuroscientifiques. *Le Bulletin de L'AmiRéSoL*. ISSN 1634-6750.

PUBLICATIONS (PEER REVIEWED) SUBMITTED

Coll S. Y., Vuichoud, N., Grandjean, D., & **James, C. E.** Electrical neuroimaging of music processing in pianists with true-absolute pitch versus non-absolute pitch. Submitted to Human Brain Mapping on November 27, 2017.

James, C.E., Zuber, S., Dupuis-Lozeron, E., Abdili, L., Gervaise, D., Kliegel, M. How music cognition, general cognition and procedural skills relate in musically naïve primary school children. Journal of School Psychology.