



Annoni Jean-Marie

Professional address 2-6 Chemin des Pensionnats, CH-1708 Fribourg

Tel + 41 26 306 38 02; Email : jean-marie.annoni@unifr.ch

Page : <http://www.unifr.ch/neurology/>

Nationality : CH, Date of birth : 26.09.1956, Married with 4 children

Language: French and Italian (Mother tongue), English (C1), German (B2)

1. PERSONAL INFORMATION,

Professor of Neurology, Section of Medicine University of Fribourg
Senior Neurologist : H-Fr, Fribourg (10%), consultant HUG, CHUV
Titular Professor , Faculty of Medicine UNIGE and PD, Faculty of Medicine UNIL
President of the section of Medicine, Faculty of Sciences and Medicine, UNIFR
Google scholar ID : jean-marie.annoni@gmail.com;
Orcid ID: jean-marie.annoni@unifr.ch , Account [0000-0002-4751-0855](https://orcid.org/0000-0002-4751-0855)
From 1.2.2019 : vice-président of the Commission Ethique de la recherche (VD), 20%

2. EDUCATION:

Bacalauréat français, Annecy July 1974
1975-1981 : Medical School, Faculty of Medicine, Geneva
American ECFMG (1981, Genève) and VQE (1982, Paris) ,
1981-1983 : Postgraduate Course for experimental médecine and biology and MD
1893-1989: Residency in medicine and Neurology (Geneva Hospital)
1989-1991 : Post graduate training in rehabilitation and cognitive neurosciences

3. EMPLOYMENT HISTORY

Medical Swiss Federal Diploma (12 mars 1981, Geneva)
MD: *Pharmakologische Charakterisierung der synaptischen Übertragung in Bogengangsorgan*, Zürich 1985.
Neurologist FMH : 1989 (University Hospital, Geneva)
PD : (Medical faculty, UNIGE, 2000) : *Bases Neurologiques du traitement sémantique*.
PD : (Medical faculty, UNIL, 2003 : *Troubles comportementaux d'origine neurologiques*).
Associated Professor, (Medical faculty, Geneva University) in Neurology, since 1.1.2008
1991- 2010 : Chef de Clinique neurologist , (HUG); , Head of the clinical skill teaching, UNIGE
2000- 2010 : Head of the Neuropsychological Unit, Geneva university hospital (80%)
2000-2010 : Head of the Neurobehavioral Unit (20%) CHUV
2010 - Professor of Neurology, dpt of Medecine, Faculty of Science, UNIFR
Neurologist at the H-FR Fribourg Memory Clinic and the Stroke Unit,

4. Institutional Responsibilities

2016-2017 President of the Department of Medicine, Faculty of Sciences University of Fribourg
2018- President of the section of Medicine, Faculty of Sciences and Medicine, UNIFR

5. Approved research projects (main applicant*) last 10 years

- 1 Grant from ZHAW institute "Bilateral research collaboration with South Asia and Iran 2017 – 2020" for the project "Distant versus close language-pair bilingualism: does language distance affect the effective connectivity between language and control systems?" 12 months, award 16.800 CH Frs
- 2 Subside SNF 25130_182594 Motor-language interaction in the first and late second language: experimental data and clinical implications. PI JM Annoni amount 525'000 CH Frs; 1.10.2018- 31.9.2021
- 3 Subside of the Lithuanian-Swiss cooperation program to reduce economic and social disparities within the enlarged European Union under project agreement No. CH-3- ŠMM-02/02. CHF 230 000. 2016-2017
- 4 Subside SNF 325130_156937. Role of executive functions on language: an experimental and clinical approach with application to mother language and second language , applicant (Unifr-HFR) : Jean-Marie Annoni ; Co-applicants : René Mueri (Uni Bern), Lucas Spierer (Unifr), Marina Laganaro (unige). CHF 625.000 *; 2014-18.
- 5 Subside SNF 320030_144016 Observational and imaginary balance training - Evaluation of behavioural changes and their underlying neural adaptations. W. Taube & JM Annoni (01.12.2012, 327 000 Frs)
- 6 Subside SNF 325130_138497 Differences in reading strategies across languages in bilinguals JM Annoni, R Mueri, Th

- Nyffeler, M Laganaro (1er octobre 2011, 311.000,- Frs) *
- 7 Subside SNF 325130_138497 32 0030_1385 32 Aphasia and Co-speech gesture, René Mueri, St Bohlhalter, C Gutbrod, JM Annoni Th Nyffeler (1.10.2011, 438 000.- SFR)
 - 8 Subside SNF 100014_130412 - Translation competence and Theory of Mind; Lee-Jahnke, Hannelore, Lazeyras, François Annoni, Jean-Marie; 01.05.2010, 36 months, 180.000frs
 - 9 Subside FNRS 325100-118362 /1. Investigation In language control and semantic processing mechanisms In the bilingual brain; JM Annoni, AL Lee-Jancke, F Lazeyras, A Khateb, (first of October 2007, 335.000,- Frs) *
 - 10 Dissecting the decisional process in patients with multiple sclerosis: cognitive, emotional and anatomical aspects (M Schluep, JM Annoni, P Vuilleumier) Starting october 2007 (290.000frs)

Research Citation Report (WoS) : 177 Publications, h-index 28 (Google Scholar : 41) ; Times Cited 2,975

6. Supervision of junior researchers at graduate and postgraduate level

- Supervision of PD DR Lucas Spierer 2011-2015, actual PI in the laboratory, Dr S Dieguez, Dr J Britz, Dr L Jost
- Director of 7 PhD theses, of 3 MD Thesis,
- Co-Director of 4 PhD Thesis,
- Expert in 15 PhD Thesis at university of Fribourg, Bern, Lausanne, Geneva, Toulouse, Barcelona

7. Teaching activities

2010 -2015; Head of the bachelor Program for Neurology Co- director of the LCNS, UNIFR,

8. Memberships in panels, boards, etc., and individual scientific reviewing activities

Editor of the Swiss Archives for Neurology and psychiatry up to 2015

Editorial Board of behavioral Neurology up to 2015

Annals of Clinical and Translational Neurology

20 Reviews/year in clinical and Neurosciences journal

9. Active memberships in scientific societies, fellowships in renowned academies

AAN, EAN, SNG, SNLF,

Vice-President of Aphasie Suisse

Committee of the Swiss behavioral neurology society and the Commission Mixte FMH

10. Organization of conferences

- Culture et neuropsychologie: de la cognition à la clinique – 2014 journées de la SNLF
- Research day, University and Hospital of Fribourg : 2012, 2013, 2014, 2015, 2016 , 2017, 2018
- Post graduate teaching of Neurology (rencontres de Neurologie) since 2011
- Co Organisation : Intensive Seminar Series on Interdisciplinary in Translation & Interpreting, Shanghai Nov 2017

11. Prizes, awards, fellowships

9th EFNS Congress, 2005. Poster prize.

2006 Best Poster, SNG : Comparative effect of modafinil on fatigue in multiple sclerosis and stroke.

2011 and 2014: two prizes of the best poster for PhD students

12. Research career breaks

2003 : bilingual Brain

2008 : Decision making and social cognition

2015 : Integration of Neuromodulation research in controls and patients

2017 : Biomarkers in DTA



Scientific achievements of Jean-Marie Annoni, MD. 2018

Jean-Marie Annoni (M) has a longstanding clinical and academic activity in behavioural neurology and Neurocognitive diseases, cognitive neuroscience of language and cognition. Using behavioural, ERP and fMRI studies, he obtained 9 grants (approx. 2.4 Million Frs) as applicant and 9 grants as co-applicant (approx. 1.8 Millions Frs) and published more than 120 articles in neurology and neurosciences. He could propose a model of semantic networks, which rely on extensive left temporal and frontal networks. The studies on bilinguals, could help to characterize. Since 2010 he is full professor of Neurology at the University of Fribourg and director of the LCNS (<http://www.unifr.ch/neurology>) with Dr Spierer. He collaborated with high level neuroscientists (Th Landis, A Schnider, R Frackowiak, A Pegna, Van der Linden, R Mueri,...). The 3 main scientific achievements in the career of each applicant Jean-Marie Annoni may be considered the following.

- 1) A large series of studies on the neurological bases of language, reading and numbers, using clinical, behavioural and imaging studies. He showed that semantic processing relies on left temporal centered network and may reorganize according to environment and to brain lesions. JM Annoni' studies on bilinguals, through ERP and fMRI study demonstrated that language selection is achieved through a neural network involving left caudate and the anterior cingulate cortex, and that language processes depend on language proficiency and on characteristic of language itself. This was highlighted by the best poster presentation prize at the European Federations of Neurological Societies, 2005; actual development of connectivity and neuromodulation studies.
 - a. Seghier, M.L., et al., *Group analysis and the subject factor in functional magnetic resonance imaging: analysis of fifty right-handed healthy subjects in a semantic language task*. Hum Brain Mapp, 2008. **29**(4): p. 461-77.
 - b. Magezi, D.A., et al., *Cognitive control of language production in bilinguals involves a partly independent process within the domain-general cognitive control network: evidence from task-switching and electrical brain activity*. Brain Lang, 2012. **122**(1): p. 55-63
 - c. Radman N., et al. *The role of the cognitive control system in recovery from bilingual aphasia*, a multiple single-case fMRI study Neural Plasticity, 2016;2016:8797086
 - d. Jost LB, Radman N, Buetler KA, Annoni JM. Behavioral and electrophysiological signatures of word translation processes. Neuropsychologia. 2018 Jan 31;109:245-254. doi: 0.1016/
- 2) The grounding of the Laboratory of Cognitive and Neurological sciences in Fribourg University in 2011, which has produced more than 60 papers in five years, together with the initiation of the Fribourg Memory Platform (<http://www.memoire-fribourg.ch/2014>) and the Fribourg Stroke Unit (2012, 2017) (with PD Dr A Humm), and the initiation and perpetuation of the research day of the university and hospital of Fribourg (2011 to 2018).
- 3) Since October 2018, he is named, starting the 1.2.2019 as vice president of the ethic commission for research of the Canton of Vaud, Fribourg and Neuchâtel (university of Lausanne). This activity will take 20%.



Fribourg, April 28 th, 2019

Annoni Jean-Marie, 26. 09.1956**Publication list:** (<http://www.unifr.ch/neurology/en/team/jean-marie-annoni/> and www.unifr.ch/neurology/fr/press) 2014- 2019 :**1- Original Publications (Peer-reviewed articles)**

1. Buetler KA, de León Rodríguez D, Laganaro M, Müri R, Spierer L, **Annoni JM**. Language context modulates reading route: an electrical neuroimaging study. *Front Hum Neurosci*. 2014 Feb 20;8:83. [IF 3.6]
2. Miguélez M, Merlani P, Gigon F, Verdon M, Annoni JM, Ricou B. Feasibility of a multiple-choice mini mental state examination for chronically critically ill patients. *Crit Care Med*. 2014 Aug;42(8) :1874-81.
3. Giovanni Battistella, Eleonora Fornari, **Jean-Marie Annoni**, Haithem Chtioui, Kim Dao, Marie Fabritius, Bernard Favrat, Jean-Frédéric Mall, Philippe Maeder, and Christian Giroud. Long-term effects of cannabis on brain structure in press, *Neuropsychopharmacology* (IF 8.7)
4. Taube W, Mouthon M, Leukel C, Hoogewoud HM, **Annoni JM**, Keller M. Brain activity during observation and motor imagery of different balance tasks: an fMRI study. *Cortex*. 2015 Mar;64:102-14.
5. Preisig BC, Eggenberger N, Zito G, Vanbellingen T, Schumacher R, Hopfner S, Nyffeler T, Gutbrod K, **Annoni JM**, Bohlhalter S, Müri RM. Perception of co-speech gestures in aphasic patients: a visual exploration study during the observation of dyadic conversations. *Cortex*. 2015 Mar; 64:157-68.
6. Radman N, Spierer L, Laganaro M, **Annoni JM**, Colombo F. Language specificity of lexical-phonological therapy in bilingual aphasia: A clinical and electrophysiological study. *Neuropsychol Rehabil*. 2015 May 26:1-26
7. Manchon, Melanie; Buetler, Karin; Colombo, Françoise; Spierer Lucas, Assal Frédéric and **Annoni JM**. Impairment of both languages in late bilinguals with dementia of the Alzheimer type. *Bilingualism: Language and Cognition*: 18 , 90-100, 2015 (IF 3.3)
8. Chouiter L, Tzovara A, Dieguez S, **Annoni JM**, Magezi D, De Lucia M, Spierer L. Experience-based Auditory Predictions Modulate Brain Activity to Silence as Do Real Sounds. *J Cogn Neurosci*. 2015 Oct;27(10):1968-80
9. de León Rodríguez D., Buetler K., Eggenberger N., Preisig B., Schumacher R., Laganaro M., Nyffeler T., **Annoni J-M.**, and Müri R. The modulation of reading strategies by language opacity in early bilinguals: an eye movement study. *Bilingualism: Language and Cognition*, 2015, June, 1-11 (IF 3.3)
10. Schumacher R., Cazzoli D., Eggenberger N., Preisig B., Nef T., Nyffeler T., Gutbrod K., **Annoni J.M.**, Müri R.M. PLoS One, 10(11) Cue Recognition and Integration - Eye Tracking Evidence of Processing Differences in Sentence Comprehension in Aphasia. *PLoS One*. 2015 Nov 12;10(11)
11. Khateb A., Pegna A.J., Michel C.M., Mouthon M., **Annoni J.M.** *Bilingualism: Language and Cognition*, 2015 April 29 Semantic relatedness and first-second language (IF 3.3)
12. Buetler K., de León Rodríguez D., Laganaro M., Müri R., Nyffeler T., Spierer L., **Annoni J.M.** *Brain and Language*, 150, 166-76 Balanced bilinguals favor lexical processing



13. Preisig BC, Eggenberger N, Zito G, Vanbellingen T, Schumacher R, Hopfner S, Gutbrod K, Nyffeler T, Cazzoli D, Annoni JM, Bohlhalter S, Müri RM. *J Cogn Neurosci*. 2016 Oct;28(10):1613-24. doi: 10.1162/jocn_a_00983. Epub 2016 May 31.
14. Partly segregated cortico-subcortical pathways support phonologic and semantic verbal fluency: A lesion study. Chouiter L, Holmberg J, Manuel AL, Colombo F, Clarke S, Annoni JM, Spierer L. *Neuroscience*. 2016 Aug ; 329:275-83. doi: 10.1016/j.neuroscience.2016.05.029. Epub 2016 May 20.
15. The Impact of Language Opacity and Proficiency on Reading Strategies in Bilinguals: An Eye Movement Study. de León Rodríguez D, Buetler KA, Eggenberger N, Laganaro M, Nyffeler T, Annoni JM, Müri RM. *Front Psychol*. 2016 May 6;7:649. doi: 10.3389/fpsyg.2016.00649. eCollection 2016.
16. Screening for Language Disorders in Stroke: German Validation of the Language Screening Test (LAST). Koenig-Bruhin M, Vanbellingen T, Schumacher R, Pflugshaupt T, **Annoni JM**, Müri RM, Bohlhalter S, Nyffeler T. *Cerebrovasc Dis Extra*. 2016 Apr 20;6(1):27-31. doi: 10.1159/000445778. eCollection 2016 Jan-Apr.
17. Successful Neuropsychological Rehabilitation in a Patient with Cerebellar Cognitive Affective Syndrome. Ruffieux N, Colombo F, Gentaz E, **Annoni JM**, Chouiter L, Roulin Hefti S, Ruffieux A, Bihl T. *Appl Neuropsychol Child*. 2016 Apr 6:1-9. [Epub ahead of print]
18. Comprehension of Co-Speech Gestures in Aphasic Patients: An Eye Movement Study. Eggenberger N, Preisig BC, Schumacher R, Hopfner S, Vanbellingen T, Nyffeler T, Gutbrod K, **Annoni JM**, Bohlhalter S, Cazzoli D, Müri RM. *PLoS One*. 2016 Jan 6;11(1):e0146583. doi: 10.1371/journal.pone.0146583. eCollection 2016.
19. Hicheur H, Boujon C, Wong C, Pham QC, **Annoni JM**, Bihl T. Planning of spatially-oriented locomotion following focal brain damage in humans: A pilot study. *Behav Brain Res*. 2016 Mar 15;301:33-42. doi: 10.1016/j.bbr.2015.12.014. Epub 2015 Dec 21.
20. Martory MD, Pegna AJ, Sheybani L, Métral M, Bernasconi Pertusio F, **Annoni JM**. Assessment of Social Cognition and Theory of Mind: Initial Validation of the Geneva Social Cognition Scale. *Eur Neurol*. 2015;74(5-6):288-95. doi: 10.1159/000442412. Epub 2015 Dec 12.
21. Ruffieux N., Colombo F., Gentaz E., **Annoni J.M.**, **Chouiter L.**, Roulin Hefti S., Ruffieux A., Bihl T. Successful Neuropsychological Rehabilitation in a Patient with Cerebellar Cognitive Affective Syndrome. *Applied Neuropsychology: Child*, In press 2016 [[PubMed](#)]
22. Chouiter L., Holmberg J., Manuel A.L., Colombo F., Clarke S., **Annoni J.M.**, **Spierer L.** Partly segregated cortico-subcortical pathways support phonologic and semantic verbal fluency: a lesion study. *Neuroscience*, 329:275-83, 2016 [[PubMed](#)]
23. de León Rodríguez D., Buetler K., Eggenberger N., Laganaro M., Nyffeler T., **Annoni J.M.**, Müri R.M. The impact of language opacity and proficiency on reading strategies in bilinguals: an eye movement study. *Frontiers in Psychology*, 7:649, 2016 [[Direct link](#)]
24. Preisig B.C., Eggenberger N., Zito G., Vanbellingen T., Schumacher R., Hopfner S., Gutbrod K., Nyffeler T., Cazzoli D., **Annoni J.M.**, Bohlhalter S., Müri R.M. Eye gaze behaviour at turn transition: How aphasic patients process speakers' turns during video observation. *Journal of Cognitive Neuroscience*, 31:1-12, 2016 [[PubMed](#)]



25. Eggenberger N., Preisig BC., Schumacher R., Hopfner S., Vanbellinghen T., Nyffeler T., Gutbrod K., **Annoni J.M.**, Bohlhalter S., Cazzoli D., Müri RM. Perception of co-speech gestures in aphasic patients: An eye movement study. *PLoS One*, 11(1), 2016 [[Pubmed](#)]
26. Radman N., Mouthon M., Di Pietro M., Gaytanidis C., Leemann B., Abutalebi J., **Annoni J.M.** The role of the cognitive control system in recovery from bilingual aphasia, a multiple single-case fMRI study *Neural Plasticity*, 2016;2016:8797086
27. Ruffieux N, Ramon M, Lao J, Colombo F, Stacchi L, Borruat FX, Accolla E, **Annoni JM**, Caldara R. Residual perception of biological motion in cortical blindness. *Neuropsychologia*. 2016 Dec;93(Pt A):301-311.
28. Mistridis P, Mata J, Neuner-Jehle S, **Annoni JM**, Biedermann A, Bopp-Kistler I, Brand D, Brioschi Guevara A, Decrey-Wick H, Démonet JF, Hemmeter U, Kressig RW, Martin B, Rampa L, Savaskan E, Stuck A, Tschopp P, Zekry D, Monsch A. Use it or lose it! Cognitive activity as a protective factor for cognitive decline associated with Alzheimer's disease. *Swiss Med Wkly*. 2017 Mar 21;147:w14407. doi: smw.2017.14407. eCollection 2017 Mar 21.
29. Beinert K, Mouthon A, Keller M, Mouthon M, **Annoni JM**, Taube W. Neural Correlates of Maladaptive Pain Behavior in Chronic Neck Pain - A Single Case Control fMRI Study. *Pain Physician*. 2017 Jan Feb;20(1):E115-E125.
30. Nanchen G., Abutalebi J., Assal F., Manchon M., Démonet J.F., **Annoni J.M.** Second language performances in elderly bilinguals and individuals with dementia: The role of L2 immersion. *Journal of Neurolinguistics*, 2017 (August) Volume 43, Part A, Pages 49-58)
31. Neuhaus M, Bagutti S, Yaldizli Ö, Zwahlen D, Schaub S, Frey B, Fischer-Barnicol B, Burgunder JM, Martory MD, Pöttgen J, **Annoni JM***, Penner IK. Characterization of social cognition impairment in multiple sclerosis.(* cor auth.) *Eur J Neurol*. 2018 Jan;25(1):90-96. doi: 10.1111/ene.13457.
32. Jost LB, Radman N, Buetler KA, **Annoni JM**. Behavioral and electrophysiological signatures of word translation processes. *Neuropsychologia*. 2018 Jan 31;109:245-254. doi: 0.1016/
33. Marathe S, Jaquet M, Annoni JM, Alberi L. Jagged1 Is Altered in Alzheimer's Disease and Regulates Spatial Memory Processing. *Front Cell Neurosci*. 2017 Aug 9;11:220. doi: 10.3389/fncel.2017.00220.
34. Sebastian Dieguez, Mélanie Kaeser, Camille Roux, Jérôme Cottet, **Jean-Marie Annoni**, Eric Schmidlin Birth and death of a phantom 2017 Nov 17;5(1):98-101
35. Ruffieux J, Mouthon A, Keller M, Mouthon M, **Annoni JM**, Taube W. Balance Training Reduces Brain Activity during Motor Simulation of a Challenging Balance Task in Older Adults: An fMRI Study. *Front Behav Neurosci*. 2018 Jan 24;12:10.
36. Mireille Neuhaus Pasquale Calabrese Jean-Marie Annoni Decision-Making in Multiple Sclerosis Patients: A Systematic Review *Multiple Sclerosis International* Volume 2018 (2018), Article ID 7835952, <https://doi.org/10.1155/2018/7835952>
37. Age-Related Differences in Cortical and Subcortical Activities during Observation and Motor Imagery of Dynamic Postural Tasks: An fMRI Study. Mouthon A, Ruffieux J, Mouthon M, Hoogewoud HM, **Annoni JM**, Taube W. *Neural Plast*. 2018 Mar 11;2018:1598178. doi: 10.1155/2018/1598178. eCollection 2018.
38. Preisig BC, Eggenberger N, Cazzoli D, Nyffeler T, Gutbrod K, **Annoni JM**, Meichtry JR, Nef T, Müri RM. Multimodal Communication in Aphasia: Perception and Production of Co-speech Gestures During Face-to-Face Conversation.. *Front Hum Neurosci*. 2018 Jun 14;12:200.
39. Radman N, Britz J, Buetler K,, Weekes BS, Spierer L and **Annoni J-M** (2018) Dorsolateral Prefrontal



Transcranial Direct Current Stimulation Modulates Language Processing but Does Not Facilitate Overt Second Language Word Production. *Front. Neurosci.* 12:490. doi: 10.3389/fnins.2018.00490

40. Vez S, Köhli J, Frey B, Magezi DA, **Annoni JM**, Burgunder JM.. Auditory time perception in Huntington's disease. *Neuropsychologia*. 2018 Aug 22;119:247-252. doi: 10.1016
41. Cumming TB, Yeo AB, Marquez J, Churilov L, **Annoni JM**, Badaru U, Ghotbi N, Harbison J, Kwakkel G, Lerdal A, Mills R, Naess H, Nyland H, Schmid A, Tang WK, Tseng B, van de Port I, Mead G, English C. Investigating post-stroke fatigue: An individual participant data meta-analysis. *J. Psychosom Res.* 2018 Oct;113:107-112. doi: 10.1016/
42. Pestalozzi MI, Di Pietro M, Martins Gaytanidis C, Spierer L, Schnider A, Chouiter L, Colombo F, **Annoni JM**, Jost LB. Effects of Prefrontal Transcranial Direct Current Stimulation on Lexical Access in Chronic Poststroke Aphasia. *Neurorehabil Neural Repair.* 2018 Oct;32(10):913-923. doi: 10.1177/1545968318801551. Epub 2018 Oct 1.
43. Vez S, Köhli J, Frey B, Magezi DA, **Annoni JM**, Burgunder JM. Auditory time perception in Huntington's disease. *Neuropsychologia*. 2018 Oct;119:247-252. doi: 10.1016/j.neuropsychologia.2018.08.018. Epub 2018 Aug 22
44. Mouthon M, Khateb A, Lazeyras F, Pegna AJ, Lee-Jahnke H, Lehr C, **Annoni JM**. Second-language proficiency modulates the brain language control network in bilingual translators: an event-related fMRI study; *Bilingualism: Language and Cognition.*; 2019/1/1, 1-14

2- Review (Peer Reviewed)

1. Lavanchy AS, Humm AM, **Annoni JM**. [Screening tools for dementia in community and family practice]. *Rev Med Suisse.* 2013 Dec 11;9(410):2345-9.
2. **Jean-Marie Annoni**, Narges Radman, Françoise Colombo, Serge Zumbach, Frédéric Assal J'ai des trous de mémoire. *Revue Médicale Suisse* 2015. <http://www.revmed.ch/Guidelines/Docteur-j-ai>
3. **Annoni JM**, Chouiter L, Démonet JF. Age-related cognitive impairment: conceptual changes and diagnostic strategies]. *Rev Med Suisse.* 2016 Apr 20;12(515):774-9. French.
4. Chouiter L, **Annoni JM** Glossolalia and Aphasia: Related but Different Worlds. *Front Neurol Neurosci.* 2018;42:96-105. doi: 10.1159/000475694. Epub 2017 Nov 17.
5. E Monaco, LB Jost, PM Gyga, **JM Annoni**. Embodied semantics in a second language: Critical review and clinical implications, *Frontiers in Human Neuroscience* 2019 13, 110

3- Monographs

1. Mouthon M, **Annoni JM**, Khateb A The bilingual brain *Swiss Archives of Neurology and Psychiatry.* 2013;164(08):266-273
2. Koenig-Bruhin M, Kolonko B, At A, **Annoni JM**, Hunziker E Aphasia following a stroke : recovery and recommendations for rehabilitation *Swiss Arch of Neurol and Psychiat.* 2013;164(08):292-8

4- Book contributions



5- conference proceedings

F Colombo-Thuillard, **JM Annoni** : Editor of a special Number : Culture et neuropsychologie: de la cognition à la clinique – 2014 / 3 (Volume 6)

6) Invited contributions to international conferences

1. JM Annoni : Aphasietherapie bei zweisprachigen Patienten , 14. Wissenschaftlichen Symposium des dbs Köln Februar 2013
2. JM Annoni: CIUTI Forum, United Nation organizations, Geneva : January 2013 and January 2016
3. JM Annoni : Conferences at the Swiss society of Neurology conference on Behavioral Neurology: 2014, 2015, 2016
4. JM Annoni: Bilingual Brain; For of th Dept of Psycholinguistic, Hong Kong, Nov 2015
5. JM Annoni : Impact of neurological diseases in decision making and social cognition; The 18th Zhongshan Neurology International Summit Forum, Guangzhou Nov 2015
6. JM Annoni : Organization and 2 hours Lectures on “Neuroimaging and fMRI data analysis - clinical and research applications”, 30 hours course for radiologists, neurologists, neurosurgeons, biomedical engineers, technical science specialists, physicists, neurobiologists, statisticians, Sept 2016
7. JM Annoni : Neurological Aspects of T&I: Latest Developments in Europe. International Conference of Shanghai University of International Studies. Common Grounds for multilingual interdisciplinary Research and development: Mirroring Swiss experience with Chinese Practice , supported by swissnet Oct 2016 www.giit.shisu.edu.cn/sgic/home.html
8. JM Annoni and Lea Jost: 2nd International Conference of Shanghai University of International Studies. Common Grounds for multilingual interdisciplinary Research and development: Mirroring Swiss experience with Chinese Practice , supported by swissnet Nov 2017 : 8 hours seminar on Brain, language and bilingualism.

7) Other publications (maps, documents, software, databases, arXiv-articles, etc.).

1. e-material for University of Fribourg : Introduction to Neurology for 3rd Year Student, Teaching Material and program in French (Appr 250 pages) and German (appr. 250 pages) 2013-
<https://www.unifr.ch/neurology/fr/teaching/courses>