### PERSONAL INFORMATION

First name, Family name: Sara Assecondi

Researcher unique identifier(s): ORCID: <a href="https://orcid.org/0000-0002-3720-9444">https://orcid.org/0000-0002-3720-9444</a>

ResearcherID: E-4162-2010

Open Science Framework: https://osf.io/jg34p/

Date of birth: 08/03/1977 Nationality: Italian

Children: Anita (07/01/2014), Emma (07/01/2014)

URL for website: <a href="https://webapps.unitn.it/du/it/Persona/PER0056324/Curriculum">https://webapps.unitn.it/du/it/Persona/PER0056324/Curriculum</a>

## **EDUCATION**

2005-2009	PhD in Biomedical Engineering
	Dep. Electronics and Information Systems, Ghent University, BE
	Prof. Stevens Staelens, Prof. Paul Boon
2004	Professional Practice Exam - Electronical Engineering, Polytechnic University of Milan, IT
1996-2004	Master in Biomedical Engineering
	Department of Biomedical Engineering, Polytechnic University of Milan, IT

### **ACADEMIC POSITION**

2020 – now	Fixed-term Assistant Professor (RTD-A)
	Centre for Mind/Brain Sciences (CIMeC), University of Trento, IT
2016 – 2020	Research Fellow, School of Psychology, University of Birmingham, UK
2015 – 2016	Research Fellow (part-time), School of Psychology, University of Birmingham, UK
2011 – 2013	Research Fellow, School of Psychology, University of Birmingham, UK
2009 – 2011	Research Fellow, Centre for Mind/Brain Sciences (CIMeC), University of Trento, IT

# **ACADEMIC QUALIFICATIONS AND TRAINING**

2009, PhD in Biomedical Engineering, Doctoral training in Biomedical Engineering, Ghent University, BE 2004 Professional Practice Exam - Electronical Engineering, Polytechnic University of Milan, IT 2004 MSc in Biomedical Engineering, Polytechnic University of Milan, IT

## **FELLOWSHIPS AND AWARDS**

2018	travel grant (£1000) - Guarantors of Brain, UK
2013	travel grant (£500) - Guarantors of Brain, UK
2013	travel grant (£500) - Post-Doc Career Development, University of Birmingham, UK
2008	Poster Prize (€100) - Liege Image Days, University of Liège, BE

## **GRANTS (AWARDED)**

2022	University of Trento Starting Grant, PI	(€8000):
	2 :	(0000).

"Impact of interindividual differences on healthy ageing trajectories"

2019 Canadian International Seed Funds (VPRIIS), Co-I with Gail Eskes and Kim Shapiro (£5,900):

"Multimodal Approaches to Cognitive Enhancement in Aging and Brain Disease"

2017 MRC Proximity to Discovery, Co-I with Kim Shapiro (£8100):

"COGNISANT: COGNItive Skills and Needs Training, combined cognitive training and tDCS in the elderly"

2017 Pump Priming University of Birmingham, Co-I with Kim Shapiro (£2600):

"Acquiring a virtual reality setup to explore the use of virtual reality in neuroscience"

# **TEACHING ACTIVITIES**

2022-2023	Guest Lecturer - Circadian rhythms and cognition (3h), University of Trento, IT
2022-2023	Guest Lecturer – EEG investigations of cognitive functions (5h), University of Trento, IT
2018-2019	Guest Lecturer - Transcranial current brain stimulation (1h), University of Birmingham, UK
2018-2019	Guest Lecturer - Introduction to EEG fMRI (1h), University of Birmingham, UK

2010	Guest Lecturer - EEG and EEG-fMRI recording and analysis (6h), University of Trento, IT
2007-2009	Teaching Assistant - EEG and ECG signal processing (8h), Ghent University, BE

## **ORGANISATION OF SCIENTIFIC MEETINGS**

2018	Organizer, NIBS Workshop (~100 pp), University of Birmingham, UK
2016 – 2018	co-organizer ERP Bootcamp (~150 pp), University of Birmingham, UK
2012 – 2013	co-organizer ERP Bootcamp (~100 pp), University of Birmingham, UK
2012 – 2013	Organizer of the Internal Seminar Series on EEG, University of Birmingham, UK
2010 - 2011	Organizer of the Internal Seminar Series on E/MEG, University of Trento, IT
2010	co-organizer BrainProducts Workshop on EEG/fMRI, University of Trento, IT

# **INSTITUTIONAL RESPONSIBILITIES**

2022 – now	Language Centre, CIMeC delegate, University of Trento, IT
2016 - 2020	Lab manager, Visual Experience Lab, University of Birmingham, UK
2017 - 2018	Early Career Research Staff Development Group; member, University of Birmingham, UK
2009 - 2011	Responsible for the MR-compatible EEG equipment, University of Trento, IT

# **REVIEWING ACTIVITIES**

2022 – now	Guest Associate Editor, Frontiers in Psychology-Cognition
2022 – now	Review Editor, Frontiers in Cognition, Frontiers in Brain Imaging Methods, Frontiers in
	Cognitive Neuroscience

External Reviewer for scientific journals, including Annals of Biomedical Engineering, Brain Topography, Scientific Reports, Neurolmage, Cortex, IEEE Transaction in Biomedical Engineering, PLOSone, Journal of Cognitive Neuroscience, Neuropsychologia, Psychological Bulletin, Stroke

External Reviewer, Research Foundation – Flanders, BE

# PUBLIC ENGAGEMENT AND MEDIA COMMUNICATION

I frequently engage with the public by participating in science days at museums, giving seminars at public libraries and lectures at the third age university. My recent work has been reprised on national and international web-based news pages and on local TV and national radio.

# <u>Public engagement</u>

2022 Nov	Invecchiamento e neurotecnologie, University of the Third Age	
2022 Oct	Possiamo invecchiare bene? Le risposte delle neuroscienze cognitive, Public library, Ala, IT	
2022 Jul	Possiamo invecchiare bene? Le risposte delle neuroscienze cognitive, CIMeC Città, Rovereto IT	
2019 Sep	Agewell: Meet the researcher, Birmingham UK	
2019 Feb	"What our amazing brains can do an experimental take on cognition and ageing", University	
	of the third age (U3A): Scientific branch, Birmingham UK.	
2018 Sep	Dreamboat, event at IKON Gallery, Birmingham UK,	
	https://www.ikon-gallery.org/event/dreamboat	
2018 Sep	Agewell: Meet the researcher, Birmingham UK	
2017 Jul	Invited talk: Secondary School, Birmingham, UK.	
2017 Jul	Community Day, Birmingham, UK	
2017 Apr	Birmingham Neuroscience Association, Outreach Booth, Birmingham, UK	
2017 Mar	Brain Awareness Week at the Think Tank Science Museum, Birmingham, UK November 2016,	
	Good kids can spit, Library of Birmingham, Birmingham, UK "Live demo of EEG recordings"	
2013 Jan	Community Day, Birmingham, UK	
2012 Mar	Brain Awareness, Week, Birmingham, UK	
2011Nov	Researcher's Night, Trento, Italy	
Media coverage		

### M

2023 May	National radio, Obiettivo Salute, Radio 24
	https://www.radio24.ilsole24ore.com/programmi/obiettivo-salute-weekend/puntata/il-cervello-cabina-
	regia-nostra-vitadiretta-festival-economia-trento-120500-AEIEuLYD
2022 Oct	national television Trentino TV

https://trentinotv.it/video\_on\_demand.php?id\_menu=268&id\_video=66929&pag= (min 21)

#### Assecondi

2022 Oct	international online health news, Medical News Today
	https://www.medicalnewstoday.com/articles/giving-memory-a-lift-can-games-and-brain-stimulation-
	do-it?utm_source=ReadNext
2022 Nov	national online health news, QuotidianoSanita.it
	https://www.quotidianosanita.it/provincia_autonoma_trento/articolo.php?articolo_id=108591
2021 Nov	webmagazine UniTrentoMag,
	https://wehmagazine.unith.it/ricerca/90693/allenare-la-memoria-per-un-invecchiamento-attivo

#### **INVITED TALKS**

Thanks to my contribution to neuroscience and my ability to talk to varied audiences, I have been invited to give seminars on a range of topics from technical to more cognitive-oriented in physics and engineering, as well as in psychology departments and medical faculties, and user and good practice meetings.

2023	Neurocare user meeting – Neuromodulation "cognisant©: Working Memory Recovery with transcranial direct current stimulation and Cognitive Training: State of research,
	Applications, and Possibilities". Ilmenau, DE
2022	Boosting Working Memory with tES and Cognitive Training, Neuroelectrics invited web
	seminar https://www.youtube.com/watch?v=MfTcbeTEZYw&t=1s (205 views, January 2023)
2021	Combined cognitive training and non-invasive brain stimulation to counteract cognitive
	decline. 107 Congresso Nazionale di Fisica, IT
2017	Boosting Cognitive training for home therapy in the elderly. University of Birmingham, School
	of Computer Science, UK
2009	Removal of BCG artefact from EEG-fMRI data by means of CCA, Katholieke Universiteit
	Leuven, SISTA, Dep of Electrical Engineering, BE
2007	Time-frequency analysis of EEG and ERP data, Ghent University, Department of Experimental
	Psychology, BE
2007	ERPs in dyslexia, Gasthuisberg University Hospital, Leuven, BE

# **SUPERVISION**

- Post-doctoral Fellows: Bernardo Villa-Sanchez (2021-2023)
- PhD students: Rong Hu (co-supervision, 2018-2023), Zohe Zakeri (co-supervision, 2012-2013)
- Masters/Undergraduates: 14 MSc thesis; 13 undergraduate projects; 13 internships.

### **PATENTS**

I have been able to translate my research output into a patent application, on which I am named inventor (publication number WO/2022/106850) jointly submitted by the University of Birmingham and Dalhousie University, titled "IMPROVING COGNITIVE FUNCTION", currently in the PCT phase (international application No. PCT/G82021/053019).

## **MAJOR COLLABORATIONS**

- Prof. **K. Shapiro** (University of Birmingham, UK), Prof. **G. Eskes** (Dalhousie University, CA): *Combined non-invasive electric stimulation and cognitive training in healthy ageing.*
- Prof. **V. Mazza** (University of Trento, IT): Attention and memory in older adults.
- Dr D. Bissig (University of California–Davis, USA), Prof. J. Kaye (Oregon University (OHSU), USA), Prof. P. Angelelli (Universita' del Salento, IT): Remote screening for cognitive impairment.
- Prof. **A. Candelieri** (University of Milano-Bicocca, IT), *Machine learning towards individualised neuroscience*.
- Prof. **A. P. Bagshaw** (University of Birmingham, UL), Prof. **C. Porcaro** (University of Padua, IT): Advanced biomedical signal processing.

## **CAREER BREAKS**

Jan 2014 – Sept 2015 (21 months) Career break due to caring responsibility for my twin daughters. For the same reason, since October 2015, I took up a research part-time position (0.6 FTE) for six months, till April 2016.

## **COVID-19 IMPACT TO SCIENTIFIC PRODUCTIVITY**

I had to take on increased caring responsibility (home-schooling two children in primary school) while in lockdown. In-person testing had been suspended (as my research involves older adults, an at-risk population) for modalities such as EEG and tDCS. Some projects had to be suspended or cancelled.

# PUBLICATIONS IN PEER\_REVIEWED JOURNALS

- Tagliabue, C. F., Bissig, D., Kaye, J., Mazza, V., & **Assecondi**, S. (2023). Feasibility of Remote Unsupervised Cognitive Screening With SATURN in Older Adults. *Journal of Applied Gerontology*, 07334648231166894. https://doi.org/10.1177/07334648231166894
- **Assecondi**, S., Hu, R., Kroeker, J., Eskes, G., & Shapiro, K. (2022). Older adults with lower working memory capacity benefit from transcranial direct current stimulation when combined with working memory training: A preliminary study. *Frontiers in Aging Neuroscience*, 14. <a href="https://www.frontiersin.org/articles/10.3389/fnagi.2022.1009262">https://www.frontiersin.org/articles/10.3389/fnagi.2022.1009262</a>
- Perinelli, A., **Assecondi**, S., Tagliabue, C. F., & Mazza, V. (2022). Power shift and connectivity changes in healthy aging during resting-state EEG. *NeuroImage*, *256*, 119247. <a href="https://doi.org/10.1016/j.neuroimage.2022.119247">https://doi.org/10.1016/j.neuroimage.2022.119247</a>
- Tagliabue, C. F., Varesio, G., **Assecondi**, S., Vescovi, M., & Mazza, V. (2022). Age-related effects on online and offline learning in visuo-spatial working memory. *Aging, Neuropsychology, and Cognition*, 1–18. https://doi.org/10.1080/13825585.2022.2054926
- **Assecondi**, S., Villa-Sánchez, B., & Shapiro, K. (2022). Event-Related Potentials as Markers of Efficacy for Combined Working Memory Training and Transcranial Direct Current Stimulation Regimens: A Proof-of-Concept Study. *Frontiers in Systems Neuroscience*, 16. https://www.frontiersin.org/article/10.3389/fnsys.2022.837979
- **Assecondi**, S., Hu, R., Eskes, G., Pan, X., Zhou, J., & Shapiro, K. (2021). Impact of tDCS on working memory training is enhanced by strategy instructions in individuals with low working memory capacity. *Scientific Reports*, *11*(1), Article 1. <a href="https://doi.org/10.1038/s41598-021-84298-3">https://doi.org/10.1038/s41598-021-84298-3</a>
- **Assecondi**, S., Hu, R., Eskes, G., Read, M., Griffiths, C., & Shapiro, K. (2020). BRAINSTORMING: A study protocol for a randomised double-blind clinical trial to assess the impact of concurrent brain stimulation (tDCS) and working memory training on cognitive performance in Acquired Brain Injury (ABI). *BMC Psychology*, 8, 125. https://doi.org/10.1186/s40359-020-00454-w
- Tagliabue, C. F., **Assecondi**, S., Cristoforetti, G., & Mazza, V. (2020). Learning by task repetition enhances object individuation and memorization in the elderly. *Scientific Reports*, *10*(1), 19957. <a href="https://doi.org/10.1038/s41598-020-75297-x">https://doi.org/10.1038/s41598-020-75297-x</a>
- Lindh, D., Sligte, I. G., **Assecondi**, S., Shapiro, K. L., & Charest, I. (2019). Conscious perception of natural images is constrained by category-related visual features. *Nature Communications*, *10*(1), Article 1. https://doi.org/10.1038/s41467-019-12135-3
- **Assecondi**, S., Lavallee, C., Ferrari, P., & Jovicich, J. (2016). Length matters: Improved high field EEG–fMRI recordings using shorter EEG cables. *Journal of Neuroscience Methods*, *269*, 74–87. <a href="https://doi.org/10.1016/j.jneumeth.2016.05.014">https://doi.org/10.1016/j.jneumeth.2016.05.014</a>
- Rollings, D. T., **Assecondi**, S., Ostwald, D., Porcaro, C., McCorry, D., Bagary, M., Soryal, I., & Bagshaw, A. P. (2016). Early haemodynamic changes observed in patients with epilepsy, in a visual experiment and in simulations. *Clinical Neurophysiology: Official Journal of the International Federation of Clinical Neurophysiology, 127*(1), 245–253. <a href="https://doi.org/10.1016/j.clinph.2015.07.008">https://doi.org/10.1016/j.clinph.2015.07.008</a>
- **Assecondi**, S., Ostwald, D., & Bagshaw, A. P. (2015). Reliability of Information-Based Integration of EEG and fMRI Data: A Simulation Study. *Neural Computation*, 27(2), 281–305. <a href="https://doi.org/10.1162/NECO">https://doi.org/10.1162/NECO</a> a 00695
- Oldenburg, J. F. E., Roger, C., **Assecondi**, S., Verbruggen, F., & Fias, W. (2012). Repetition priming in the stop signal task: The electrophysiology of sequential effects of stopping. *Neuropsychologia*, *50*(12), 2860–2868. https://doi.org/10.1016/j.neuropsychologia.2012.08.014

- Assecondi, S., Vanderperren, K., Novitskiy, N., Ramautar, J. R., Fias, W., Staelens, S., Stiers, P., Sunaert, S., Van Huffel, S., & Lemahieu, I. (2010). Effect of the static magnetic field of the MR-scanner on ERPs: Evaluation of visual, cognitive and motor potentials. *Clinical Neurophysiology*, 121(5), 672–685. https://doi.org/10.1016/j.clinph.2009.12.032
- Vanderperren, K., De Vos, M., Ramautar, J. R., Novitskiy, N., Mennes, M., **Assecondi**, S., Vanrumste, B., Stiers, P., Van den Bergh, B. R. H., Wagemans, J., Lagae, L., Sunaert, S., & Van Huffel, S. (2010). Removal of BCG artifacts from EEG recordings inside the MR scanner: A comparison of methodological and validation-related aspects. *NeuroImage*, *50*(3), 920–934. <a href="https://doi.org/10.1016/j.neuroimage.2010.01.010">https://doi.org/10.1016/j.neuroimage.2010.01.010</a>
- Assecondi, S., Bianchi, A. M., Hallez, H., Staelens, S., Casarotto, S., Lemahieu, I., & Chiarenza, G. A. (2009). Automated identification of ERP peaks through Dynamic Time Warping: An application to developmental dyslexia. *Clinical Neurophysiology*, 120(10), 1819–1827. <a href="https://doi.org/10.1016/j.clinph.2009.06.023">https://doi.org/10.1016/j.clinph.2009.06.023</a>
- Hallez, H., De Vos, M., Vanrumste, B., Van Hese, P., **Assecondi**, S., Van Laere, K., Dupont, P., Van Paesschen, W., Van Huffel, S., & Lemahieu, I. (2009). Removing muscle and eye artifacts using blind source separation techniques in ictal EEG source imaging. *Clinical Neurophysiology: Official Journal of the International Federation of Clinical Neurophysiology*, 120(7), 1262–1272. https://doi.org/10.1016/j.clinph.2009.05.010
- **Assecondi**, S., Hallez, H., Staelens, S., Bianchi, A. M., Huiskamp, G. M., & Lemahieu, I. (2009). Removal of the ballistocardiographic artifact from EEG–fMRI data: A canonical correlation approach. *Physics in Medicine and Biology*, *54*(6), 1673–1689. <a href="https://doi.org/10.1088/0031-9155/54/6/018">https://doi.org/10.1088/0031-9155/54/6/018</a>

# **CONFERENCE PROCEEDINGS**

- **Assecondi, S.,** Moreel, L., & Mazza, V. (2023). Resting-state electroencephalographic change in response to combined tDCS and working memory training in healthy older adults. *European Conference on Visual Perception*, Cyprus.
- Moreel, L., Villa-Sánchez, B., Fornari, C., Mazza, V., & **Assecondi, S.** (2023). Working Memory Training and Transcranial Direct Current Stimulation in older adults: A resting-state EEG analysis. *Rotman Research Institute Conference Aging and the brain health*, virtual, Canada.
- Villa-Sánchez, B., Fornari, C., Mazza, V., & **Assecondi, S.** (2022). Working memory training combined with transcranial direct current stimulation in healthy older adults. *TBS CNW*, Rovereto, Italy.
- Villa-Sánchez, B., Hu, R., Eskes, G., Kroeker, J., Shapiro, K., Mazza, V., **Assecondi, S.** (2022). Exploring the effect of expectation in working memory training combined with transcranial direct current stimulation. *Learning and Plasticity meeting*, Ylläs, Lapland, Finland.
- **Assecondi, S.,** Hu, R., Eskes, G., Kroeker, J., K. Shapiro (2022). Combined tDCS and working memory training in elderly with low capacity. *Rotman Research Institute Conference Aging and the brain*, virtual, Canada.
- Tagliabue, C.F., **Assecondi, S.,** Cristoforetti, G., Mazza, V. (2020) Enhanced object individuation and memorization in the elderly after working memory practice. *VSS Annual Meeting, Journal of Vision 20 (11)*.
- **Assecondi, S.,** Hu, R., Shapiro, K. (2019) The impact of strategy on the efficacy of cognitive training combined with brain stimulation. *RAW*, Rovereto, Italy
- Tagliabue, C.F., **Assecondi, S.,** Mazza, V. (2019) Working memory practice enhances object individuation and memorization in the elderly. *European Conference on Visual Perception,* Leuven, Belgium
- **Assecondi, S.,** Hu, R., Eskes, G., Kroeker, J., Shapiro, K. (2018) The benefits of combined brain stimulation and cognitive training: a pilot study in the elderly. *TBS CNW*, Rovereto, Italy.
- **Assecondi, S.,** Shapiro, K. (2018) The benefits of combined brain stimulation and cognitive training: a pilot study. VSS Annual Meeting, Journal of Vision 18 (10), 119
- Lindh, D., **Assecondi, S.,** Sligte, I., Shapiro, K., Charest, I. (2017) Using Deep Convolutional Neural Networks to predict image-specific behavioural dynamics in the conscious access to visual objects. *13th International Conference of Cognitive Neuroscience*, Amsterdam, The Netherlands
- Lindh, D., **Assecondi, S.,** Sligte, I., Shapiro, K., Charest, I. (2017) Categorical differences in the conscious access to visual objects. *VSS Annual Meeting, Journal of Vision 17 (10), 964-964*
- Charest, I., Lindh, D., **Assecondi, S.,** Treder, M. (2017) Revealing the temporal dynamics of individually unique object representations. *VSS Annual Meeting, Journal of Vision 17 (10), 1343-1343*
- **Assecondi, S.,** Ostwald, D., Bagshaw, A.P. (2013). Characterization of information coding in simulated EEG-fMRI datasets. *International conference on Basic and Clinical multimodal Imaging (BaCl)*. Geneva, Switzerland.

- Wilson, R., Mayhew, S.D., **Assecondi, S.,** Arvanitis, T.N., Bagshaw, A.P. (2013). The Effect of Epoch Length on Functional Connectivity within the Default Mode Network. *International conference on Basic and Clinical multimodal Imaging (BaCI)*. Geneva, Switzerland.
- Ferrari, P., **Assecondi, S.**, Jovicich, J. (2013). A new methodological approach to improve safety, quality and reproducibility during concurrent EEG/fMRI: a feasibility study. *VIII Congresso nazionale Associazione Italiana di Fisica Medica*, Turin, Italy.
- **Assecondi, S.,** Ferrari, P., Jovicich, J. (2013). A compact setup to improve the quality of EEG data recorded during fMRI. VIII Congresso nazionale - Associazione Italiana di Fisica Medica, Turin, Italy.
- Zakeri, Z., **Assecondi, S.,** Bagshaw, A.P., Arvanitis, T.N. (2013) Influence of signal preprocessing on ICA-based EEG decomposition. *Proceeding of the XIII Mediterrenean Conference of Medical and Biological Engineering and Computing,* Sevilla Spain.
- Wilson, R., Mayhew, S.D., Assecondi, S., Arvanitis, T.N., Bagshaw, A.P. (2013). Functional Connectivity within the Default Mode Network: The Effect of Epoch Length. *Proceeding of the 19th Annual Meeting of the OHBM,* Seattle, USA.
- **Assecondi, S.,** Shalev, N., Mayhew, S.D., Mevorach, C., Bagshaw, A.P. (2013). Data Quality of Concurrent EEG-TMS in a Faces-Scenes Discrimination Task. *Proceeding of the 19th Annual Meeting of the OHBM*, Seattle, USA.
- **Assecondi, S.,** Ostwald, D., Bagshaw, A.P. (2013). Reliability of Information-based Integration of EEG and fMRI Data: A Simulation Study. *Proceeding of the 19th Annual Meeting of the OHB*M, Seattle, USA.
- **Assecondi, S.,** Ferrari, P., Jovicich, J., (2013). Optimization of a compact setup to improve the quality of EEG data recorded during fMRI. *Proceeding of the 20th Annual Meeting of the ISMRM*, Salt Lake City, USA.
- Assecondi, S., Bianchi, A.M., Ferrari, P., Mazza, V., Schwarzbach, J., Jovicich, J., (2010). Optimization of BCG artifact removal for single-trial EEG-fMRI recordings at 4 T. *Proceedings of the IVth European Conference of Medical Physics*, Udine, Italy.
- Assecondi, S., Bianchi, A.M., Buiatti, M., Ferrari, P., Mazza, V., Schwarzbach, J., Jovicich, J., (2010). A nonlinear template-based approach for BCG artifact removal in EEG-fMRI recordings at high fields. *Proceedings of the 16<sup>th</sup> Annual Meeting of the Organization for Human Brain Mapping*, Barcelona, Spain.
- **Assecondi, S.,** Buiatti, M., Ferrari, P., Mazza, V., Schwarzbach, J., Jovicich, J., (2010). Ballistocardiographic artifact removal from simultaneous EEG-fMRI recordings at 4 T. *ISMRM Italian Chapter*, Milan, Italy.
- Huiskamp, G., **Assecondi, S.** (2009). EEG-correlated fMRI in epilepsy. *Proceedings of the Neuromath Workshop,* Leuven, Belgium.
- Van Mierlo, P., Hallez, H., **Assecondi, S.,** Staelens, S., Carrette, E., Lemahieu, I., Boon, P. (2009). Feasibility study of the time-variant functional connectivity pattern during an epileptic seizure. *Proceedings of the 7th NFSI and ICBEM Conference*, Rome.
- Oldenburg, J., Verbruggen, F., **Assecondi, S.,** Fias, W. (2009). The locus of interference in primed inhibition: an ERP study. *Proceedings of the 16th Annual Meeting of the Cognitive Neuroscience Society*, San Francisco, USA.
- Franchin, T., Bianchi, A.M., Cannatà, V., Genovese, E., Nocchi, F., **Assecondi, S.,** Cerutti, S. (2008). A robust independent component analysis algorithm for removing ballistocardiogram artifacts from EEG and fMRI recordings. *Proceedings of the 4th European Conference of the International Federation for Medical and Biological Engineering,* Antwerp, Belgium.
- Van Mierlo, P., **Assecondi, S.**, Staelens, S., Boon, P. Lemahieu, I. (2008). Changes in connectivity patterns in the kainate model of epilepsy. *Proceedings of the 4th European Conference of the International Federation for Medical and Biological Engineering*, Antwerp, Belgium.
- **Assecondi, S.,** Hallez, H., Van Hese, P., Bianchi, A.M., Staelens, S., Boon, P. Lemahieu, I. (2008). Blind source separation to remove BCG artifact from EEG/fMRI data. *Proceedings of Liège Image Days 2008: Medical Imaging*, Liège, Belgium.
- Assecondi, S., Van Hese, P., Hallez, H., D'Asseler, Y., Lemahieu, I., Bianchi, A.M., Boon, P. (2008). Ballistocardiographic artifact removal from simultaneous EEG/FMRI recording by means of canonical correlation analysis. *Proceedings of the International Conference on Bio-inspired systems and signal processing, BIOSIGNALS*, Funchal, Portugal.

- **Assecondi, S.** (2008). Removal of ballistocardiographic artefact from EEG-fMRI data: a canonical correlation approach. *9e UGent-FirW doctoraatssymposium,* Ghent, Belgium.
- Hallez, H., Vanrumste, B., Delputte, S., Van Hese, P., **Assecondi, S.,** D'Asseler, Y., Lemahieu, I. (2007). Dipole estimation errors in EEG source localization due to not incorporating anisotropic conductivities of white matter in realistic head models. *Proceedings of 2007 joint meeting of the 6th International Symposium on Noninvasive Functional Source Imaging of the Brain and Heart and the International Conference on Functional Biomedical Imaging (NFSI-ICF), Hangzhou, China.*
- **Assecondi, S.,** Hallez, H., D'Asseler, Y., Lemahieu, I. (2007). Comparison of different auto-solid angle approximations in BEM for EEG dipole source localization. *Proceedings of the joint meeting of the 6<sup>th</sup> International Symposium on Noninvasive Functional Source Imaging of the Brain and Heart and the International Conference on Functional Biomedical Imaging (NFSI-ICF)*, Hangzhou, China.
- De Deene, Y., Baete, S., Fieremans, E., Delputte, S., Ozkalayci, B., **Assecondi, S.,** Keereman, V., Ozdemir, M., Vandenberghe, S. (2007). MR Engineering Research at Ghent University. *Abstract book first Benelux in vivo MR methods symposium*. Bruxelles, Belgium.
- **Assecondi, S.,** Casarotto, S., Bianchi, A.M., Chiarenza, G.A., D'Asseler, Y., Lemahieu, I. (2006). Automatic measurement of reading related potentials in dyslexia. *Proceedings of the IEEE/EMBS Benelux symposium, Belgian Day on Biomedical Engineering*.
- **Assecondi, S.** (2006). Co-recording of EEG and fMRI data: EEG artifact removal. *Abstracts 7eUGent-FirW doctoraatssymposium*, Ghent, Belgium.
- Bianchi, A.M., **Assecondi, S.,** Casarotto, S., Chiarenza, G.A. (2006). Computation of templates for reading related potentials by means of wavelet decomposition and dynamic time warping. Journal of Psychophysiology, *Abstracts of the XII Congress of the Italian Society of Psychophysiology*, SIPF. Vol. 20(3), Alghero, Italy.
- Bianchi, A.M., **Assecondi, S.**, Casarotto, S., Chiarenza, G.A., Cerutti, S. (2004). Multiresolution analysis of reading related potentials to calculate activation maps in dyslexia. *Proceedings of X Mediterranean Conference on Medical and Biological Engineering*, Ischia, Italy.
- **Assecondi, S.,** Bianchi, A.M., Casarotto, S., Cerutti, S., Chiarenza, G.A. (2004). Analysis of reading-related potentials by combining wavelet decomposition and dynamic time warping. *12TH WORLD CONGRESS OF PSYCHOPHYSIOLOGY*. International Journal of Psychophysiology. Vol. 54, Thessaloniki, Greece.