

# Gorka Fraga González



### **Education**

2011 – 2015 **PhD in Developmental Psychology,** University of Amsterdam, The Netherlands.

*Project:* 'Fluent reading neurocognitively decomposed: the case of dyslexia'. Longitudinal behavioral/EEG studies in 3<sup>rd</sup> grade children to examine (1) neural markers (ERPs, network analysis) of dyslexia (2) reading gains after training (3) neural changes associated with treatment response. *Promotor:* Prof. Dr. M. W. (Maurits) van der Molen. *Co-Promotors:* Dr. Jurgen Tijms, Dr. Milene Bonte (Maastricht University).

- 2010 2011 **Master in Psychology,** University of Groningen, The Netherlands. Master Thesis (30 ECTS) at the Neuroimaging Center of the University Medical Center. 'Prefrontal-temporal connectivity and emotion regulation: a DTI comparison between schizophrenia and bipolar disorder'. *Supervisor*: Dr. Branislava Curcic-Blake. *Examiner*: Prof. Dr. Andre Aleman.
- 2003 2008 **Licenciado in Psychology.** University of Deusto, Bilbao, Spain (Bachelor equivalent. Long cycle degree). Bachelor research practicum at the Psychopedagogy Department. Assisting in preparation of an lexical decision experiment using orthographic and phonological priming . Prof. Edurne Goikoetxea.

### **Publications**

Fraga González, G., Žarić, G., Tijms, J., Blomert, L., Bonte, M., & van der Molen, M. W. (2014). Brain-potential analysis of visual word recognition in dyslexics and typically reading children. Frontiers in Human Neuroscience, 8(June), 474.

Žarić, G., **Fraga González, G.**, Tijms, J., van der Molen, M. W., Blomert, L., & Bonte, M. (2014). Reduced Neural Integration of Letters and Speech Sounds in Dyslexic Children Scales with Individual Differences in Reading Fluency. *PloS one*, 9(10).

Submitted **Fraga González, G.**, Tijms, J.,G., Žarić, G., Bonte, M., Blomert, L., & van der Molen, M. W. (*under review*). The beneficial effects of training letter-speech sound integration on reading fluency in children with dyslexia.

**Fraga González, G.**, Žarić, G., Tijms, J., Blomert, L., Bonte, M., & van der Molen, M. W. (*submitted*). Visual ERP Changes in Dyslexia Associated with a Letter-Speech Sound Reading Training.

**Fraga González, G.**, van der Molen, M.J.W., G., Žarić, G., Bonte, M., Tijms, J., Blomert, L., Stam, C.J., Van der Molen, M.W. (*submitted*). Graph Analysis of EEG Resting State Functional Networks in Dyslexic and Typically Reading Children.

Žarić, G., **Fraga González, G**., Tijms, J., van der Molen, M., Blomert, L., and Bonte, M. (*in revision*) Crossmodal deficit in dyslexic children: practice affects the neural timing of letter-speech sound integration.

### **Presentations**

- Fraga González, G., van der Molen, M.J.W., G., Žarić, G., Bonte, M., Tijms, J., Blomert, L., Stam, C.J., Van der Molen, M.W. (2015, March). Graph Analysis of EEG Resting State Functional Networks in Dyslexic and Typically Reading Children. *Invited presentation at the Department of Clinical Neuropsychology and MEG Center, VU University Medical Center, Amsterdam, The Netherlands.*
- Fraga González, G., Žarić, G., Bonte, M., Tijms, J., Blomert, L., and Van der Molen, M. (2014, July). Letter-speech sounds intervention for children with dyslexia: reading fluency gains and neural changes in visual word processing. Oral presentation at the Twenty-First Annual Meeting of the Society for the Scientific Study of Reading (SSSR), Santa Fe, NM, USA.
- Fraga González, G., Žarić, G., Bonte, M., Tijms, J., Blomert, L., and Van der Molen, M. (2014, June). Letter-speech sounds intervention for children with dyslexia: reading fluency gains and neural changes in visual word processing. Elevator Pitch Talk at the NIHC Health Pillar Meeting in Utrecht, the Netherlands.
- Fraga González, G., Žarić, G., Bonte, M., Tijms, J., Blomert, L., and Van der Molen, M. (2014, May) Reading fluency neurocognitively decomposed: the case of dyslexia. *Invited presentation at the University of Jyväskylä, Jyväskylä, Finland*.
- Fraga González, G., Žarić, G., Bonte, M., Blomert, L., Tijms, J., & van der Molen, M. W. (2013, December). Brain-potential analysis of visual word recognition in dyslexics and typically reading children. *Oral presentation at the opening symposium Rudolf Berlin Center, Amsterdam, the Netherlands*.
- Fraga González, G., Žarić, G., Bonte, M., Tijms, J., Blomert, L., Van der Molen, M.W (2013, February). Reading fluency neurocognitively decomposed: the case of dyslexia. *Elevator Pitch talk at the course 'From Neuroanatomy to Psychopathology' organized by the School for Mental Health and Neuroscience, Maastricht University.*

#### **Posters**

Submitted

- Fraga González, G., van der Molen, M.J.W., G., Žarić, G., Bonte, M., Tijms, J., Blomert, L., Stam, C.J., Van der Molen, M.W. (2015, June). Graph Analysis of EEG Resting State Functional Networks in Dyslexic and Typically Reading Children. *Poster presentation at the annual conference of the Organization for Human Brain Mapping (OHBM), Honolulu, Hawaii, USA*
- Žarić, G., **Fraga González, G.**, Tijms, J., Van der Molen, M., Blomert, L., and Bonte, M. (2014). Failure of letter-speech sound integration as a basis of reading dysfluency in dyslexia. *Poster presented at the Society of Applied Neurosciences (SAN) meeting, Utrecht, NL*
- Žarić, G., **Fraga González, G.**, Tijms, J., Van der Molen, M., Blomert, L., and Bonte, M. (2013, December). Failure of letter-speech sound integration as a basis of reading dysfluency in dyslexia. *Poster presented at the Opening symposium Rudolf Berlin Center, Amsterdam, NL*
- Fraga González, G., Žarić, G., Bonte, M., Blomert, L., Tijms, J., & van der Molen, M. W. (2013, July). Differences in visual processing of printed words in dyslectic children. *Poster presented at the Mid-year Meeting of the International Neuropsychological Society in Amsterdam, the Netherlands*.
- Fraga González, G., Žarić, G., Bonte, M., Blomert, L., Tijms, J., Van der Molen, M. (2013, May). Visual specialization for words in dyslectic and typically reading children. *Poster presented at the International Workshop on Reading and Developmental Dyslexia, San Sebastián, Spain.*

### **Teaching experience**

- 2015 **Bachelor project (psychology).** *University of Amsterdam, The Netherlands.* Supervision of 4 students in writing a research report. Students also performed behavioral assessments in schools as part of a project on 'bibliotherapy' with the IWAL institute.
- Bachelor thesis (psychology). *University of Amsterdam, The Netherlands.* Supervision of 2 students in writing a literature review on remediation studies of dyslexia.
- 2013, 2014 **Bachelor miniscripties (psychobiology).** *University of Amsterdam, The Netherlands*. Supervision of 8 students in writing a brief literature review ('miniscripties').
- 2012 **Master thesis (psychology).** *University of Amsterdam, The Netherlands*. Supervision of 2 theses of students that participated in EEG data collection with children, pre-processed and analyzed data.
- Bachelor thesis (psychobiology). *University of Amsterdam, The Netherlands*. Supervision of 3 students that participated in EEG data collection with children, pre-processed and analyzed data.

### **Organizational experience**

Organizing committee of NIHC 'Health Pillar' meeting. Utrecht, The Netherlands (June 16<sup>th</sup>). Assisting in organization of the 'Innovative Program 2' session (invitation of speakers, identifying stakeholders and keynote speakers, elaboration of the event program details).

### **Further Education and Training**

- 2014 **MEG/EEG Summer school.** (25<sup>th</sup> 29<sup>th</sup> August). *Jyväskylä Centre for Interdisciplinary Brain Resesarch, University of Jyväskylä, Finland.*
- Analyzing Neural Time Series Data (27<sup>th</sup>, 29<sup>th</sup>, 31<sup>st</sup> October). *Organized by EPOS graduate education network, the Netherlands.*
- 2013 **Cognitive electrophysiological methods** (5<sup>th</sup> February 28<sup>th</sup> March). *Organized by EPOS graduate education network, the Netherlands*. Advanced processing and analysis of MEG and EEG data
- From human neuroanatomy to psychopathology (25<sup>th</sup>-28<sup>th</sup> February). School for Mental Health and Neuroscience, Maastricht University, The Netherlands.
- 2011 **FMRI Course.** Department of Neuroscience/BCN Neuroimaging Centre of the University Medical Center Groningen.
- 2009 Language Teaching to Adults (22<sup>nd</sup> June 3<sup>rd</sup> July). *London, UK.* Intensive course of Goldsmith College of London in cooperation with Instituto Cervantes.
- 2008 **School of Psychology José Germain . Psychology on Adaptation Processes** (25<sup>th</sup> -29<sup>th</sup> August). *Menéndez Pelayo International University. Santander, Spain.*

### **Skills**

#### Personal skills

- Good team player and experienced working in multicultural and multidisciplinary environments
- Flexible and experienced in a variety of analysis methods; behavioral and neuroimaging (EEG, DTI)

#### Computer skills

- Operating systems Windows, Linux, MacOs
- MS Office Suite
- SPSS, R
- MATLAB
- EEG analysis software: Brain Vision Analyzer, EEGlab (Matlab toolbox), Brainwave
- MRI analysis software: MRIcro, MRIcron, FSL
- Other: Presentation, E-Prime; word listing databases (Buscapalabras, Lexin, CELEX)
  Gimp (photo editor)

#### Languages

- Spanish (native speaker)
- English (proficient, Academic IELTS 7.5)
- Dutch (intermediate level course at University of Amsterdam)

## **Professional Memberships**

- Society for the Scientific Study of Reading (SSSR)
- Amsterdam Brain & Cognition priority program
- Society for Psychophysiological Research (SPR)
- Organization for Human Brain Mapping (OHBM)

# **Further Experience**

- Youth in action training Course 'Outside EU is Europe' (1st -7th May). *Craiova, Romania*. Course on European Citizenship Funded by a Youth in Action Program.
- European Voluntary Service. Stichting Kwintes, Almere, The Netherlands. A 12-month programme funded by the European Commission. Assisting day activity center for people with long term social or psychological problems.
- 2005 **Home-care Cognitive Stimulation.** Red Cross Centre (Pausoka), Bilbao, Spain. 3-month internship. Face-to-face cognitive rehabilitation sessions with patients with mild dementia or early stages of Alzheimer's disease.