GIULIO G.A. SEVERIJNEN, PHD

Postdoctoral researcher
Basque Center on Cognition, Brain and Language ⋄ Donostia/San Sebastián, Spain
g.severijnen@bcbl.eu ⋄ https://giuliosev.github.io

EMPLOYMENT

Postdoctoral researcher 2026-current
Basque Center on Cognition, Brain and Language, Donostia/San Sebastián, Spain
PI: Dr. Efthymia Kapnoula
Topics: Perceptual learning; Speech perception gradiency; Cognitive load and pupillometry

Postdoctoral researcher 2024-2026
International School for Advanced Studies (SISSA) & Università di Pavia, Italy
PI: Prof. Davide Crepaldi
Topics: Neural substrates of statistical learning and reading

EDUCATION

Ph.D., Psycholinguistics (cum laude) 2020-2024
Donders Institute for Brain, Cognition, and Behaviour & Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands
Thesis title:A blessing in disguise: How prosodic variability challenges but also aids successful speech perception
Promotor: Prof. James M. McQueen
Co-promotors: Dr. Hans Rutger Bosker & Dr. Ashley G. Lewis

MSc Cognitive Neuroscience (cum laude) 2018-2020
Radboud University Nijmegen, The Netherlands
Thesis title: The role of talker-specific prosody in predictive speech perception
Supervisors: Dr. Hans Rutger Bosker, Dr. Vitoria Piai, & Prof. James M. McQueen

BSc Psychology 2013-2017
Radboud University Nijmegen, The Netherlands
Thesis title: Incidental learning of a new language: The influence of attention and multilingualism
Supervisors: Prof. Kristin M. Lemhöfer

RESEARCH EXPERIENCE

Research Internship 2019
Donders Institute for Brain, Cognition, and Behaviour, Nijmegen, The Netherlands
PI: Prof. Ton Dijkstra
Topic: Computational modeling of multilingual speech perception

Student assistant 2018-2020
Donders Institute for Brain, Cognition, and Behaviour, Nijmegen, The Netherlands
PI: Prof. Ton Dijkstra
Topic: Several topics within multilingual language processing such as idiomatic second language acquisition and processing of cognates in bilinguals.

Research Internship 2018
Centre for Language studies & Donders Institute for Brain, Cognition, and Behaviour, Nijmegen, The Netherlands
PI: Prof. Mirjam.E. Broersma & Prof. James.M. McQueen
Topic: Error-based phonological learning

Research Internship 2018
Centre for Language studies, Nijmegen, The Netherlands
PI: Dr. Laura Speed & Prof. Asifa. Majid
Topic: The role of language in cross-modal odor-color associations

Research Internship 2017-2018
Donders Institute for Brain, Cognition, and Behaviour, Nijmegen, The Netherlands
PI: Prof. Kristin M. Lemhöfer
Topic: Second language attrition

RESEARCH PUBLICATIONS

Published articles (** indicates student project)

[1] **Severijnen**, **G. G. A.**, Bosker, H. R., McQueen, J. M., (2025). Is rate-dependent perception affected by linguistic information about the intended syllable rate? *Psychonomic Bulletin & Review*. https://doi.org/10.3758/s13423-025-02746-x

[2] Henry, M. J., Obleser, J., Crusey, M. R., Fuller, E. R., Lee, Y. S., Meyer, M., Acosta, E. A. M., Van Hedger, S. C., Inbar, M., Oderbolz, C., Dunham, S. A., Anankul, Y., Sabo, L. E., Keitel, C., Maddox, R. K., Mehl, K., Aslan, G., Martens, P. A., Sauppe, S., Horovitz, M., Kinghorn, E. E., Koukouvinis, S., Bosker, H. R., Huviyetli, M., Leung, C., Symons, A. E., Strauß, A., Chait, M., Hu, M., Eulitz, C., Salagovic, C. A., Davis, C., **Severijnen**, **G. G. A.**, Kosachenko, A. I., Alain, C., Kim, J., Grahn, J. A., Sidhu, R. K., Megighian, C., Butler, B. E., Sears, D. R. W., Herrmann, B., Griffiths, M. L., Landau, A. N., Razin, R., Grassi, M., Levitsky, A., Holt, L. L., Belfi, A. M., Stewart, H. J., Shinn-Cunningham, B. G., Gomez, C., Brookes, F., Smith, E. D., Axler, E., Bakardjian, K., Hochstrasser, D., Guiotto Nai Fovino, L., Tune, S., Pavlov, Y. G., Lee, K. A., Xavier, A. G., Keitel, A., Rogers, C. S., Maltseva, A., Strauss, J. L., Lodol, F. F., Arsiwala, N., Peelle, J. E., (2025). How strong is the rhythm of perception? A registered replication of Hickok *et al* . (2015). *Royal Society Open Science*, *12*(6), 220497. https://doi.org/10.1098/rsos.220497

[3] **Severijnen**, **G. G. A.**, (2025). *A blessing in disguise: How prosodic variability challenges but also aids succesful speech perception* [Doctoral dissertation, Radboud University Nijmegen]. https://repository.ubn.ru.nl/handle/2066/315703

[4] ****Severijnen**, **G. G. A.**, Gärtner, V. M., Walther, R. F., McQueen, J. M., (2024). Talker-specific perceptual learning about lexical stress: Stability over time. *Proceedings of Speech Prosody 2024*, 657–661. https://doi.org/10.21437/SpeechProsody.2024-133

[5] **Severijnen**, **G. G. A.**, Bosker, H. R., McQueen, J. M., (2024). Your "VOORnaam" is not my "VOORnaam": An acoustic analysis of individual talker differences in word stress in Dutch. *Journal of Phonetics*, *103*, 101296. https://doi.org/10.1016/j.wocn.2024.101296

[6] **Severijnen**, **G. G. A.**, Bosker, H. R., McQueen, J. M., (2023). Syllable rate drives rate normalization, but is not the only factor. In R. Skarnitzl & J. Violín (Eds.), *Proceedings of the 20th International Congress of the Phonetic Sciences (ICPhS 2023)* (pp. 32–36).

[7] **Severijnen**, **G. G. A.**, Di Dona, G., Bosker, H. R., McQueen, J. M., (2023). Tracking talker-specific cues to lexical stress: Evidence from perceptual learning. *Journal of Experimental Psychology: Human Perception and Performance*, *49*(4), 549–565. https://doi.org/10.1037/xhp0001105

[8] **Severijnen**, **G.**, Bosker, H. R., McQueen, J., (2022). Acoustic correlates of Dutch lexical stress re-examined: Spectral tilt is not always more reliable than intensity. In S. Frota, M. Cruz, & M. Vigário (Eds.), *Proceedings of Speech Prosody 2022* (pp. 278–282). https://doi.org/10.21437/SpeechProsody.2022-57

[9] Muntendam, A., Van Rijswijk, R., **Severijnen**, **G.**, Dijkstra, T., (2022). The role of stress position in bilingual auditory word recognition: Cognate processing in Turkish and Dutch. *Bilingualism: Language and Cognition*, *25*(4), 679–690. https://doi.org/10.1017/S1366728922000037

[10] **Severijnen**, **G. G. A.**, Bosker, H. R., Piai, V., McQueen, J. M., (2021). Listeners track talker-specific prosody to deal with talker-variability. *Brain Research*, *1769*. https://doi.org/10.1016/j.brainres.2021.147605

Preprints

[1] **Severijnen**, **G. G. A.**, Crepaldi, D., (2026). A unified mechanism for statistical learning? Evidence from multimodal integration during learning. *PsyArXiv Preprints*. https://doi.org/10.31234/osf.io/qwbup_v1

TALKS AND PRESENTATIONS

Invited talks

[1] **Severijnen**, **G. G. A.**, (2026). *Turning REcord into reCORD: Talker-specific perceptual learning about lexical stress* (Invited talk). Invited talk at WASPER workshop, Nijmegen, The Netherlands.

[2] **Severijnen**, **G. G. A.**, (2026). *A blessing in disguise: How prosodic variability challenges but also aids succesful speech perception* (Invited talk). Invited talk at de Grote Taaldag, Utrecht, The Netherlands.

[3] **Severijnen**, **G. G. A.**, (2025). *From INsight to in SIGHT: Understanding prosodic adaptation in speech perception* (Invited talk). Invited talk at the Faculty of Humanities, Leiden University, The Netherlands.

[4] **Severijnen**, **G. G. A.**, (2024). *Prosodic variability, friend or foe?* (Invited talk). Invited talk at MPI for Psycholinguistics, Nijmegen, The Netherlands.

[5] **Severijnen**, **G. G. A.**, (2024). *Prosodic variability not only challenges, but also contributes to successful speech perception.* (Invited talk). Invited talk at the Department of Linguistics, Potsdam.

[6] **Severijnen**, **G. G. A.**, Di Dona, G., (2021). *Listeners deal with prosodic talker variability through perceptual learning* (Invited talk). Invited talk at the Online meeting, University of Rochester.

Conference presentations and posters (** indicates student presentation)

[1] **Stamenkovic, D., Zhou, H., **Severijnen**, **G. G. A.**, Lippi, E., Bogaerts, L., Crepaldi, D., (2026). *Individual Differences in Reflection-Based and Processing-Based Statistical Learning across Modalities*. Presentation at XXXII Conference of the Italian Association of Psychology – Experimental Section, Venezia, Italy.

[2] **Severijnen**, **G. G. A.**, Crepaldi, D., (2026). *A unified mechanism of statistical learning? Evidence from cross-modal integration during learning* (Poster). Poster at international Advances in Statistical Learning, Donostia-San Sebastián, Spain.

[3] **Severijnen**, **G. G. A.**, Crepaldi, D., (2025). *A unified mechanism of statistical learning? Evidence from cross-modal integration during learning* (Poster). Poster at the NVP Winter conference 2025, Egmond aan Zee, The Netherlands.

[4] **Severijnen**, **G. G. A.**, Crepaldi, D., (2025). *A unified mechanism of statistical learning? Evidence from cross-modal integration during learning* (Oral presentation). Presentation at the 24th biennial conference of the European Society for Cognitive Psychology (ESCOP 2025), Sheffield, UK.

[5] **Kapp, S., **Severijnen**, **G. G. A.**, Hanulíková, Bosker, H. R., (2024). *Within speaker rate variability limits habitual speech rate tracking*. Presentation at the 187th meeting of the Acoustical Society of America, Virtual meeting.

[6] **Severijnen**, **G. G. A.**, Gärtner, V., Walther, R., McQueen, J. M., (2024). *Perceptual learning about lexical stress: Stability over time* (Oral presentation). Presentation at the 12th international conference on Speech Prosody (Speech Prosody 2024), Leiden, The Netherlands.

[7] **Severijnen**, **G. G. A.**, Bosker, H. R., McQueen, J. M., (2023). *Listeners prioritize acoustic information over orthographic information in rate normalization* (Poster). Poster at Architectures and Mechanisms for Language Processing (AMLaP) 2023, Donostia-San Sebastián, Spain.

[8] **Severijnen**, **G. G. A.**, Bosker, H. R., McQueen, J. M., (2023). *Syllable rate drives rate normalization, but is not the only factor* (Poster). Poster at the 20th International Congress of the Phonetic Sciences (ICPhS 2023), Prague, Czech Republic.

[9] **Severijnen**, **G. G. A.**, Bosker, H. R., McQueen, J. M., (2023). *Individual differences in lexical stress in Dutch: An examination of cue weighting in production* (Oral presentation). Presentation at Phonetics and Phonology in Europe 2023 (PaPe 2023), Nijmegen, The Netherlands.

[10] **Severijnen**, **G. G. A.**, Bosker, H. R., McQueen, J. M., (2022). *How do "VOORnaam" and "voorNAAM" differ between talkers? A corpus analysis of individual talker differences in lexical stress in Dutch* (Poster). Poster at the 18th conference on Laboratory Phonology (LabPhon18), Virtual meeting.

[11] **Severijnen**, **G. G. A.**, Bosker, H. R., McQueen, J. M., (2022). *Acoustic correlates of Dutch lexical stress re-examined: Spectral tilt is not always more reliable than intensity* (Oral presentation). Presentation at the 11th international conference on Speech Prosody (Speech Prosody 2022), Lisbon, Portugal.

[12] **Severijnen**, **G. G. A.**, Bosker, H. R., McQueen, J. M., (2021). *Jouw "voornaam" is niet mijn "voornaam": An acoustic analysis of individual talker differences in producing lexical stress in Dutch* (Oral presentation). Presentation at the Dag van de Fonetiek 2021, Virtual meeting.

[13] **Severijnen**, **G. G. A.**, Bosker, H. R., McQueen, J. M., (2021). *Listeners deal with prosodic talker variability through perceptual learning* (Poster). Poster at the 62nd Annual Meeting of the Psychonomic Society, Virtual meeting.

[14] **Severijnen**, **G. G. A.**, Bosker, H. R., Piai, V., McQueen, J. M., (2020). *The role of talker-specific prosody in predictive speech perception* (Oral presentation). Presentation at the Dag van de Fonetiek 2020, Virtual meeting.

[15] **Severijnen**, **G. G. A.**, Bosker, H. R., Piai, V., McQueen, J. M., (2020). *The role of talker-specific prosody in predictive speech perception* (Poster). Poster at the 26th Architectures and Mechanisms for Language Processing Conference (AMLaP 2020), Virtual meeting.

GRANTS AND RECOGNITION

NWO Rubicon grant 2026-2028
Title: The cognitive machinery behind segmental and prosodic perceptual learning
Funding Agency: Dutch Research Council (NWO)
Funding: €152.604
PI: Dr. Giulio G.A. Severijnen; Co-PI: Dr. Efthymia Kapnoula & Prof. Arthur G. Samuel

Marie Sklodowska-Curie Actions Seal of Excellence 2026
European Union

Nomination Anéla/AVT PhD Dissertation Prize 2026
Top 3 best dissertations 2025
Anéla/Algemene Vereniging voor Taalwetenschap

Nomination NVP thesis award 2025
Top 5 best dissertations 2024-2025
Dutch Society for Brain and Cognition (NVP)

TEACHING EXPERIENCE

Teacher and coordinator Multilingualism, Cognition, and Neuroscience 2026-2027
Master in Cognitive Neuroscience of Language,University of the Basque Country & Basque Center on Cognition, Brain, and Language

Supervisor BSc intern 2026
Basque Center on Cognition, Brain, and Language

Co-advisor PhD student project 2025-2026
Università di Pavia

Co-supervisor MSc Erasmus+ student 2025-2026
International School for Advanced Studies & Donders Institute for Brain, Cognition, and Behaviour
***Continued with a PhD at the International School for Advanced Studies, Trieste, Italy*

Co-supervisor MSc student 2024-2025
Radboud University Nijmegen
***Continued with a PhD at Heidelberg University, Germany*

Obtained university teaching qualification (BKO) 2023
Radboud University Nijmegen

Co-supervisor of BSc Honours students 2022-2023
Radboud University Nijmegen

Lecturer Research Methods and Project 2022-2023
Bachelor Linguistics, Radboud University Nijmegen

Seminar teacher Phonetics 2021-2023
Bachelor Linguistics, Radboud University Nijmegen

Seminar teacher Introduction to Psychology 2020-2023
Bachelor Psychology, Radboud University Nijmegen

Seminar teacher Introduction to Brain and Cognition 2021-2023
Bachelor Psychology, Radboud University Nijmegen

Co-supervisor MSc student 2020-2021
Radboud University Nijmegen
***Continued with a PhD at the Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands*

COURSES AND WORKSHOPS

Summer school on Advanced Bayesian Statistics 2025
Statistical Methods for Linguistics and Psychology, University of Potsdam, Germany

Courses on teaching and supervision in higher education 2021-2023
Radboud University Nijmegen

Advanced MEG/EEG toolkit 2022
Donders Institute for Brain, Cognition, and Behaviour, Nijmegen

Courses on presentation and illustration skills 2021-2022
Radboud University Nijmegen

Course on open science 2021
Radboud University Nijmegen

Course on scientific writing 2021
Radboud University Nijmegen

Course on project management 2021
Radboud University Nijmegen

ACADEMIC SERVICE AND OUTREACH

CONFERENCE ORGANIZATION

Junior organization committee GESPIN conference 2022-2023
Max Planck Institute for Psycholinguistics, Nijmegen

Conference organization committee IMPRS conference 2022
Max Planck Institute for Psycholinguistics, Nijmegen

AD-HOC REVIEWER ACTIVITY

Journal reviewer (in square brackets the number of reviewed papers) 2020-present
Behaviour Research Methods [1]; Journal of Experimental Psychology: Learning, Memory, and Cognition [2]; Language and Linguistic Compass [1], Language and Speech [1], Nature Communications [1]; Language, Cognition, and Neuroscience [1]; Psychonomic Bulletin & Review [1]; Psychological Research [1]; The Journal of the Acoustical Society of America [3]

Conference submission reviewer 2022-present
GeSPiN 2023, CogSci 2024, CogSci 2025, CogSci 2026

OUTREACH, INSTITUTIONAL INVOLVEMENT, AND MEDIA COVERAGE

Interview for RTL Nieuws 2026
https://www.rtl.nl/nieuws/artikel/5649278/odido-stem-herkennen-zonder-zijn-gezicht-te-zien-hoe-moeilijk-dat

Interview Max Planck Institute for Psycholinguistics 2026
https://www.mpi.nl/blog/what-having-unique-voice-means-speech-perception

Trieste Next 2025
Trieste, Italy

SISSA for Schools 2024
SISSA, Trieste, Italy

Lab committee member 2020-2024
Donders Institute for Brain, Cognition, and Behaviour, Nijmegen

Lab support 2020-2021
Donders Institute for Brain, Cognition, and Behaviour, Nijmegen

Demo at talenfestival Drongo 2019
Nijmegen, The Netherlands

MAJOR COLLABORATIONS

Prof. James McQueen, Dr. Hans Rutger Bosker, Donders Institute for Brain, Cognition, and Behaviour. **Prof. Yiya Chen**, Leiden Univerisity. Topics: Talker-specific perceptual learning about lexical stress; Cognitive resources required for perceptual learning

Prof. Davide Crepaldi, Università di Pavia; **Dr. Linda Drijvers**, Donders Institute for Brain, Cognition, and Behaviour; **Dr. Noam Siegelman**, Hebrew University of Jerusalem, Topics: Neurocognitive mechanisms of statistical learning; individual differences in statistical learning, statistical learning in children

Dr. Efthymia Kapnoula, Basque Center on Cognition, Brain and Language. Topics: Perceptual learning; Speech perception gradiency; Cognitive resources and pupillometry

Prof. Roberto Bottini, Dr. Federica Sigismondi, Dr. Giuliano Giari, CiMeC, University of Trento; **Dr. Yamil Vidal**, Donders Institute for Brain, Cognition, and Behaviour. Topics: Neural substrates of reading

ManyLanguages network. Topic: ManyTones, collaborative project related to the development of tones across languages

SKILLS

Research methods
In-house and online behavioural experiments (speech perception and speech production), EEG, MEG, fMRI

Experiment programming
Neurobs Presentation, Python/Psychopy, Psychtoolbox, Gorilla, JsPsych

Data analysis
R, MATLAB, Fieldtrip toolbox, BrainVision Analyzer, SPM

Speech editing
Praat, Audacity

REFERENCES