# Simon Gorin

PhD · Postdoctoral researcher in Psychological Science

Belgian • 11<sup>th</sup> June 1989

Boulevard du Pont d'Arve 40, 1205 Genève, Switzerland (Office)



# Profile\_

Good skills learning, adaptation capacities and ability to deal with new challenges

Developed creativity, self-starter and flexible

Interests in team working, energetic and good leadership skills

Problem-solver, methodical and reliable

# **Positions**

**Research Fellow** 

**Doctoral Researcher** 

### **Postdoctoral Researcher and Teaching Assistant**

DEVELOPMENTAL COGNITIVE PSYCHOLOGY RESEARCH UNIT (PROF. P. BARROUILLET) | UNIVERSITY OF GENEVA

Switzerland

Sep. 2017-ongoing

Lecturer

Switzerland

FACULTY OF SOCIAL AND POLITICAL SCIENCES | UNIVERSITY OF LAUSANNE

Jun. 2017-Aug. 2017

Oct. 2012-May 2017

Aug. 2019-ongoing

PSYCHOLOGY AND NEUROSCIENCE OF COGNITION RESEARCH UNIT (PROF. S. MAJERUS) | UNIVERSITY OF LIÈGE

Belgium

PSYCHOLOGY AND NEUROSCIENCE OF COGNITION RESEARCH UNIT (PROF. S. MAJERUS) | UNIVERSITY OF LIÈGE

Belgium

# **Teaching experience**

### Seminar on Elaboration of a Research Project: Music Cognition

2019-2020

BACHELOR LEVEL (6 ECTS; 56H) | UNIVERSITY OF LAUSANNE | FACULTY OF SOCIAL AND POLITICAL SCIENCES

• Topics taught: Introduction to the psychology of music, introduction to research in psychological sciences, scientific epistemology, good practices in psychological sciences, elaborating a scientific research question, elaborating a research plan, building of a scientific bibliography

### Digital activities and their development (Main teacher: Prof. P. Barrouillet)

Spring 2019/2020

BACHELOR LEVEL (2019: 10H / 2020: 8H) | UNIVERSITY OF GENEVA | FACULTY OF PSYCHOLOGY AND EDUCATIONAL SCIENCES

• Topics taught: Numeric cognition in animals, numeric cognition in children, verbal numerical chain, quantification, operations, problem solving, dyscalculia, theories of dyscalculia

# **Education**

## PhD in Psychology

Belgium

 ${\sf Psychology} \ {\sf And} \ {\sf Neuroscience} \ {\sf of} \ {\sf Cognition} \ {\sf Research} \ {\sf Unit} \ \mid \ {\sf Faculty} \ {\sf of} \ {\sf Psychology}, {\sf Speech} \ {\sf and}$ 

Oct. 2012-Jun. 2017

LANGUAGE THERAPY, AND EDUCATION | UNIVERSITY OF LIÈGE

• Thesis title: Exploration of the cognitive processes underlying musical short-term memory

• Supervisor: Pr. Steve Majerus

### **Master of Science Degree in Psychology**

Belgium

FACULTY OF PSYCHOLOGY, SPEECH AND LANGUAGE THERAPY, AND EDUCATION | UNIVERSITY OF LIÈGE

Sep. 2010-Aug. 2012

• Thesis title: Influence of long-term memory and expertise on musical short-term memory

- Supervisor: Pr. Steve Majerus
- Achievement: Magna cum laude

FACULTY OF PSYCHOLOGY AND EDUCATION | UNIVERSITY OF MONS-HAINAUT

· Achievement: Cum laude

# Research interests\_

#### **Human memory**

Short-term and working memory; memory for speech and music; cross-domains comparisons

#### Serial order

Serial order phenomena in speech and music; relationship between serial order and rhythm; domain-general aspects; role of serial order in musical learning

#### **Musical cognition**

Musical perception; musical factors influencing memory for music; relationship between memory capacities for music and singing proficiency; relationship between musical expertise/learning and cognitive abilities

# Grants and awards

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Dec. 2	2018 <b>Reg and Molly Buck Award</b> from the Society for Education, Music and Psychology Research (SEMPRE)	£ 2500
	to support a post-doctoral research project entitled "Maintenance in musical short-term memory:	
	exploration of the role of sensorimotor processes" (in collaboration with Dr. Emma Greenspon)	
Nov.	2018 <b>Mobility grant</b> from the Swiss Academy of Humanities and Social Sciences for attenting the 59 <sup>th</sup>	CHF 440
	Annual Meeting of the Psychonomic Society, 15–18 November 2018, New-Orleans, LA, USA	
Nov. 2	2018 <b>Mobility grant</b> from the Presidence of the Psychology Section of the University of Geneva for	CHF 899
	attenting the 59 <sup>th</sup> Annual Meeting of the Psychonomic Society, 15–18 November 2018, New-Orleans,	
	LA, USA	
Jul. 2	Mobility grant from the Presidence of the Psychology Section of the University of Geneva for	CHF 1000
	attenting the Fifth European Summer School on Computational and Mathematical Modelling of	
	Cognition, 7–21 July 2018, Couches, France	
Aug.	2013 <b>Mobility grant</b> from the Fund for Scientific Research–FNRS (Belgium) for attending the <i>biennial</i>	EUR 625
	meeting of the Society for Music Perception and Cognition, 8–11 August 2013, Toronto, Canada	
Oct. 2	2012 <b>Doctoral Scholarship (4 years grant)</b> funded under a FRESH grant from the Fund for Scientific	
	Research-FNRS	
Oct. 2	2012 <b>Doctoral Scholarship (4 years grant – DECLINED)*</b> funded under a NON-FRIA grant from the	
	University of Liège	
	*The grant has been declined in January 2013 after obtaining another doctoral scholarship from the Fund for	
	Scientific Research–FNRS	
May 2	2012 <b>Best poster award</b> at the first joint international meeting of the Belgian and Spanish societies for	EUR 150
	psychological sciences (BAPS-SEPEX), 10–11 May 2012, Liège, Belgium	

# **Scientific publications**

For the manuscripts I am not listed as a first author, my contribution to the research is detailed using the *CRedit* taxonomy (see https://casrai.org/credit/).

### Peer-reviewed manuscripts

PUBLISHED

- Gorin, S., & Majerus S. (2019). Verbal and musical short-term memory: evidence for shared serial order processes? *Psychologica Belgica*, *59*(1), 177–205. 10.5334/pb.426.
- Gorin, S., Mengal, P., & Majerus, S. (2017). Temporal grouping effects in musical short-term memory. *Memory*. 6(6), 831–843. doi: 10.1080/09658211.2017.1414848.
- Gorin, S., Mengal, P., & Majerus, S. (2017). A comparison of serial order short-term memory effects across verbal and musical domains. Memory & Cognition, 46(3), 464–481. doi: 10.3758/s13421-017-0778-0.
- **Gorin, S.**, Kowialiewski, B., & Majerus, S. (2016). Domain-generality of timing based serial order processes in short-term memory: New insights from musical and verbal domains. *PLOS ONE*, *11*(12), e0168699. doi: 10.1371/journal.pone.0168699.

#### PRE-REGISTERED STUDIES

• Gorin, S., (2019). The influence of rhythm on short-term memory for serial order. *Quarterly Journal of Experimental Psychology*. Stage 1 Registered Report, date of in-principle acceptance: 22/04/2019. https://osf.io/s3tvh

#### SUBMITTED

• Barrouillet, P., **Gorin, S.**, & Camos V. (Submitted). Simple spans underestimate verbal working memory capacity. [Contribution: formal analysis, investigation, methodology, project administration, software, validation, visualization, writing (original draft)]

### Papers in conference proceedings

• Gorin, S., & Majerus, S. (2015). Common serial order processes in musical and verbal short-term memory: Evidence from novel serial order probe recognition paradigm, In J. Ginsborg, A. Lamont, M. Phillips, & S. Bramley (Eds.), *Proceedings of the Ninth Triennial Conference of the European Society for the Cognitive Sciences of Music*. Manchester, United Kingdom.

#### **Invited oral presentations**

- Gorin, S. (2019, December). Is serial order processing in working memory domain-general? A comparison between musical and verbal domains. Psycholinguistics lab seminar, University of Geneva, Geneva, Switzerland.
- Gorin, S. (2019, July). On the general laws of serial order in working memory: Ambizione project presentation. Invited presentation at the Distance Learning University, Brig, Switzerland.

#### **Oral presentations**

- **Gorin, S.** (2020, Frebruary). *Sequence learning in musical short-term memory: Exploration of the Hebb repetition effect.* Oral presentation at the 3<sup>rd</sup> Swiss Working Memory Meeting, 7 February 2020, Fribourg, Switzerland.
- Barrouillet, P., Gorin, S., & Camos, V. (2019, November). On the dual structure of verbal working memory. Oral presentation at the 60<sup>th</sup> Annual Meeting of the Psychonomic Society, 14–17 November 2019, Québec, Canada.
- Gorin, S. (2019, September). Is memory slave to the rhythm? Focus on the role of timing and temporal factors in verbal short-term memory. Oral presentation at the 21st Meeting of the European Society for Cognitive Psychology, 26 September 2019, Tenerife, Spain.
- Barrouillet, P., Camos, V., & textbfGorin, S. (2019, September). *IHow to make the phonological similarity effect disappear?* Oral presentation at the 21<sup>st</sup> Meeting of the European Society for Cognitive Psychology, 26 September 2019, Tenerife, Spain.
- **Gorin, S.** (2019, March). *The Hebb repetition effect in musical short-term memory for serial order.* Oral presentation at the 2<sup>nd</sup> Swiss Working Memory Meeting, 15 March 2019, Fribourg, Switzerland.
- Barrouillet, P., **Gorin, S.**, & Camos, V. (2018, November). *Miller's Error: Short-Term Memory Spans Do Not Measure One, but Two Capacities*. Oral presentation at the 59<sup>th</sup> Annual Meeting of the Psychonomic Society, 15–18 November 2018, New-Orleans, LA, USA.
- Barrouillet, P., **Gorin, S.**, & Camos, V. (2018, August). *Miller's error: short-term memory spans do not measure the content of a (single) memory store*. Oral presentation at the 9<sup>th</sup> European Working Memory Symposium, Pavia, Italy.
- **Gorin, S.** (2018, July). *Musical short-term memory: Using modeling techniques to explore the nature of serial order representations*. Oral presentation at the 5<sup>th</sup> European Summer School on Computational and Mathematical Modeling of Cognition, Couches, France.
- Kowialiewski, B., **Gorin, S.**, & Majerus, S. (2017, May). *Does semantic knowledge influence serial order processing in short-term memory?*Oral presentation at the annual meeting of the Belgian Association for Psychological Sciences, Brussels, Belgium.
- **Gorin, S.**, Mengal, P., & Majerus, S. (2016, September). *Short-term memory for serial order in musical and verbal domains: Comparison between musicians and nonmusicians*. Oral presentation at the 8<sup>th</sup> European Working Memory Symposium, Liège, Belgium.
- **Gorin, S.**, & Majerus, S. (2015, August). *Common serial order processes in musical and verbal short-term memory: Evidence from a novel serial order probe recognition paradigm*. Oral presentation at at the 9<sup>th</sup> triennial conference of the European Society for the Cognitive Sciences of Music, Manchester, United Kingdom.

### **Poster presentations**

- Gorin, S., Kowialiewski, B., Céspedes Ortiz, C., & Majerus, S. (2015, August). Serial temporal order information in musical and verbal short-term memory. Oral presentation at the biennial meeting of the Society for Music Perception and Cognition, Nashville, TN.
- Gorin, S., & Majerus, S. (2014, May). Domain generality of serial order in short-term memory: Evidence from musical and verbal domains. Oral presentation at the annual meeting of the Belgian Association for Psychological Sciences, Leuven, Belgium.
- Gorin, S. (2018, November). Is serial order reconstruction of tone sequences influenced by rhythmic grouping? Poster presented at the 59<sup>th</sup> Annual Meeting of the Psychonomic Society, New-Orleans, LA, USA.
- Gorin, S. (2018, August). The influence of temporal grouping on serial reconstruction of tone sequences. Poster presented at the 9<sup>th</sup> European Working Memory Symposium, Pavia, Italy.
- Kowialiewski, B., **Gorin, S.**, & Majerus, S. (2018, August). *Effects of semantic and temporal grouping on serial order processing*. Poster presented at the 9<sup>th</sup> European Working Memory Symposium, Pavia, Italy.
- **Gorin, S.** (2018, July). *On the nature of serial order mechanisms in musical short-term memory.* Poster presented at the 5<sup>th</sup> European Summer School on Computational and Mathematical Modeling of Cognition, Couches, France.
- Diongzon, V.-D., & **Gorin, S.** (2018, June). *Is temporal grouping beneficial for musical short-term memory for serial order?* Poster presented at the 3<sup>rd</sup> Jean Piaget conference: The origin of numbers, Geneva, Switzerland.
- Kowialiewski, B., **Gorin, S.**, & Majerus, S. (2017, September). Semantic similarity finally interacts with serial order processing in short-term memory. Poster presented at the 20<sup>th</sup> conference of the European Society for Cognitive Psychology, Potsdam, Germany.

- Kowialiewski, B., **Gorin, S.**, & Majerus, S. (2017, April). *La similarité sémantique influence-t-elle le traitement de l'ordre en mémoire à court terme?* Poster presented at the École Thématique TRANSMEM, Hyères, France.
- Kowialieski, B., **Gorin, S.**, & Majerus, S. (2015, May). *Can item and serial order short-term memory components be distinguished in the musical short-term memory domain?* Poster presented at the annual meeting of the Belgian Association for Psychological Sciences, Brussels, Belgium.
- Gorin, S., & Majerus, S. (2014, December). *Interaction between long-term memory and short-term memory: New evidence from the musical domain.* Poster presented at the EPOS working memory workshop, Amsterdam, The Netherlands.
- **Gorin, S.**, & Majerus, S. (2013, August). *Interactions with musical long-term memory are a critical component for musical working memory.* Poster presented at the biennial meeting of the Society for Music Perception and Cognition, Toronto, Canada.
- **Gorin, S.**, & Majerus, S. (2013, May). *Interaction between short-term and long-term memory in the musical domain: The impact of musical knowledge and musical expertise*. Poster presented at the annual meeting of the Belgian Association for Psychological Sciences, Louvain-La-Neuve, Belgium.
- Gorin, S., & Majerus, S. (2012, September). *Implicit musical sequence learning and short-term memory: Further evidence for the universality of long-term memory mechanisms in short-term memory.* Poster presented at the Lifespan Perspectives on Implicit and Explicit Learning Symposium, Brussels, Belgium.
- **Gorin, S.**, & Majerus, S. (2012, May). *The impact of implicit musical sequence learning on short-term memory for music*. Poster presented at the joint international meeting of the Belgian and Spanish societies for psychological sciences (BAPS-SEPEX), Liège, Belgium.

# **Reviewing activities**

**Ad hoc reviewer for** Experimental Psychology  $(2\times)$ 

Journal of Experimental Psychology: Learning, Memory, and Cognition (4×)

PLOS ONE (1×)

# Research supervision.

#### Research assistant

• L. Monnet (master student) | University of Geneva

Worked on a project entitled "Maintenance in musical short-term memory: exploration of the role of sensori-

Funded by a Reg and Molly Buck Award from the Society for Education, Music and Psychology Research

• I. Jacot (master student) | University of Geneva

Worked on a project entitled "Maintenance in musical short-term memory: exploration of the role of sensorimeter processes"

Funded by a Reg and Molly Buck Award from the Society for Education, Music and Psychology Research

### **Master thesis**

• A. Grillet | University of Geneva (Switzerland)

Thesis topic: The Hebb repetition effect in musical short-term memory for serial order

 $\hbox{\it Co-supervised with Prof. Pierre Barrouillet}$ 

• C. Sequeira Pinto | University of Geneva (Switzerland)

Thesis topic: The influence of rhythmic variations of processing episodes on working memory capacities Co-supervised with Prof. Pierre Barrouillet

• **S. Akaoglu** | University of Geneva (Switzerland)

Thesis topic: Temporal grouping effects in serial order reconstruction for tone sequences Co-supervised with Prof. Pierre Barrouillet

• V.-D. Diongzon | University of Geneva (Switzerland)

Thesis topic: Temporal grouping effects in serial order reconstruction for tone sequences capacities Co-supervised with Prof. Pierre Barrouillet

• P. Mengal | University of Liège (Belgium)

Thesis topic: The effect of temporal grouping in serial order short-term memory for music Co-supervised with Prof. Steve Majerus

• **S. Foveau** | University of Liège (Belgium)

Thesis topic: Musical short-term memory and implicit learning in eight years old children Co-supervised with Prof. Steve Majerus

P Publons profile

Apr.-May. 2019

Apr.-May. 2019

2018-ongoing

2018-ongoing

2018-2019

2017-2018

2015-2016

2012–2013

### Master research internship

C. Céspedes Ortiz   University of Liège (Belgium)  Topic: The influence of pitch proximity on musical short-term memory for item and serial order information: Part 2  Co-supervised with Prof. Steve Majerus	2015–2016		
<ul> <li>C. Céspedes Ortiz   University of Liège (Belgium)</li> <li>Topic: The influence of pitch proximity on musical short-term memory for item and serial order information:</li> <li>Part 1</li> <li>Co-supervised with Prof. Steve Majerus</li> </ul>	2014–2015		
B. Kowialiewski   University of Liège (Belgium)     Topic: Comparison of interfering effects on short-term memory for item and serial order information between verbal and musical domains     Co-supervised with Prof. Steve Majerus	2013-2014		
Bachelor research project			
<ul> <li>The effect of rhythmic priming on verbal serial order short-term memory (1 student, co-supervised with Prof. Pierre Barrouillet, University of Geneva, Switzerland)</li> </ul>	2018–2019		
<ul> <li>Interactions between temporal and semantic grouping effects in verbal short-term memory for serial order (2 students, co-supervised with Prof. Steve Majerus and B. Kowialiewski, University of Liège, Belgium)</li> </ul>	2016–2017		
<ul> <li>Comparison of serial order recall processes in the musical and the verbal domains (4 students, co-supervised with Prof. Steve Majerus, University of Liège, Belgium)</li> </ul>	2015–2016		
<ul> <li>Comparison of the cognitive processes involved in musical and verbal short-term memory: Part 2 (5 students, co-supervised with Prof. Steve Majerus, University of Liège, Belgium)</li> </ul>	2015–2016		
<ul> <li>Interfering effects on short-term memory for item and serial order information in verbal and mu- sical domains (1 student, co-supervised with Prof. Steve Majerus, University of Liège, Belgium)</li> </ul>	2014–2015		
<ul> <li>Comparison of the cognitive processes involved in musical and verbal short-term memory: Part 1 (4 students, co-supervised with Prof. Steve Majerus, University of Liège, Belgium)</li> </ul>	2013–2014		

# Master thesis jury member \_\_\_\_\_

**Marquis, A.,** (2016). *L'agressivité et l'exposition à un contenu violent dans les jeux vidéo chez les adolescents*, Master thesis in clinical psychology. Faculty of Pschology, Speech and Language Therapy, and Education, University of Liège, Belgium.

**Boulonnais, É.,** (2015). Effet de la métrique sur la justesse vocale et son évaluation, Master thesis in speech and language therapy. Faculty of Pschology, Speech and Language Therapy, and Education, University of Liège, Belgium.

**Hennes, E.,** (2015). *Perception de la justesse mélodique en contexte musical*, Master thesis in speech and language therapy. Faculty of Pschology, Speech and Language Therapy, and Education, University of Liège, Belgium.

**Zuba, I.,** (2015). *Définition de la justesse en contexte mélodique*, Master thesis in speech and language therapy. Faculty of Pschology, Speech and Language Therapy, and Education, University of Liège, Belgium.

# Committees in scientific conferences \_\_\_\_\_

2019	<b>Organizer</b> of a symposium entitled "Is memory slave to the rhythm? Focus on the role of timing and temporal factors in verbal short-term memory", hold during the 21 <sup>st</sup> conference of the European Society for Cognitive Psychology (ESCOP), 25–28 September	Tenerife, Spain
2018	<b>Organizing committee</b> for the 3 <sup>rd</sup> Jean Piaget Conferences "The origin of number", 28–29 June	Geneva,
		Switzerland
2016	Organizing committee for the 8 <sup>th</sup> European Working Memory Symposium (EWOMS 8) on Cognitive	Liège, Belgium
	and Neural models of Working Memory, 31 August–2 September	

# **Academic responsabilities**

Since Nov. **Secretary** of the Association of teaching and research collaborators in psychology, Faculty of

2019 Psychology and Educational Sciences, University of Geneva, Switzerland

Apr. 2019 **Delegation member** for the nomination to the position of Professor in Clinical and Handicap

 $Psychology, Faculty\ of\ Psychology\ and\ Educational\ Sciences,\ University\ of\ Geneva,\ Switzerland$ 

Oct. 2018 **Commission member** for the regularization of Dr. Tobias Brosch to the position of Associate Professor, Faculty of Psychology and Educational Sciences, University of Geneva, Switzerland

# Skills

**Modeling** Mathematical and computational modeling (elementary skills)

**R** Data computing and processing (intermediate skills)

Frequenist and Bayesian statistical analyses (intermediate skills)

Programming (elementary skills)

**Statistica** Frequentist statistical analyses (advanced skills)

**JASP** Frequentist and Bayesian statistical analyses (advanced skills)

**Python** Programming (elementary skills)

**Opensesame** Experiment presentation software (advanced skills)

Audacity High-quality typesetting software (intermediate skills)

Praat Sound processing and edition (intermediate skills)

Sound processing and analysis (elementary skills)

**Excel** Data computing and processing (advanced skills)

**Languages** French and english

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