

MAGDALENA-LUCIA DUMITRU

EMPLOYMENT

MARCH 2023 – CONTINUING

Guest researcher | University of Bergen

Department of Biological Sciences | Faculty of Mathematics and Natural Sciences

SEPTEMBER 2019 – MARCH 2023

Postdoctoral research fellow | **Associate Professor** | **Guest researcher** | University of Bergen

Department of Biological and Medical Psychology | Faculty of Psychology

OCTOBER 2016 – SEPTEMBER 2019

Postdoctoral research fellow | University of Liège

- Marie Curie FP7-PEOPLE-COFUND awarded to ML Dumitru (#600405)

OCTOBER 2015 – SEPTEMBER 2016

Postdoctoral research fellow | METU Ankara

- Marie Curie FP7-PEOPLE-IAPP awarded to the IRIS project led by Microsoft Portugal (#610986)

EDUCATION

21st APRIL 2011

Ph.D. Human Cognition and Brain Science | Macquarie University, Australia

- Thesis "Cognitive properties of conjunctions and disjunctions"

1st FEBRUARY 2004

M.A. Linguistics | State University of New York, USA

- Thesis "The role of fundamental frequency in perceiving prominence"

11th FEBRUARY 1998

M.Phil. French Linguistics | University of Bucharest, Romania

- Thesis "Stranded constituents in colloquial French"

3rd MARCH 1997

B.A French and Dutch Philology | University of Bucharest, Romania

- Thesis "The strategic function of language"

20th JUNE 1996

Drs. Dutch Studies | University of Leiden, The Netherlands

- Thesis "The strategic function of language"

PUBLICATIONS

Journal Articles

1. **Dumitru, M. L.** (2023). Brain Asymmetry is Globally Different in Males and Females: Exploring Cortical Volume, Area, Thickness, and Mean Curvature. *Cerebral Cortex* DOI 10.1093/cercor/bhad396
2. **Dumitru, M. L.**, Korbacher, M., & Bartsch, H. Male and Female Brain Coherence Models of Cognitive Performance and Psychopathology. | bioRxiv doi.org/10.1101/2022.09.28.509939 | **2022**

3. Kazimierczak, K., Craven, A. R., Erland, L., Specht, K., **Dumitru, M. L.**, Sandoy, L. B., & Hugdahl, K. (2022). Combined fMRI Region- and Network-Analysis Reveal New Insights of Top-Down Modulation of Bottom-Up Processes in Auditory Laterality. *Frontiers in Behavioral Neuroscience*
4. **Dumitru, M. L.**, & Joergensen, G. H. Thought extramission: The eyes project conceptual maps at close distance. bioRxiv doi.org/10.1101/2021.08.18.456814 | 2021
5. **Dumitru, M. L.**, & Joergensen, G. H. (2018). Logical connectives modulate attention to simulations evoked by the constituents they link together. *Frontiers in Psychology*, 08/2018; 6. DOI: 10.3389/fpsyg.2018.01358
6. **Dumitru, M. L.** (2016). Gestalt-like representations hijack chunk-and-pass processing. *Behavioral and Brain Sciences*. DOI: 10.1017/S0140525X15000758
7. **Dumitru, M. L.**, & Joergensen, G.H. (2016). Gestalt reasoning with conjunctions and disjunctions. *PLoS ONE* 11(3): e0151774. DOI: 10.1371/journal.pone.0151774
8. Pasqualotto, A., **Dumitru, M. L.**, & Myachykov, A. (2016). Editorial: Multisensory Integration: Brain, Body, and World. *Frontiers in Psychology*, 6:2046. DOI: 10.3389/fpsyg.2015.02046
9. **Dumitru, M. L.** (2015). Coherence across consciousness levels: Symmetric visual displays spare working memory resources. *Consciousness and Cognition*, 38, 139-149. DOI: 10.1016/j.concog.2015.10.007
10. **Dumitru, M. L.**, & Joergensen, G. H. (2015). Similarity judgments of same-category object representations: Effects of physical size, manipulability, and word frequency. *Visual Cognition*, 23 (7), 855-859. DOI: 10.1080/13506285.2015.1093242
11. **Dumitru, M. L.**, & Joergensen, G. H. (2015). Effects of word-evoked object size on covert numerosity estimations. *Frontiers in Psychology*, 08/2015; 6. DOI: 10.3389/fpsyg.2015.00876
12. **Dumitru, M. L.** (2014). Moving stimuli guide retrieval and (in) validation of coordination simulations. *Cognitive Processing*. 15 (3), 397-403. DOI: 10.1007/s10339-014- 0604-6
13. **Dumitru, M. L.**, & Taylor, A. J. (2014). Or cues knowledge of alternatives: Evidence from priming. *Scandinavian Journal of Psychology*. 55 (2), 97-101. DOI: 10.1111/sjop.12100
14. **Dumitru, M. L.**, Joergensen, G. H., Cruickshank, A. G., & Altmann, G. T. M. (2013). Language-guided visual processing affects reasoning: The role of referential and spatial anchoring. *Consciousness and Cognition*, 22 (2), 562-571. DOI: 10.1016/j.concog.2013.03.008

Books Edited

Dumitru, M. L., Pasqualotto, A., Myachykov, A., eds. (2016). Multisensory Integration: Brain, Body and the World. Lausanne: Frontiers Media. doi: 10.3389/978-2-88919-792-7

REVIEWING

Human Brain Mapping, Brain and Cognition; European Journal of Neuroscience: Mind and Language; Frontiers in Psychology; Polish Psychological Bulletin; International Journal of Psychology; Journal of Visualised Experiments (JoVE)

PROFESSIONAL AFFILIATIONS

Elected Fellow - Psychonomic Society (2016)

Ambassador - European Human Behaviour and Evolution Association (2016- 2020)

Member - Cognitive Neuroscience Society, Organization for Human Brain Mapping, Society for Psychophysiological Research, Schizophrenia International Research Society, Association for Psychological Science, Vision Sciences Society, European Association for Decision Making, Society for Judgment and Decision Making, Cognitive Science Society, Australasian Cognitive Science Society, Australasian Society for Experimental Psychology, Linguistics Association of Great Britain, Aristotelian Society.

TEACHING

2021-2022

Course convener (Emne ansvarlig) | IBMP, University of Bergen, Norway

- MAPSYK 319b Cognitive Neuroscience | **Master level**
- PSOPSYK 304 Cognitive Neuroscience | **Psychology professional**

Lecturer | IBMP, University of Bergen, Norway

- IGSIN 913 Integrated Neuroscience, module "The Neuroscience of Memory" | **PhD level**
- PSOPSYK 304 Cognitive Neuroscience, module "Cognitive Control" | **Psychology professional**
- PSOPSYK 304 Cognitive Neuroscience, module "Perception" | **Psychology professional**
- PSOPSYK 304 Cognitive Neuroscience, module "Memory" | **Psychology professional**
- PSOPSYK 303/MAPSYK 319a Biological Psychology, module "Emotions 1: Introduction and evolutionary background" | **Psychology professional/Master level**
- PSOPSYK 303/MAPSYK 319a Biological Psychology, module "Emotions 2: Brain functions, fear formation" | **Psychology professional/Master level**

2010

Lecturer | MARCCS, Western Sydney University, Australia

- Applied Cognition and Human Performance | **Bachelor level**
- Human Learning | **Bachelor level**

2007-2010

Lecturer | School of Psychology, Macquarie University, Australia

- Psycholinguistics | **Bachelor level**

1999-2004

Lecturer | Department of Linguistics and of Foreign Languages, State University of New York, USA

- Introduction to Linguistic Analysis | **Bachelor level**
- French (various levels) | **Bachelor level**

STUDENT SUPERVISION

D. S. Langedal, J. G. Arnesen, C. Arnesen | University of Bergen, Norway | 2023

Theory of Mind | **Bachelor Thesis**

25 Psychology Professional students (5 theses) | University of Bergen, Norway | 2022

Dichotic Listening

J. A. Haug | University of Bergen, Norway | 2020-2021

Brain Lateralization of Attentional Control Following Brief Meditation Training. | **Master Thesis**

J. O. S. Olsnes | University of Bergen, Norway | 2020-2021

Meditation and Gender Affect the Attentional Blink: An ERP and Bayesian Learning Analysis. | **Master Thesis**

T. M. Andersen, A. Håland, M. Svendsen | University of Bergen, Norway | 2019-2020

Personality traits and learning modulate changes in functional connectivity induced by a memory task: A graph-theoretical analysis. | **Bachelor Thesis**

J. M. Quispe | University of Liège, Belgium | 2018

Language and pictures in the working memory of young and older adults. | **Bachelor Thesis**

B. Misson | University of Liège, Belgium | 2017

The role of short-term memory during verbal comprehension in the elderly. | **Master Thesis**

M. Docquier, L. Fouarge, A. Lemmert | University of Liège, Belgium | 2016

SELECTED PEER-REVIEWED CONFERENCES AND INVITED TALKS

1. Dumitru, M. L. (2023, May). Neural Correlates of Consciousness. Invited talk by the *Brain and Consciousness* forum, Bergen, Norway.
2. Dumitru, M. L. (2022, October). Male and Female Brain Coherence Predicts Psychopathology (2022, October). Blitz session talk at the Brain Health Symposium, Trondheim, Norway.
3. Dumitru, M. L., Korbacher, M., & Bartsch, H. (2022, June). Brain Coherence Predicts Cognitive Performance and Neuropathology: Computing the Distance Index. (2022, June). Poster presented at the 28th Annual Meeting of the Organization for Human Brain Mapping OHBM (online).
4. Kazimierczak, K., Craven, A. R., Erland, L., Specht, K., Dumitru, M. L., Sandoy, L. B., & Hugdahl, K. (2022, June). Combined fMRI Region- and Network-Analysis Reveal New Insights of Top-Down Modulation of Bottom-Up Processes in Auditory Laterality. Poster presented at the 28th Annual Meeting of the Organization for Human Brain Mapping OHBM (online).
5. Dumitru, M. L., Johnsen, E., Brunvoll-Sandøy, L., Kroken, R. A., Lilleskare, L., & Hugdahl, K. (2022, April). Amygdala Symmetry Predicts Distressful Auditory Verbal Hallucinations in Schizophrenia Patients. Poster presented at the Annual Meeting of the Schizophrenia International Research Society, Florence, Italy (online).
6. Haug, J. A., Olsnes, J., & Dumitru, M. L. (2021, June). Neurophysiology of Attention Lateralization Following Brief Meditation Training. Poster presented at the 27th Annual Meeting of the Organization for Human Brain Mapping OHBM (online).
7. Olsnes, J., Haug, J. A., & Dumitru, M. L. (2021, June). Meditation and Gender Affect the Attentional Blink: An ERP and Bayesian Learning Analysis. Poster presented at the 27th Annual Meeting of the Organization for Human Brain Mapping OHBM (online).
8. Dumitru, M. L., Van Calster, L., Majerus, S., & Hugdahl, K. (2020, May). The cerebellum works across task-positive and task-negative networks. Poster presented at the 27th Meeting of the Cognitive Neuroscience Society, Boston MA, USA.
9. Dumitru, M. L. (2018, May). Covertly-induced emotional states modulate task performance. Talk given at the 3rd International Meeting of the Psychonomic Society, Amsterdam, The Netherlands.
10. Dumitru, M. L., Van Calster, L., Bouffier, M., & Majerus, S. (2018, March). Cortico-cerebellar pathways for understanding language coordination. Poster presented at the 25th Meeting of the Cognitive Neuroscience Society, Boston MA, USA.
11. Dumitru, M. L. (2017, November). Action-based language Gestalts in working memory. Talk given at the Psychonomic Society's 58th Annual Meeting, Vancouver, Canada.
12. Dumitru, M. L., Van Calster, L., Bouffier, M., & Majerus, S. (2017, September). Laterality patterns for Gestalts of language. Poster presented at the 6th Cambridge Neuroscience Biennial Symposium, Cambridge, UK.
13. Dumitru, M. L. & Joergensen, G. H. (2017, August). Groundless altruism: Why it makes sense to risk one's life for other people's money. Talk given at the 26th Meeting of the Subjective Probability, Utility, and Decision Making (SPUDM) conference, Haifa, Israel.
14. Dumitru, M. L. (2017, March). An affective account of distance estimation biases. Talk given at the 2nd International Meeting of the Association for Psychological Science, Vienna, Austria.
15. Dumitru, M. L. (2016, November). In the eye of the beholder: Affect as well as object properties impact measurement estimations. Talk given at the Psychonomic Society's 57th Annual Meeting, Boston MA, USA.
16. Dumitru, M. L. (2016, October). Affect as well as object properties impact measurement estimations. Talk given at the 1st GCPN Meeting, Brussels, Belgium.
17. Dumitru, M. L. & Joergensen, G. H. (2016, August-September). Speed of color recognition depends on Gestalt representations of cause, consequence, condition, and concession. Poster presented at the 39th edition of the European Conference on Visual Perception, Barcelona, Spain.
18. Dumitru, M. L. & Joergensen, G. H. (2016, May). Gestalt Reasoning: Perceptual compatibility effects evoked by coordination descriptions. Talk given at the 2nd Meeting of the International Psychonomic Society, Granada, Spain.

19. Dumitru, M. L. & Joergensen, G. H. (2016, May). Gestalt Reasoning Promotes Extension Errors. Poster presented at the 28th Annual Convention of the Association for Psychological Science, Chicago IL, US.
20. Dumitru, M. L., Joergensen, G. H., Harvey, S. & Harris S. (2016, April). Shared ambiguity resolution strategies promote mutual fitness of language and perceptual systems. Poster presented at the Annual Meeting of the European Human Behaviour and Evolution Association, London, UK.
21. Dumitru, M. L. & Joergensen, G. H. (2015, November). Similarity judgments of same-category object representations: Effects of physical size, manipulability, and word frequency. Talk given at the OPAM workshop, Psychonomic Society's 56th Annual Meeting, Chicago IL, USA.

GRANTS, AWARDS, AND FELLOWSHIPS

- ✓ 2019 – 2023. Postdoctoral research fellowship. Department of Biological and Medical Psychology, Faculty of Psychology, University of Bergen, Norway.
- ✓ 2016–2018. Marie Curie research fellowship. Psychology and Neuroscience of Cognition Research Unit, Department of Psychology, University of Liège, Belgium.
- ✓ 2015- 2016. Marie Curie research fellowship. METU Informatics Institute, Department of Cognitive Science, Ankara, Turkey.
- ✓ 2006-2011. Macquarie University Research Scholarship, PGRF Grant, MACCS Postgraduate Grant, Conference Travel Award, Thesis Completion Grant. Macquarie University, Australia
- ✓ 2009. Conference Participation Bursary. Aristotelian Society
- ✓ 1999-2003. Scholarship, NYS/GSEU Professional Development Award, Mark Diamond Research Fund Grant. State University of New York, USA
- ✓ 1999. Global Supplementary Grant. Open Society Foundation
- ✓ 1994-1996. Fellowship. The University of Leiden, the Netherlands
- ✓ 1992-1997. Fellowship. The University of Bucharest, Romania

CERTIFICATES AND COMMISSIONS OF TRUST

- ✓ **Co-organizer.** HBF 'Hjerne- og bevissthetsforskning' (Brain and Cognition), Bergen, Norway (2021-)
- ✓ **Certificate**, "Utrecht fMRI Course" Basics and Advanced MVPA, Den Dolder, The Netherlands, 24th – 27th October 2017.
- ✓ **Certificate**, the "Human Connectome Project Course", University of British Columbia, 19th – 23rd June 2017.
- ✓ **Certificate**, "TEDable Presentations" provided by Consulting House, Microsoft Portugal Headquarters, 30th October 2015.
- ✓ **Ambassador**, European Human Behaviour and Evolution Association, 2016-2020
- ✓ **Scientific committee member**, Cognitive and Neural Mechanisms of Human Memory conference, Cluj Napoca Romania, 17-20 May 2016
- ✓ **Co-organizer**, Macquarie Centre for Cognitive Science Seminar Series, Macquarie University, Sydney, Australia, 2008-2009.
- ✓ **Co-organizer**, Williams Syndrome conference. Macquarie University, Sydney, Australia, 2007.
- ✓ **Editor**, interactive annotated texts in Dutch and Romanian and online French language training, SUNY Buffalo, USA, 2000-2002.
- ✓ **Reviewer**, Studii si Cercetari Lingvistice of the Romanian Academy, Bucharest, 1996-1997.
- ✓ **Occasional translator** for the Royal Netherlands Embassy in Bucharest, for the Romanian Embassy in The Hague, and for Philips Lighting, 1993-1999.
- ✓ **Programming skills:** Matlab, SPM, EPrime, FreeSurfer, Conn, R, SPSS, JASP, Excel, OpenSesame, PsychoPy, Experiment Builder, Data Viewer, Praat, EMU, Audacity, Qualtrics, EEGlab, ERPlab, BrainVision Analyser.