# LARS COSTERS

## PHD STUDENT IN MEDICAL SCIENCES

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## ABOUT ME

I am passionate and motivated about improving the life of people suffering from (neurological) disease and therefore looking for a job in the world of digital health and innovation.

## SKILLS

CLINICAL TRIAL MANAGEMENT    DATA-ANALYSIS    PROGRAMMING

(GRANT) WRITING    CREATIVITY    GRAPHICAL DESIGN

## INTERESTS

NEUROLOGICAL DISEASE    HEALTH INNOVATION    BUSINESS DEVELOPMENT

## PUBLICATIONS

- **DOES INCLUDING THE FULL CVLT-II AND BVMT-R IMPROVE BICAMS? EVIDENCE FROM A BELGIAN (DUTCH) VALIDATION STUDY (2017)**
  MULTIPLE SCLEROSIS AND RELATED DISORDERS (Q1)
  *CITATIONS: 6*

- **SPATIOTEMPORAL AND SPECTRAL DYNAMICS OF MULTI-ITEM WORKING MEMORY AS REVEALED BY THE N-BACK TASK USING MEG (2019)**
  SUBMITTED TO HUMAN BRAIN MAPPING (Q1)

## EXPERIENCE

**2015 — RESEARCH INTERNSHIP**

📍 University College London – Institute of Neurology Queen Square

An evaluation of the **efficacy of hyperoxia treatment** on neurological dysfunction and structural damage in a **rodent** model of **Multiple Sclerosis (MS)**. Involved animal handling, neurological function testing, brain and spinal cord tissue handling and immunohistochemistry.

**2016 — MSC THEORETICAL AND EXPERIMENTAL PSYCHOLOGY**

📍 Ghent University

Large distinction – Specialisation in Neuroscience with with a heavy focus on **programming** (C, Matlab, R), **statistics** and **digital signal processing**.

**2016 — START OF PHD IN MEDICAL SCIENCES**

📍 Vrije Universiteit Brussel

**2017 — AWARDED FWO GRANT**

📍 Vrije Universiteit Brussel

Awarded a personal FWO research grant for a project focused on investigating the neurophysiology of working memory impairment in MS through MEG. **Coordinated magnetoencephalography (MEG) and magnetic resonance imaging (MRI) data acquisition from 105 subjects** among which 65 MS patients over the course of 1.5 years.

**2020 — PLANNED END OF PHD**

Looking for a new challenge

## CO-AUTHOR

- **ALTERED TRANSIENT BRAIN DYNAMICS IN MULTIPLE SCLEROSIS: TREATMENT OR PATHOLOGY? (2019)**
  HUMAN BRAIN MAPPING (Q1) – 3RD AUTHOR

- **DATA QUALITY SIGNIFICANTLY AFFECTS RESTING-STATE FMRI NETWORK PARAMETERS IN MULTIPLE SCLEROSIS (2019)**
  SUBMITTED TO BRAIN STRUCTURE AND FUNCTION (Q1) –
  2ND AUTHOR

## UNPUBLISHED

- **DYNAMICAL DISEASES: MODELLING THE EFFECT OF STIMULATION-BASED INTERVENTIONS ON INTRINSIC BRAIN DYNAMICS. AN APPLICATION TO EPILEPSY (2016)**
  MASTERTHESIS – LARGE DISTINCTION

- **MULTISENSORY INTEGRATION AN ADAPTIVE PROCESS? LOOKING FOR INTERSENSORY BIAS EFFECTS USING THE MCGURK EFFECT AND PIP-AND-POP TASK (2015)**
  EPO RESEARCH PROJECT MASTER DEGREE

## CONFERENCES AND TALKS

- **LINEAR ALGEBRA FOR NEUROSCIENTISTS (2018)** – 1 WEEK SUMMER SCHOOL RADBOUD UNIVERSITY NIJMEGEN (NETHERLANDS)

- **NEUROTECHNOLOGY APPLICATIONS ON AGING-RELATED DISORDERS (2018)** – 2 WEEK WINTER SCHOOL AT INTERNATIONAL SCHOOL OF NEUROTECHNOLOGY HAVANA (CUBA)

- **EUROPEAN COMMITTEE FOR TREATMENT AND RESEARCH IN MULTIPLE SCLEROSIS (2018, BERLIN)** – POSTER

- **BRAINMODES (2018, HAVANA)** – POSTER

- **INTERNATIONAL MULTIPLE SCLEROSIS COGNITION SOCIETY (2017, DUSSELDORF)** – POSTER

- **SCIENTIFIC TALKS AT NATIONAL MULTIPLE SCLEROSIS CENTER MELSBROEK AND CENTER FOR NEUROSCIENCES PHD DAY**

## MEDIA

- **INVLOED VAN VERANDERINGEN IN HERSENSTRUCTUUR EN -ACTIVITEIT OP COGNITIE IN MS** – MSEXPERT EDITION 5

- **BICAMS, EEN KORTE NEUROPSYCHOLOGISCHE TESTBATTERIJ VOOR PERSONEN MET MS** – MSEXPERT EDITION 5

## BIO

- 23/04/1993
- BORN IN VILVOORDE
- LIVING IN GHENT
- LICENSED PSYCHOLOGIST
- GOOD CLINICAL PRACTICE CERTIFICATE
- CONTACT:
  - 0499/16.00.76
  - LARSCOSTERS@GMAIL.COM

## PROGRAMMING

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|---|---|
| **MATLAB** | ● ● ● ● ● |
| **R** | ● ● ● ● |
| **PYTHON** | ● ● |
| **HTML** | ● |

## LANGUAGES

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|---|---|
| **DUTCH** | ● ● ● ● ● |
| **ENGLISH** | ● ● ● ● ● |
| **FRENCH** | ● ● ● ● |
| **GERMAN** | ● ● |

## EXTRA ACTIVITIES

- EDUCATIONAL PROGRAMME COMMISSION OF PSYCHOLOGY AT UNIVERSITY OF GHENT (2014)

- STUDENT REPRESENTATIVE FOR EXPERIMENTAL AND THEORETICAL PSYCHOLOGY AT UNIVERSITY OF GHENT (2014)

## HOBBIES

- FOUNDER AND PRESIDENT OF FUTSAL TEAM

- DESIGNING LOGO'S FOR RESEARCH LAB, PHARMACY AND FUTSAL TEAM

- ITALIAN COOKING