David Thonnard

Neuroscientist
Data-analyst

- July 26, 1985 (37) 🇧🇪
- Leuven, Belgium
- +32 498 07 56 51
- thonnard.david@gmail.com
- linkedin.com/in/Thonnard
- github.com/Thonnard/

About Me

I am a neuroscientist and data scientist with a biomedical and psychological background. For the past 8 years, I have been conducting preclinical work studying cognitive flexibility. During this period, I have also developped a wide array of statistical and data-related skills. More recently, I have been combining academia with industry.

Languages

🇳🇱 Dutch	● ● ● ● ●
🇬🇧 English	● ● ● ● ○
🇫🇷 French	● ● ● ○ ○
🇪🇸 Spanish	● ● ○ ○ ○
🇩🇪 German	● ○ ○ ○ ○

Hard Skills

⚗ Laboratory Skills

- ☑ Neurosurgical lesions
- ☑ Neurosurgical implantations
- ☑ IHC/nissl stainings
- ☑ Brain perfusion/extraction
- ☑ Injections (IP/SC/IM)
- ☑ Optogenetics
- ☑ Flowcytometry

Work Experience

currently — **Research Scientist** — UCB
In-vivo pharmacology - neurodegeneration - gene therapy

2020-2021 — **QA Analyst/Consultant** — Johnson&Johnson
Quality Assuruance in the European Distribrution Center (EDC) for Medical Devices (Johnson & Johnson) as consultant for Altran - Capgemini.

2013-2020 — **Neuroscientist** — KU Leuven - Brain and Cognition
Preclinical brain research. Main topic: cognitive flexibility. Lab of Prof. Dr. Rudi D'Hooge.

2008 — **Lab technician** — University Ghent - Dep. of Virology
Quantification of cellular immunological memory after measles vaccination through intracellular cytokine detection using flowcytometry. Lab of Prof. Dr. Geert Leroux-Roels.

Education

2022-2023 — **Advanced Master in Artificial Intelligence** — KU Leuven
Engineering and Computer Science

2014-2020 — **PhD Neuroscience** — KU Leuven
Thesis: Pharmacological mechanisms and telencephalic interactions involved in neurocognitive flexibility

2008-2013 — **Master of Science in Theoretical and Experimental Psychology** — Ghent University
Thesis: Jouw pijn is mijn pijn, maar... "Does it matter if you're black or white?".

2005-2008 — **Bachelor in Biomedic Laboratory Technology, Pharmaceutical and Biological Techniques** — University College - Ghent
Thesis: Quantification of cellular immunological memory after measles vaccination through intracellular cytokine detection.

Grants

2014 — Doctoraatsbeurs Strategisch Basisonderzoek — IWT/FWO

Conferences & Presentations

08/2017 — **European Behavioural Pharmacology Society** — Heraklion - Greece
Perseverative behaviour in low-dose MK801-treated mice

07/2017 — **RIKEN Brain Science Institute** — Tokyo - Japan
Impaired reversal learning after NMDA-induced lesions in the PFC-HC network

05/2017 — **Belgian Society for Neuroscience** — Ghent
Effect of MK801 on learning and memory

07/2016 — **Federation of European Neurosciences Societies** — Copenhagen - Denmark
Cognitive flexibility: Modulation of prefrontal-hippocampal network

Certificates and Courses

03/2020 — Introduction to SAS — FLAMES

01/2020 — Python for Machine Learning — VSC - KU Leuven

01/2020 — Python for Data Science — VSC - KU Leuven

01/2020 — Scientific Python — VSC - KU Leuven

David Thonnard

Neuroscientist
Data-analyst

Behavioural Testing

- ☑ Morris Water Maze
- ☑ T-Maze
- ☑ Rotarod
- ☑ Open Field
- ☑ Elevated Plus Maze
- ☑ Touchscreen visual discrimination
- ☑ Odor discrimination

Computer Skills

- ☑ R
- ☑ SAS
- ☑ Python
- ☑ SQL
- ☑ Stata
- ☑ SPSS
- ☑ Matlab
- ☑ C
- ☑ LaTeX

🚗 Driver's license: B (2004)

Soft Skills ----------

Leadership
Risk Management
Project Management
Communication
Problem Solving
Planning

Explorative
Analytic Mind
Personal Aspect
Critical Mind
Innovative

Date	Course	Institution
10/2019	Matlab programming introduction	VSC - KU Leuven
10/2019	Linux scripting	VSC - KU Leuven
12/2016	Non-parametric statistics	Leuven Statistics Research Centre
07/2014	FELASA C - Laboratory Animal Sciences	Biomedical Sciences - KU Leuven
03/2010	Vaccinations in the 21st century	Ghent University
02/2008	The tumor micro-environment: new insights and therapeutic perspectives	Ghent University
03/2007	Viral infections during pregnancy and in children. Disease and bio-safety in the lab	Ghent University
2007	Kjeldahl method	Ghent University
2004	Business Management	OLVL Highschool

Publications

2021 — **Effects of orbitofrontal cortex and ventral hippocampus disconnection on spatial reversal learning.**
Thonnard, D., Callaerts-Vegh, Z., D.'Hooge, R.
Neuroscience Letters, 135711 <u>DOI</u>

2020 — **Comparison between touchscreen operant chambers and water maze to detect early prefrontal dysfunction in mice.**
Van den Broeck, L., Hansquine, P., Sierksma, A., Thonnard, D., Vegh-Callaerts, Z. & D'Hooge, R.
Genes, Brain and Behavior, e12695 <u>DOI</u>

2019 — **Differential effects of post-training scopolamine on spatial and non-spatial learning tasks in mice**
Thonnard, D., Callaerts-Vegh, Z., D.'Hooge, R.
Brain Research Bulletin, 152, 52-62 <u>DOI</u>

2019 — **NMDA receptor dependence of reversal learning and the flexible use of cognitively demanding search strategies in mice**
Thonnard, D., Dreesen, E., Callaerts-Vegh, Z., D'Hooge, R.
Progress in Neuropsychopharmacology & Biological Psychiatry, 90, 235-244 <u>DOI</u>

2011 — **Oorzaken en gevolgen van een verhoogd glucose metabolisme bij kanker**
Thonnard, D., Vermeulen, S.
Tijdschrift van de Belgische Vereniging van Laboratorium Technologen, 38(1), 17-23 <u>DOI</u>

Extra-curricular Activities

Nature, Music, Books, PC, Sports, Travel