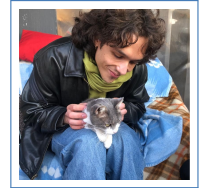


# Robert Tromm

## Curriculum vitae

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### Education

- 2021–2023 **MSc Cognitive and Clinical Neuroscience**, *Maastricht University*, 8.45/10  
Supervised by: Dr. Jan Ramaekers, Dr. Morten Kringelbach
- 2016–2020 **BS Neuroscience**, *Brandeis University*, *Cum laude*  
Supervised by: Dr. Eve Marder

### Honors and awards (partial list)

- 2024 **Usona Institute Scholarship**, *Usona Institute*
- 2024 **Polaris Fellowship**, *Entrepreneur First*
- 2023 **Usona Institute Scholarship**, *Usona Institute*
- 2020 **Justice Brandeis Scholarship**, *Brandeis University*
- 2016 **AHEPA Scholarship**, *American Hellenic Educational Progressive Association*
- 2016 **Academic and Adversity Scholarship**, *Southern Alumni Scholarship Foundation*

### Skills

- Programming MATLAB, Python, Java, C++, R, Bash, neuroimaging frameworks (SPM/FSL/FreeSurfer)
- Computational Neuroimaging analysis, whole-brain modeling, numerical simulation, information decomposition, unsupervised data analysis, artificial neural networks
- Soft skills Project management, public speaking, networking, collaboration

### Experience

#### Research

- 2024–Present **Research Engineer**, *Karalis Lab*, Paris Brain Institute, Institut du Cerveau  
Causal decoupling in neuromodulatory rhythms
- 2023 **Visiting Researcher**, *Centre for Eudaimonia and Human Flourishing*, Department of Psychiatry, University of Oxford  
**Thesis:** Changes in brain hierarchy following acute and chronic use of DMT and cannabis  
○ Analyzed changes in functional hierarchy using whole-brain modeling and information decomposition.
- 2022–2023 **Research Assistant**, *Ramaekers Lab*, Maastricht University  
fMRI preprocessing pipeline development

- 2020–2021 **Research Assistant**, *Novamind*  
Analysis of studies on emotion-focused ketamine-assisted psychotherapy in eating disorders
- 2019–2020 **Undergraduate Researcher**, *Marder Lab*, Brandeis University  
**Thesis:** Variability in homeostatic tuning rules produces diverse correlations in ion channels  
○ **Key finding:** Model neurons express variability in mRNA- and ion channel-level maximal conductance across neurons of the same cell type through differential regulation of ion channel associated mRNA transcription rates.  
○ Implemented and analyzed 2 homeostatic control mechanisms in C++ for use with Xolotl, improving performance by 3x versus the gold-standard simulator, NEURON.
- 2018–2019 **Undergraduate Researcher**, *Miller Lab*, Brandeis University  
Neuronal homeostasis, dynamical systems theory
- Professional**
- 2020–2022 **Founder and CTO**, *Psygaia*  
Educational programs for psychedelic science and therapy
- 2019–2021 **Coordinator**, *Intercollegiate Psychedelics Network*  
Research & Professional Development  
○ Organized first iteration of PsychedelX, a virtual conference and talk competition.

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## Conferences and Speaking Opportunities

- 2023 **Awareness Lectures on Psychedelic Science**, *Geneva*, Poster  
'The anarchically organised brain: changes in functional hierarchical organisation after acute and chronic use of ayahuasca and DMT'
- 2020 **PsychedelX**, *Online*, Panel moderator  
Industry leaders on working in the psychedelic industry
- 2020 **Intercollegiate Psychedelics Summit**, *Harvard University*, Organiser
- 2019 **SciFest IX**, *Brandeis University*, Poster  
Dual homeostatic mechanisms can reproduce diverse ion channel correlations

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## Workshops and Certifications

- 2024 **Mediterranean Society for the Study of Consciousness Winter School**, *Catalunya*
- 2020 **Neuromatch Academy Computational Neuroscience**, *Online*