

# Neuroimaging markers of major depressive disorder: orbitomedial prefrontal cortex and beyond

Citation for published version (APA):

Samara, Z. (2015). *Neuroimaging markers of major depressive disorder: orbitomedial prefrontal cortex and beyond*. [Doctoral Thesis, Maastricht University]. Boekenplan.  
<https://doi.org/10.26481/dis.20151106zs>

## Document status and date:

Published: 01/01/2015

## DOI:

[10.26481/dis.20151106zs](https://doi.org/10.26481/dis.20151106zs)

## Document Version:

Publisher's PDF, also known as Version of record

## Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

## General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

[www.umlib.nl/taverne-license](http://www.umlib.nl/taverne-license)

## Take down policy

If you believe that this document breaches copyright please contact us at:

[repository@maastrichtuniversity.nl](mailto:repository@maastrichtuniversity.nl)

providing details and we will investigate your claim.

Download date: 19 Apr. 2024

**Propositions Accompanying the Dissertation:  
Neuroimaging Markers of Major Depressive Disorder:  
Orbitomedial Prefrontal Cortex and beyond**

by Zoe (Zoi) Samara

1. Finding the critical unit of analysis of cortical organization and recognizing its role is crucial for unlocking the secrets of brain functioning. Parcellation methods such as the one applied here is a step towards this direction (*this thesis*).
2. Brain imaging methods have met an unprecedented development and will continue to develop very fast. When applying them, neuroscientists should be ready to heavily question and appropriately adapt concepts and paradigms about the brain and its organization which are based on extremely crude observations of the past (*this thesis*).
3. Running statistical tests and actually understanding what you are looking at are essentially two very different things. Interpreting your results is the art of recognizing the true findings given but beyond your methods limitations.
4. Psychiatric disorders are dynamic phenomena which come about as interplay between vulnerability, resilience, past life events and current concerns. The resulting heterogeneity calls for diagnostic assessments and therapeutic interventions that take into account multiple factors and perspectives instead of generic treatments.
5. The neuroimaging findings presented in the current thesis suggest that certain connectivity abnormalities are present well before the development of depressive episodes. Given that the adult brain exhibits some plasticity and that functional connectivity is-at least temporarily-modifiable, we should first establish which of these abnormalities are etiologically linked to depression and then develop preventive interventions (*this thesis*).
6. In order to develop neuroscience applications in psychiatry we have to move away from mean statistical differences between groups towards neuroimaging markers. The solution of this non-trivial problem involves among other things, adequately characterizing patient subgroups, isolating cause and effect relationships and constructing population norms.
7. Using DSM classifications to understand biological phenomena is similar to looking through a box and trying to describe the sun's shape: it's meant to fail.
8. Scientific research is as non-objective, non-perfect and endlessly fascinating as any other significant human endeavor.
9. "Sometimes research's going to hit you in the head with a brick. Don't lose faith"  
(*adapted from Steve Jobs*)