# Enhancing Neurolmaging Genetics through Meta-Analysis (ENIGMA) Obsessive Compulsive Disorder (OCD) working group

#### **ENIGMA-OCD**

# - Memorandum of Understanding -

22 December 2013

#### Introduction

Members of the ENIGMA-OCD Working Group include investigators from different centers around the world who are actively engaged in neuroimaging research and who have contributed results from primary analyses of imaging, and/or genetic data, and/or algorithm development for the purpose of meta-analysis, replication, and/or algorithm testing in a collaborative manner. The Working Group's initial effort is to demonstrate the success of collaborative, systematic neuroimaging analyses and combined imaging-genetics analyses across multiple centers to clarify the effect of OCD phenotypes and genotypes on brain structure.

The ENIGMA-OCD Working Group is expected to work collaboratively on a growing dataset of contributed results from brain phenotypes in several large samples, as much as possible in combination with genetic data. This database will likely be useful to investigators both within and outside of the OCD Working Group who may request to use parts of the dataset for secondary analyses. In addition, the OCD Working Group will likely conduct future primary analyses of different brain phenotypes, agreed in each case by contributors. This wealth of data requires (1) organization, (2) protection of authorship rights for contributors to the primary analyses, and (3) direction for future analyses.

In order to accomplish these three aims, the ENIGMA-OCD Working Group's scientific initiatives and policies will be guided and overseen by group leaders. The ENIGMA-OCD Working Group leaders are composed of a selection of principal investigators participating in the Working Group (one for each site). The ENIGMA-OCD Working Group leaders are responsible for ensuring that work is carried out in a timely manner, and within the appropriate ethical guidelines set down for research on human subjects. Part of this responsibility is to ensure that all sites have obtained approval from their local Ethics Committees, and that such assurances are updated regularly in accordance with Office for Human Research Protections (OHRP) regulations. In addition, the ENIGMA-OCD Working Group leaders will be responsible for oversight of authorship, whether a paper constitutes a Working Group Publication, and whether the scientific contributions of the sites have been correctly and fairly acknowledged in the publication.

## **Authorship and Publications**

What Constitutes a Working Group Publication?

ENIGMA-OCD Working Group publications are papers or abstracts based on investigations that: (1) rely on intellectual resources of the Working Group or (2) use data collected through the efforts of the Working Group, or (3) rely, in whole or in part, on information obtained through Working Group membership.

In agreeing to contribute data to an ENIGMA-OCD Working Group meta-analysis for a given phenotype, the members at that site also agree that they will not publish or publicize (to the media or on the Internet) the results of the meta-analyses for that phenotype prior to the publication of the Working Group meta-analysis. Prior to publication, findings may be presented at conferences after consulting in advance with the ENIGMA-OCD Working Group leaders. This consultation is designed to ensure that they comply with embargo policies of top-tier journals, protecting the interests of other Working Group members. In addition, secondary analyses based on the findings of the Working Group (for example functional imaging correlates of an OCD-related brain structure found through a meta-analysis by the ENIGMA-OCD Working Group), may not be submitted to journals for publication until after the original Working Group paper is accepted for publication. This is intended to avoid the risk of duplicate submissions that may jeopardize a Working Group publication.

Any participating site may choose to publish and present the results of brain imaging analysis for a given phenotype conducted at their own site, which does not contain analyses conducted as part of the ENIGMA-OCD Working Group. These publications *do not* constitute Working Group publications. If an ENIGMA-OCD Working Group meta-analysis for a given phenotype is proposed and a group is already engaged in a meta-analysis for that same phenotype, the site agrees to disclose their participation in the ongoing project(s) for that phenotype if they wish to participate in the ENIGMA-OCD Working Group meta-analysis. This is also intended to avoid the risk of duplicate submissions that may jeopardize a Working Group publication.

ENIGMA-OCD Working Group publications may be classified as primary or secondary publications. Primary publications of the ENIGMA-OCD Working Group are those for which a meta-analysis is conducted for the first time by the Working Group on a phenotype of interest (for example a meta-analysis of subcortical brain volumes). Secondary publications are those that rely upon data collected in primary publications (for example re-analyzing the ENIGMA-OCD Working Group data using a novel meta-analysis technique).

### Guidelines for Authorship on Primary Publications of the ENIGMA-OCD Working Group

The ENIGMA-OCD Working Group will be listed as an author on all Working Group publications, including manuscripts on which all contributing Working Group members are listed by name. The text "for the ENIGMA-OCD Working Group" will appear at the end of the author list.

Authorship credit should be based on substantial contribution to: (1) the measurement of Magnetic Resonance Imaging (MRI) phenotypes or genotypic data for a meta-analysis; (2) contributions or generation of data for replication of results obtained in the meta-analysis; (3) contributions to the conception, design, analysis and/or interpretation of the data; (4) drafting the manuscript or revising it critically for important intellectual content, and (5) final approval of the manuscript version to be published.

Based upon the level of contribution, authorship at each site may vary from one publication to another. For each discrete publication, each site PI is responsible for preparing authorship and acknowledgment lists for their site.

Authorship for all ENIGMA-OCD Working Group papers will be weighted by current effort and contribution rather than on past contribution to ENIGMA-OCD Working Group research. Working Group members will be reasonable and self-critical in their claims for authorship. If a question arises regarding the appropriateness of authorship of (a) member(s), other Working

Group members will be asked to advocate for these members in order to avoid putting members in the awkward position of having to advocate for themselves.

Guidelines for secondary analyses of and access to data collected during an ENIGMA-OCD Working Group meta-analysis

Although the data contributed to the ENIGMA-OCD Working Group consists of group-level summaries and post-estimation statistics rather than raw phenotype (and/or genotype) data, there is theoretically a minute risk of determining whether a given individual participated in a study. While the re-identification of samples requires access to the raw phenotype or genotype data of the target individual and constitutes scientific misconduct, most groups have opted to appoint a gate-keeper approach rather than allowing full public access to the results of GWAS analyses or meta-analyses. Within the ENIGMA-OCD Working Group the group leaders will act as the gate-keeper, any Working Group member wishing to access the results of meta-analyses will be asked to complete a short proposal describing (in 1-2 paragraphs) why they wish to access the results files from each group. Non-Working Group members will be asked to complete a more detailed proposal and sign the Memorandum of Understanding regarding authorship and publishing.

The ENIGMA-OCD Working Group leaders will screen proposals for scientific interest. The proposal will then be sent by e-mail to all ENIGMA-OCD Working Group members. Working Group members will have 14 days from the time of mailing to opt-out of the analysis, ask for clarification, voice concerns or objections and/or give feedback to the proposal. No site data will be shared without the consent of the PI of the site, who may opt to impose specific conditions or limitations on the use of the data. If the author of the proposal agrees to the authorship and publication policies of the ENIGMA-OCD Working Group the access request will be granted to the results files for those groups who have not opted-out of the analysis and a member of the ENIGMA-OCD Working Group leaders will be assigned as a project liaison. The ENIGMA-OCD Working Group liaison will be responsible for providing the data and answering any queries relating to the project, and providing the contributing site PIs with updates.

Manuscripts using data obtained via this mechanism will be considered secondary ENIGMA-OCD Working Group publications. We request that the 'ENIGMA-OCD Working Group' and the liaison person will be listed as co-authors. The ENIGMA-OCD Working Group on the byline will reference the PIs of each study, in addition to contributors at their site. In this way the authors contributing data to the ENIGMA-OCD Working Group will be appropriately acknowledged on any publication.

#### Genetic data

Also sites without the availability of genetic data are welcome to participate in the metaanalyses on MRI data.

#### Sharing raw data

This memorandum of understanding only concerns meta-analyses on data processed by the individual sites, and not meta-analyses on pooled raw data. A separate MOU will be signed for those sites that are willing to share raw data for meta-analyses.

#### Participation in the ENIGMA-OCD Working group

#### Admitting New Sites as Members

Success of the first meta-analysis is anticipated to lead to a larger, longstanding OCD Working Group. New Working Group members will sign the Memorandum of Understanding indicating that they agree with the policies listed here and that they have obtained the required ethical clearances to participate or send data.

# Expulsion from the ENIGMA-OCD Neuroimaging Working Group

Expulsion from the MDD Working Group will be considered when a site fails to uphold this Memorandum of Understanding, or does not contribute significantly to the work of the ENIGMA-OCD Working Group either in data delivery, data analyses, or its goals. It is the responsibility of the ENIGMA-OCD Working Group leaders to assemble evidence and present the reasons for possible expulsion to the PIs. Expulsion from the ENIGMA-OCD Working Group will require a simple majority vote of the PIs.

A site may request to withdraw from the ENIGMA-OCD Working Group. Requests for withdrawal will be reviewed by the ENIGMA-OCD Working Group leaders. The withdrawing site will need to agree in writing to a moratorium on publication of any data that were obtained in the context of the ENIGMA-OCD Working Group work, or where the interpretation of the data relies in any part on unpublished ENIGMA-OCD Working Group work.

Deadlines for requested information and results from each group will be set at reasonable times in the future to allow all groups to contribute. ENIGMA support groups will work with sites to troubleshoot any processing and analysis problems that occur to ensure sites can provide requested material at the appropriate time. In order to move forward with the meta-analysis and goals of the ENIGMA-OCD Working Group, consistent delays or failure for a site to provide data in a timely manner will result in that group's results being excluded in the final discovery meta-analysis.

# **ENIGMA-OCD** Working Group Membership is contingent upon signing the following statement:

#### I AGREE:

- 1. To consider participation in meta-analyses and secondary analyses proposed by the ENIGMA-OCD Working Group, subject to constraints or limitations that I can impose in each case.
- 2. To abide by the guidelines for authorship and publication, and other guidelines described in this document.
- 3. Not to distribute or communicate any privileged information to individuals who are not members without consent of the entire ENIGMA-OCD Working Group. This includes any other existing collaborators who are not members of the ENIGMA-OCD Working Group.

Privileged information includes results of any unpublished analyses completed by members of the ENIGMA-OCD Working Group.

- 4. Not to distribute or copy any data collected by the ENIGMA-OCD Working Group without prior written consent of all Working Group members.
- 5. That the ENIGMA-OCD Working Group leaders will review and evaluate future scientific opportunities, and will make recommendations regarding the needed expertise and research program to maximize those opportunities in the best possible way.
- 6. That failure to uphold this agreement may result in my expulsion from the ENIGMA-OCD Working Group (but I will still be bound by publication moratorium on ENIGMA-OCD Working Group work, as described above).
- I, as group leader of my site, consent to participate within the ENIGMA-OCD Working group with
  - MRI data for meta-analyses only (no sharing of raw MRI data)
  - MRI and genetic data for meta-analyses only (no sharing of raw MRI and genetic data)
  - Both raw (anonymized) and analysed MRI data, without genetic data
     see also separate MOU to be agreed on at later stage
  - Both raw and analyzed MRI and genetic data (full data sharing of anonymized data)
    - > see also separate MOU to be agreed on at later stage

Signature	Date
Please print name	Institute