





# China Scholarship Council – University Maastricht PhD Programme Application form

#### **Basic information**

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- To be filled in by the prospective Maastricht University supervisors -

# 1. Information on prospective UM supervisors and Promotor

# 1a. First Supervisor/promoter:

- Title(s), initial(s), first name, surname: Dr. Dennis van der Meer
- Research group: Dept. of Psychiatry and Neuropsychology
- Address for correspondence: UM / MHeNs, PO Box 616, 6200 MD Maastricht, The Netherlands Maastricht, The Netherlands
- Telephone: +31638210393
- E-mail: dennis.vandermeer@maastrichtuniversity.nl

#### 1b. Second Supervisor/copromoter:

- Title(s), initial(s), first name, surname: Prof. Dr. David E.J. Linden
- Research group: Dept. of Psychiatry and Neuropsychology
- Address for correspondence: UM / MHeNs, PO Box 616, 6200 MD Maastricht, The Netherlands
- Telephone: +31433881021
- E-mail: david.linden@maastrichtuniversity.nl

#### 1c. Promotor (if applicable): - see above

- Title(s), initial(s), first name, surname:
- Research group:
- Address for correspondence:
- Telephone:
- E-mail:

# 2. Information on UM Faculty/ Department/ Institute/ School contact person:

When the application is granted by both the CSC and UM, the contact person is responsible for the practical arrangements (i.e. assistance in obtaining a visa, finding accommodation, etc.) of the visit of the PhD candidate:

- Initial(s), first name, surname: Ankie Hochstenbach
- Research group: MHeNs/ P&N
- Address for correspondence: UM / MHeNs, PO Box 616, 6200 MD Maastricht, The Netherlands
- Telephone: +31433884107
- E-mail: a.hochstenbach@maastrichtuniversity.nl

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- To be filled in by the applicant if already known -

# 1. Information on the applicant

- Initial(s), first name, surname:
- Male/female:
- Current work address:
- Telephone:
- E-mail:
- Private address:

### 2. Details of applicant's home university

Note! A separate letter of recommendation by the supervisor or faculty dean of the home university is required.

- Name of home university:
- Address:
- Telephone:
- E-mail:
- Website (if available):

# 3. Applicant's home university Master Thesis supervisor:

- Title(s), initial(s), first name, surname:
- Address for correspondence:
- Telephone:
- E-mail:

### 4. Research field(s)

Biological Foundations of Human Health and Diseases

# 5. Title of research plan for CSC-UM PhD Programme

The role of cardiometabolism in the pathophysiology of psychosis

6. Short summary of research plan (max. 250 words), with a full plan (1500-3000 words) to be submitted by the candidate.

**Background:** Multiple lines of evidence have implicated metabolic dysregulation in the pathophysiology of psychotic disorders, but the underlying mechanisms are unclear. Indicators of energy metabolism, such as circulating glucose and lipid levels, are often deviant in individuals with schizophrenia and bipolar disorder. Metabolic aberrations and comorbid cardiometabolic conditions such as type 2 diabetes (T2D) contribute to the 15-20 years shorter life expectancy of individuals with psychotic disorders. This can be partly attributed to common genetic underpinnings, together with modifiable lifestyle factors. Here, we propose to take advantage of novel, large-scale genomic and metabolomic datasets to identify biomarkers that will aid in better understanding and predicting psychosis, moving towards personalized medicine.

**Study objective:** To fill the knowledge gap on the role of cardiometabolic health in psychosis. Specifically, we aim to 1) map the relation between genetic variation, a comprehensive panel of circulating biomarkers, and psychotic disorders, and 2) leverage the identified associations to boost the prediction of clinical outcomes across the lifespan.

**Expected Results:** 1) Identification of novel genetic variants and pathways that reflect and explain the relation between metabolism and psychosis. 2) Improved prediction of clinical outcomes related to psychosis in longitudinal cohorts.

**Requirements**: Knowledge of basic statistical principles (linear regression), aptitude for coding (bash, R), interest in learning about genetics, metabolomics and psychiatry, good English writing skills.

**Group's performance:** Publications: 300+; H-Index:73; number of citations 20.000+. Our group is already hosting two CSC students, and PhD students will be embedded in an international community, within an even larger multi-university network.

# 7. Motivation for CSC-UM PhD application (max. 250 words)

# **Applicant's Curriculum Vitae (if available)**

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#### 8. Personal details

#### <u>Applicant</u>

- Title(s), initial(s), first name, surname:

CSC-UM PhD programme start 1-9-2024

- Surname:
- Nationality: Chinese
- Date of Birth:
- Country and place of birth:

#### 9. Master's degree (if applicable)

Note! Add a copy of your Master's degree to your application

University (211 or 985 if available):

Faculty/discipline:

City and country:

Date:

Grade average:

Title Master's thesis (if applicable):

Thesis grade: