

Friday, March 27<sup>th</sup>

## Molecular risk mechanisms for major psychoses II

Chair: Holger Garn

- 10:50 **Impact of the psychiatric susceptibility gene CACNA1C on mitochondrial and neuronal resilience**  
Carsten Culmsee, Marburg
- 11:10 **Effects of the psychiatric risk gene CACNA1C on neuroinflammatory responses in microglia**  
Susanne Michels, Marburg
- 11:30 **Role of the immune system in affective disorders and depression-associated behavior**  
Judith Alferink, Münster
- 11:50 General Discussion

12:00 Lunch

## Genetics and Treatment

Chair: Markus Nöthen

13:00 Selected short presentations

- 13:30 **Genomic analyses of psychiatric disorders**  
Andreas Forstner, Marburg

13:50 *Poster session IV and coffee*

- 14:50 **Divergence in genotypes and phenotypes across the affective and psychotic spectrum – from big data to disease mechanisms**  
Ole Andreassen, Oslo
- 15:30 **Methods of dimensionality reduction in genome-wide human polymorphism data**  
Bernd Müller-Myhsok, München
- 15:50 **NIRS-based neurofeedback to treat auditory hallucinations**  
Andreas Fallgatter, Tübingen
- 16:30 General Discussion
- 16:40 Summary and Farewell

**Organisation:** Tilo Kircher, Annette Tittmar  
Philipps-University of Marburg, Department of Psychiatry and Psychotherapy, Rudolf-Bultmann-Straße 8, 35039 Marburg

**Scientific committee:** Carsten Culmsee, Marburg; Udo Dannlowski, Münster; Tilo Kircher, Marburg; Markus Nöthen, Bonn; Marcella Rietschel, Mannheim; Gerhard Schratt, Zürich; Markus Wöhr, Stanford

**Congress secretariat:** Annette Tittmar  
phone: +49 6421 5865281  
email: FOR2107\_Conference2020@med.uni-marburg.de

**Registration:** [www.for2107.de](http://www.for2107.de)

**Venues** (red buildings in map):

**Wednesday, March 25th**

Satellite Meeting: Gutenbergstraße 18, Room 00019

Öffentlicher Vortrag: Alte Aula, Lahntor 3

**Thursday and Friday, March 26th-27th**

Universitätsbibliothek: Deutschhausstraße 9

Landgrafenschloss: Schloss 1



## International Conference of the DFG Research Unit 2107

## NEUROBIOLOGY OF THE MAJOR PSYCHOSES

A Translational Perspective on Gene-Environment Interactions  
in Depression, Bipolar Disorder and Schizophrenia



25th – 27th March 2020  
Marburg, Germany

# Programme, Universitätsbibliothek

Thursday, March 26<sup>th</sup> 2020

Dear colleagues

Large epidemiological and molecular genetic studies have elucidated the risk factors for the major psychoses (major depression, schizophrenia, bipolar disorder). The pathophysiological pathways from these risks onto molecular, cellular and systemic levels remain largely elusive. Since 2014, the German Research Council (DFG) has funded our large, German, nationwide translational consortium, the DFG Research Unit 2107, with the aim to unravel these pathways in animal models and humans. The conference "Neurobiology of the Major Psychoses" aims at a transdiagnostic, dimensional view.

In our three day conference, we will discuss the current state of the field to accelerate the translation of research break-throughs into novel classification and personalized medicine.



Tilo Kircher and the PIs of the FOR2107

Wednesday, March 25<sup>th</sup> 2020

## Women in Science, Satellite Meeting

Gutenbergstraße 18, Room 00019

10:00 – 15:00

**Chairs:** Theresa Kisko, Özge Sungur (Post-doctoral researchers)

## Öffentlicher Vortrag, Alte Aula, Lahntor 3

19:00 Prof. Dr. Andreas Meyer-Lindenberg, Mannheim

**Ursachen und Therapien bei psychiatrischen Erkrankungen** (auf Deutsch)

## 08:00 Registration

08:30 **Welcome** - Prof. Dr. Katharina Krause, Prof. Dr. Helmut Schäfer, Prof. Dr. Markus Nöthen  
Prof. Dr. Frank Bremmer

08:50 **Introduction** - Tilo Kircher, Marburg

## Imaging Genes (G) and Environment (E) in humans I

**Chair:** Marcella Rietschel

09:10 **Building blocks for a psychiatric nosology based on common biological mechanisms**

Gunter Schumann, London

09:50 **Limbic scars – how maltreatment experiences during childhood shape brain structure and function**

Udo Dannlowski, Münster

10:10 **Quality management of MRI data in multicentre, longitudinal studies**

Andreas Jansen, Marburg

10:30 General Discussion

10:40 *Poster session I and coffee*

11:10 **Novel MR morphometry methods: from gyrification to machine-learning based analysis**

Igor Nenadić, Marburg

11:30 **Deconstructing genetic and environmental risk for a dimensional psychosis risk phenotype**

Tina Meller, Marburg

11:50 General Discussion

12:00 *Lunch*

## Imaging G and E in humans II

**Chair:** Petra Pfefferle

13:00 **Epigenetic signatures of childhood traumatization**

Hans Grabe, Greifswald

13:40 **The major psychoses: symptoms, risk factors and the brain**

Tilo Kircher, Marburg

14:00 **Machine learning for biotype identification in psychiatry - The utility-based cluster optimization and prediction framework**

Tim Hahn, Münster

14:20 General Discussion

14:30 **Selected short presentations**

15:00 *Poster session II and coffee*

## GxE in animal models

**Chair:** Rainer Schwarting

16:30 **Using animal models to assess novel targets implicated in psychiatric disorders**

David A. Slattery, Frankfurt

17:10 **Effects of Cacna1c haploinsufficiency on brain and behavior in rats**

Markus Wöhr, Stanford

17:30 **Sex-dependent effects of Cacna1c haploinsufficiency on social behavior in rats**

Theresa Kisko, Marburg

17:50 General Discussion

18:00 Closing remarks

19:30 **Dinner and get together at Marburg Castle**

Friday, March 27<sup>th</sup> 2020

## Molecular risk mechanisms for major psychoses I

**Chair:** Stephanie Witt

08:30 **Dissecting the polygenic basis of psychiatric disorders using stem cell models and functional genomics**

Michael Ziller, München

09:10 **Contribution of microRNAs to the development of affective disorders**

Helena Martins, Zürich

09:30 **Gene environment interaction in affective disorders**

Elisabeth Binder, München

10:10 General Discussion

10:20 *Poster session III and coffee*