



## PhD Program between the Freie Universität Berlin (FUB) and the China Scholarship Council (CSC)

### Open PhD position at FUB for CSC scholarship candidates 2016

*Please note: the PhD position is only offered to Chinese PhD candidates for application in the framework of the FUB-CSC PhD Program.*

<b><u>Department/Institute:</u></b>	Institute for Neurobiology/Max-Delbrück-Center for molecular medicine
<b><u>Subject area:</u></b>	Developmental Neurobiology
<b><u>Name of Supervisor:</u></b>	Prof. Dr. Fritz G. RATHJEN (Mr.)
<b><u>Number of open PhD positions:</u></b>	2
<b><u>Type of the PhD Study:</u></b>	Full time
<b><u>Project title:</u></b>	Formation of neuronal circuits during embryonic development

#### **PhD Project description:**

The branching of axons is a morphological hallmark of virtually all neurons, and allows an individual nerve cell to innervate several distinct targets and to communicate with neurons in different parts of the brain. Axonal branching is therefore a key mechanism in the generation of neuronal circuits and allows the processing of information arriving from different parts of the body. Thus, axonal branching is crucial for normal brain function and impairments of branching might result in neurological and neurodevelopmental disorders. In the last decades axonal branching has been therefore the subject of intense study primarily by in vitro cultures, but our knowledge of the underlying molecular signaling mechanisms is still fragmentary. Dr Rathjen's laboratory focuses on the molecular analysis of branching of axons and the identification of signalling cascades important for the formation of neuronal circuits. We apply molecular, genetic, biochemical, electrophysiological and histological techniques.

#### **Language requirements:**

English: IELTS 6,5 or TOEFL 95 ibt.

#### **Academic requirements:**

Master of Biology, Master of Neurobiology or Master of Biochemistry

#### **Information of the professor or research group leader:**

For further information please see our homepage at the Max-Delbrück-Center.  
[https://www.mdc-berlin.de/1157181/en/research/research\\_teams/developmental\\_neurobiology](https://www.mdc-berlin.de/1157181/en/research/research_teams/developmental_neurobiology)

**Please note:**

In a first step the complete application should submit to the Beijing Office for evaluation by January 4<sup>th</sup>, 2016. Please don't contact the professor before. He/She will get in contact with you after having received the complete application in January.