Postdoctoral fellow, **Ph.D. student, TA/Lab manager in the field of cilia biology in iPSC-derived human brain organoids and glioma stem cells.**

The research group **"Laboratory of Centrosome & Cytoskeleton Biology" (http://centrosome-cilia-lab.com)**, located at the Institute of Human Genetics of the University Hospital of Düsseldorf, is offering the following positions for enthusiastic and motivated individuals.

-Postdoctoral fellow (m/f/d)
-Ph.D student (m/f/d)
-TA/Lab manager (m/f/d)

Postdoctoral position is for scientists aiming to build their independent careers with a long-term perspective on cilia biology combined with iPSC-derived 3D human brain organoids. The project aims to decode cilia dynamics and how it regulates stem cell maintenance. Besides, the candidate is expected to develop new brain organoids by tissue engineering the existing brain organoids. Ultimately, the candidate will set up a personalized glioma invasion assay in the newly engineered brain organoids as a routine pipeline between the lab and the clinic. The candidate is expected to develop leadership skills in managing and executing projects and play a vital role in the brain organoid facility of the institute. The post-doc candidate will be encouraged and supported to write their grant applications to define the career path via habilitation etc...

Ph.D. position is for young and enthusiastic students who want to build their early career in the poorly studied primary cilia field in glioma stem cell maintenance and modeling glioma invasion mechanisms in human brain organoid models. The student will be trained with all of the prerequisite techniques from basic cilia biology to glioma brain organoids.

The TA/Lab manager is for candidates whowant to build their managerial skills, maintain the laboratory, coordinateinter-departmental events within the clinic, regulate the procurement, guidestudents with molecular techniques, and manage the "brain organoidfacility" of the institute.

The laboratory is known for translating basic cilia/centrosome biology to clinically relevant questions such as microcephaly, cancer, and glioma with a strong publication record (refer to the lab's publications). The newly recruited colleagues will be engaging in identifying the mysterious and poorly studied role of primary cilia in determining gliomagenesis, glioma stem cell fate, and recurrence. The successful colleagues will be working within a network of scientists to establish a personalized glioma invasion assays and use them to identify small molecules that can target primary cilia in patient-specific glioma stem cells. The project's ultimate goal is to design personalized cilia therapy towards differentiating glioma stem cells into non-self-renewing stem cells. To this end, the candidates are expected to interact with a renowned pharmaceutical company and clinicians closely.

Towards this mission, we are looking for a full-time postdoctoral fellow, Lab manager/ TA, and a doctoral student as soon as possible. The position is available for two years with a possible extension. The salary will be according to TV-L scale.

Your profile (Post-doc and Ph.D. candidate):
- Excellent University degree in biology/biomedicine/biochemistry/cell biology or related fields
- Strong publication record
- Demonstrated record in doing cell biological experiments and microscopy.
- Solid knowledge about pluripotent stem cells
- Excellent experience in microscopy and genomic tailoring
-Practical experience about the generation of organotypic cultures from fresh tissues

- Excellent molecular-biological knowledge
- Motivation to learn single cell genomics
- Team spirit and enjoyment of working in a multidisciplinary team
- Willing to lead an independent research group within the next five years

Your profile (Lab manager/TA):
- Excellent University Master's or Bachelor degree in biology/biomedicine/biochemistry/cell biology or related fields
- Motivation for management
- Demonstrated record in doing cell culture and molecular biology
- Willingness to learn organoid culturing from iPS cells
- Commanding knowledge in German and English
- Team spirit and enjoyment of working in a multidisciplinary team

We offer:
- A position with individual development potential
- A fascinating, versatile, and challenging scope of the task
- An enthusiastic interdisciplinary and international team
- Possibility for you to develop your scientific research and further develop your independent scientific career
- Training in high-resolution microscopy, 3D-organoid cultures and more cutting-edge technologies
-Support for writing your publications and grant applications
-Future opportunities for a potential permanent position (For TA and postdoctoral fellow)

For further information please contact Prof. Jay Gopalakrishnan by phone (+49 211-81 11561) or by e-mail jay.gopalakrishnan@med.uni-duesseldorf.de. Interested candidates should contact Prof. Jay Gopalakrishnan with a motivation letter. The motivation letter should speak more about science, specific aims, and future focus.

To increase gender distribution in all job categories and at all levels, we strongly encourage applications from qualified women. Female applicants will be given preferential consideration when their level of qualification, competence, and professional achievements equals that of male candidates unless arguments based on the personal background of a male co-applicant prevail. Severely handicapped persons will be preferred for the same qualification set.

We kindly ask you to submit your complete application documents in **English**. Please send your comprehensive application documents (CV in tabular form incl. photographs, copies of certificates, motivation letter, and 3 recommendation letters) **within four weeks** from the announcement date.