The mission of the Berlin Institute of Health at Charité (BIH) is medical translation: transferring biomedical research findings into novel approaches to personalized prediction, prevention, diagnostics and therapies and, conversely, using clinical observations to develop new research ideas. The aim is to deliver relevant medical benefits to patients and the population at large. The BIH was founded in 2013 and is funded 90 percent by the Federal Ministry of Education and Research (BMBF) and 10 percent by the State of Berlin. Since 2021 the BIH has been integrated into Charité as its so-called third pillar.

The BIH is looking **as soon as possible limited for 3 years** for a

Ph.D. Student in Model Systems for Regenerative Therapies (f/m/d)

The BIH Berlin Center for Regenerative Therapies (BCRT) is a translational research focus of the Charité-Universitätsmedizin Berlin (Charité) and the Berlin Institute for Health Research (BIH). BCRT pursues the rapid implementation of new research results in the field of regenerative medicine in clinical applications and products. Engineers, chemists, biologists and physicians work together on the targeted promotion of the body's own healing and regenerative powers in acute and chronic diseases in the four clinical research areas of the cardiovascular system & metabolism, hepatology, Infection & Immunotherapy, and musculoskeletal system.

The research group Model Systems for Regenerative Therapies leverages interdisciplinary approaches to translate mechanistic findings from pre-clinical model systems towards regenerative therapies, within the musculoskeletal field. Fibrosis is the result of failed tissue regeneration and is a highly dynamic process. To move towards an improved understanding regarding failed tissue regeneration, we are creative in the design of our biomedical research projects and dedicated to exploring the unknown. The passionate research group values diversity in background and experience and strongly believe that diversity drives creativity and innovation.

Job description:

The successful PhD candidate will work on a highly interdisciplinary project aiming to develop an in vitro model system mimicking the human synovial joint as a multimodal platform. The overall objective of this PhD project will be to mimic the in vivo human synovial joint, and in addition, to challenge the system by inducing fibrosis, by modelling osteoarthritis. To the tasks:

- Culture, expand, differentiate and maintain human primary cells in 2D and 3D environments
- Plan, organize and execute experiment plan
- Coordinate collaborations with other groups and research project.
- Manage common laboratory tasks
- Write manuscripts
- Document progress, communicate and present analyses to group, institute members and collaborators verbally and in writing.
- Work with members of the group and collaborators as well as independently with respect to experimental design, data analysis, visualization and interpretation
- Compile data and present them in local and international conferences
- Supervise Bachelor and Master students as suitable

Requirements:

To achieve this project, the candidate will need the following skills:

- A Master of Science in biomedical engineering, nanotechnology, engineering in biotechnology, or similar program. Highly passionate and motivated candidates with a MD and experience in cell culture and cell biology will also be considered for the position.
- Experience in tissue culture, preferably with in human stem, progenitor and immune cells, and/or organoids derived from primary tissue, differentiation, and characterization.
- Experience in flow cytometry, QPCR, expression profiling, imaging.
- Experience in working independently while keeping a strong team spirit.
- Strong self-motivation, organizational skills, and ability to lead scientific projects.
- Scientific curiosity, analytical thinking, and interest in contributing to projects.
- Ability to work in a team of young scientists, to be flexible, and flourish in a fast-paced environment.
- Strong communication and interpersonal skills, ability to work in a collaborative way, and effectively with individuals of different backgrounds in

in a multidisciplinary team, team orientated with excellent organizational skills including project management and good record keeping.
- Fluent in English orally and written.

We offer:

- Working in an international environment with the opportunity to learn new high-end technologies
- Remuneration up to E 13 according to TVöD VKA-K: The grouping takes into consideration the qualifications and the personal circumstances of the candidate. We actively encourage continuing education.
- A part-time position (25,35h/week)
- Appointment duration: 3 years
- 30 vacation days per year (with a five-day week)
- Additional benefits customary in the public sector (e.g. annual bonus, VBL)
- First contact for administrative support (Visa, Tax-ID, social security, ...)
- A large panel of advantages (Jobrad, Gympass, Corporate Benefits, Events, ...)

We live diversity!

BIH strongly encourages qualified women to apply. Applications from people with an immigrant background who meet the hiring requirements are expressly encouraged. Severely disabled applicants and those with equal status will be given preferential consideration in cases of equal suitability.

Please submit your application via the BIH Career portal **https://jobs.bihealth.org by 18.06.2023**, quoting the **reference number BIH-35.23.** We are looking forward to hear from you!

Please note: If you have a foreign university degree, we would like to draw your attention to the fact that you may need to obtain a certificate from the ZAB. You can find more information at: https://www.kmk.org/zab/zentralstelle-fuer-auslaendisches-bildungswesen.html

The recruitment requirement for those born after 1970 is proof of measles immunity / measles vaccination.

Please contact Johanna Bolander (Email: johanna.bolander@charite.de) if you have any questions about this position.

You can find more information about BIH at

https://www.bihealth.org/en/