Researching at the BCRT entails working in close interdisciplinary cooperation to develop innovative tools (biomaterials, biomarkers/diagnostic agents, cell isolation/expansion, etc.) and therapies, transferring research findings to the clinical development quickly and safely, and carefully checking and documenting the efficacy of novel products and methods in each phase of translation. Regular project assessments determine, among other things, the progress of the project, how it compares on an international scale, medical demand, compliance to authorization requirements as well as health economy issues.

The BCRT’s research fields are interlinked through cross-sectional technology platforms as well as in clinical research areas. Over 30 specialized research and project groups are led by internationally distinguished scientists. The research process is consistently supported by our in-house Translation and Scientific Management Departments.
The Center

The BCRT is an internationally recognized center with a strong interdisciplinary program with basic research, clinical research areas and technology platforms being closely linked within an innovative translational infrastructure.

The BCRT focuses primarily on the development of new methods and products for stimulating endogenous regeneration processes through the use of biomaterials, biologically active factors, or cells or a combination of these, to provide long-term treatment, or even cures, for acute and chronic diseases of the immune system, the musculoskeletal system and the cardiovascular system.

The BCRT was founded in 2006 as an alliance between the Charité - Universitätsmedizin Berlin, one of Europe’s largest university clinics, and the Helmholtz Association, Germany’s largest research institution. A team of over 250 employees (physicians, scientists, engineers, experts in translational medicine, PhD students and technical staff) are conducting research at the BCRT’s two sites: at the BCRT building on the Virchow Clinic Campus of the Charité, with its close links to the BCRT partner clinics, and at the Teltow Campus of the Helmholtz Centre Geesthacht within the Centre for Biomaterial Development.

Translation

The BCRT has set new standards with its innovative translational infrastructure. It guarantees the efficient transfer of findings from research into products (e.g. diagnostics, drug delivery systems, medical products) and clinical therapies.

Position of the BCRT in the Value Chain

In addition to identifying and analyzing possible high-potential products, the centralized Business Development and Clinical Development units ensure meticulous project and quality management in every phase of research and development, right through to authorization and reimbursement. These central units assist in maintaining a constant flow of information and ideas between the interdisciplinary teams. Early cooperation with industry, health insurers and regulatory authorities as well as other external partners boosts the chances of exploiting new methods and provides access to flexible financing options.

Education

Maintaining communication between scientists is one of the greatest challenges in interdisciplinary research. This is where the work of the internationally renowned Berlin-Brandenburg School for Regenerative Therapies (BSRT) comes in. The BSRT graduate school, the interdisciplinary education center attached to the BCRT, is funded through the Excellence Initiative program (GSC 203) of the German Research Foundation (DFG).

The scientific and didactic orientation of the graduate school is to provide young scientists not only with the necessary expertise in their own field of research but also with a comprehensive understanding of each of the other disciplines. The close connection to the BCRT ensures a continuous exchange of information on the current state of research and offers a whole range of development opportunities. PhD students in the natural sciences and materials science are prepared over a three-year period for a career in science or industry; physicians receive specialist training over a five-year period with a wide range of research opportunities.