

Berlin Brandenburg School for Regenerative Therapies (BSRT)

Basic information

Keywords: Regenerative Medicine | Musculoskeletal System | Immune System | Cardiovascular System | Stem cells | Cell Signaling | Biomaterials | Biomechanics | Biological Materials

Program directors: Prof. Dr. Georg Duda (Spokesperson), Prof. Hans-Dieter Volk (Deputy Spokesperson)

Program coordinators: Dr Sabine Bartosch, Bianca Kühn

Program web link: www.bsrt.de

Detailed program information

Program summary description: BSRT provides the educational basis for research that is promoting endogenous tissue regeneration to combat acute and chronic diseases. This requires the integration of cells, drugs and technical products into successful therapeutic approaches. Engineers need to understand biological mechanisms, biologists need a technical background and clinicians require basic biological and biomaterial knowledge. BSRT offers therefore interdisciplinary training and research opportunities in regenerative medicine for outstanding doctoral and postdoctoral researchers with a background in [biology](#), [engineering](#) or [medicine](#). The young scientists benefit from our worldwide unique approach to foster collaborative science ([BioThinking](#)).

Systems medicine and/or translational highlights:

Translational Scientist

A strong focus is put on training that prepares the young scientists for translational research. A first core curriculum has been developed at BSRT to train young researchers in translational science.

- [Clinical Rotations](#)
- [Good Scientific Practice](#)
- [Good Experimental Design](#)
- [How to translate basic research into real-world clinical applications](#)
- [Business Development and Technology Assessment](#)

Clinical Scientist

The Clinical Scientist Program was established as a postdoc programme for medical doctors who wish to combine translational and/or clinical research with the training required for their clinical specialization within medical fields such as orthopaedics, traumatology, haematology, nephrology etc. The BSRT Clinical Scientist Program has been extended to become a Charité - Universitätsmedizin Berlin wide educational program for young physicians from all sorts of disciplines who wish to have protected time for research during their medical specialization. You can find more information on the [Charité Clinical Scientist Program](#) here.

Primary funding source: Deutsche Forschungsgemeinschaft (DFG) Excellence Initiative

Program start date: 11/2007

Number of students recruited per year (estimated): 20

Duration of program: 3-3.5 years (PhD track), 2 years (Postdoc track)

Scientific training

The scientific training takes care of the interdisciplinary nature of regenerative medicine. BSRT students are brought to a sufficient level in the complementary disciplines to enable collaboration between the scientists with different backgrounds in biology, biochemistry, chemistry, physics, engineering and clinical medicine. Therefore all doctoral students at BSRT have to participate in the course "Introduction into Research in Regenerative Medicine" and do a clinical rotation. BSRT also offers in depth education for the specific disciplines. The scientific training modules cover endogenous regeneration from the molecular to the organ level and are listed under optional courses.

Mandatory Courses:

- [Introduction into Research in Regenerative Medicine](#) (three weeks course)
- [Clinical Rotation](#)

Optional Courses

- [Optional BSRT scientific training courses](#)

Mentoring & supervision offered

Scientific Mentoring

Each doctoral researcher is supported by a scientific mentoring committee of three experienced scientists who are experts in the different related disciplines. Doctoral researchers and their mentoring committee meet on a regular basis. The senior scientists assist the PhD students in developing their personal research and education plan and discuss the progress of their work.

[Read more...](#)

Career Mentoring

In higher education career mentoring becomes more and more important to guide doctoral researchers in their career development. Special career mentoring programmes are therefore offered in collaboration with the Humboldt Graduate School and the Dahlem Research School.

[Read more...](#)

Additional features

Soft skills training: Workshops on complementary modules are offered in cooperation with

- [Humboldt Graduate School](#) (HGS)
- [Dahlem Research School](#) (DRS)
- [Potsdam Graduate School](#) (PoGS)
- [Charité International Academy](#) (ChIA)

Collaborative education: BSRT developed in collaboration with the [HPI School for Design Thinking](#) the [BioThinking](#) program which provides a worldwide unique program using design thinking as an innovation driver in biomedical sciences. The design thinking concept is based on the assumption

that true innovation can only take place when strong multi-disciplinary groups create a common culture and explore different opinions and perspectives. BioThinking includes:

- A structure process, which is based on understanding and analyzing a problem, identifying needs and prototyping for early testing and feedback.
- A dedicated coach, who takes care of the collaborative atmosphere by using teambuilding methods throughout the innovation process.
- Flexible spaces to provide the team with a creative environment

Support for conference visits:

- Travel grants to present at international conferences
- Allowance for lab exchanges

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Clinical visits: [Clinical Rotation](#) for up to a week in the clinical of choice

Stipends/grants funded within your program:

- Doctoral stipends/positions (up to 3 years)
- Postdoc fellowships (up to 2 years)
- Clinical Scientists positions (50% up to 3 years)
- Funding for joint student research assistant
- Funding of stipend for completion of doctoral thesis (up to one year)