Post Doc – Physics-Based Transport Simulation of Biotherapeutics

The Position

Become part of an innovative team and drive the pharmaceutical development of biologicals forward! As a Post Doc at Boehringer Ingelheim, you will manage and support cutting-edge technology projects while identifying new scientific research fields in the context of pharmaceutical development for biologicals. As part of Boehringer Ingelheim's Post-Doc Management Program, you will benefit from tailored development opportunities. Shape the future of groundbreaking therapies and contribute to innovative solutions

Your focus will be on **transport simulation strategies** for biologicals. You will combine **in silico modeling** with **laboratory-based experimentation** to assess and optimize transport conditions, ensuring the stability and quality of our drug products.

Besides the responsibility for your own project with focus on current hot topics in pharmaceutical sciences, you get insights in the general development of Biologicals, the daily routine in our laboratories using various techniques and the teamwork with several interfaces.

Apply now and become part of our dedicated team!

This Position is limited for 2 years.
Note: To make it easier to find our job advertisements, we use the usual designation "Post Doc". Of course, this advertisement is not only addressed to applicants directly after completing their doctorate, but to all qualified candidates.

Tasks & responsibilities

- In your new role, you will independently design and conduct transport simulation studies for biologicals using computational models (in silico).
- Moreover, you will plan and execute experimental validation (in vitro) of simulation results using advanced analytical techniques.
- You will develop predictive models to assess drug product stability during transport.
- In addition, you will identify, evaluate and establish new scientific methods and smart concepts to monitor drug product stability during transport.
- With your scientific expertise, you will ensure the delivery of high-quality data, presentations including the required documentation.
- The supervision of interns and students as well as the publishing and presenting of scientific results internally and externally rounds off your profile.

Requirements

- Doctoral Degree in biophysics, bioinformatics, bioprocess engineering, pharmaceutical technology, biochemistry or related disciplines
- Profound knowledge in transport-related physics (e.g. classical mechanics, dynamics, vibration analysis and related field), understanding in pharmaceutical transport logistic systems is beneficial
- Experience in scientific computing and simulation
- Strong basic understanding of protein biochemistry, basic skills in biopharmaceutical analytics are beneficial
- Ability to manage projects and to initiate and promote cooperation's with research institutes or other interfaces
- Strong team collaboration skills as well as ability to work independently
- Excellent organization skills as well as sound technical writing and documentation competencies
- Fluent in German and English

Ready to contact us?

If you have any questions about the job posting or process - please contact our HR Direct Team, Tel: +49 (0) 6132 77-3330 or via mail: hr.de@boehringer-ingelheim.com

Recruitment process:

Step 1: Online application - The job posting is presumably online until November 10th, 2025. We reserve the right to take the posting offline beforehand. Applications up to October 27th, 2025 are guaranteed to be considered.
Step 2: Virtual meeting beginning end of October
Step 3: On-site interviews beginning mid of November