

The Department of Biotechnology, Institute of Bioprocess Science and Engineering / Christian Doppler Laboratory for Knowledge-based Production of Gene Therapy Vectors is currently seeking a



Postdoctoral Research Associate (project employment)

Reference code: 211

Extent of employment: 40 hours per week
Duration of employment: 1st of January 2023, limited to 31st of December 2024
(with option for a limited extension)

Workplace: Vienna

Gross monthly salary and pay grade in terms of collective agreement for university staff (payable 14 times per year): B1 lit. b, € 4.061,50

Responsibilities

- Independent research in the field of production of gene therapy vectors with the main focus on downstream processing and analytics
- Independent planning, set-up, evaluation and documentation of processes and their corresponding analyses, visualisation of results
- Support of project lead with project management tasks
- Compiling reports, presentations of project progress
- Independent writing of scientific publications, scientific presentations at international conferences
- Co-supervision of PhD theses, Bachelor and Master students

Required skills and qualifications

- Doctorate degree / PhD in Biotechnology, Biochemical Engineering
- Diploma degree in Biotechnology, Biochemical Engineering or other equivalent university degree
- Language skills: English, German or willingness to learn

Desirable skills and qualifications

- Knowledge, independent application and design of process steps in the downstream processing of biopharmaceutical products with a focus on viruses, VLP or other complex bioproducts
- Knowledge and independent application of analytical methods for process monitoring of biopharmaceutical manufacturing processes with a focus on bionanoparticles such as viruses, VLPs or gene therapy vectors
- Understanding of biotechnological processes in particular requirements for biopharmaceuticals
- Knowledge of statistical modelling and programming e.g. in Python or R
- Interest in and understanding of project management tools and willingness to support the project lead with these tasks
- High level of motivation and willingness to learn and perform
- Enjoy co-supervision of Bachelor, Master and Doctoral theses
- Excellent learn spirit
- Interest in habilitation at the Institute of Bioprocess Science and Engineering at the University of Natural Resources and Life Sciences is favored

Applications can be submitted until: 9th of November 2022

University of Natural Resources and Life Sciences Vienna seeks to increase the number of its female faculty and staff members. Therefore qualified women are strongly encouraged to apply. In case of equal qualification, female candidates will be given preference unless reasons specific to an individual male candidate tilt the balance in his favour.

People with disabilities and appropriate qualifications are specifically encouraged to apply.

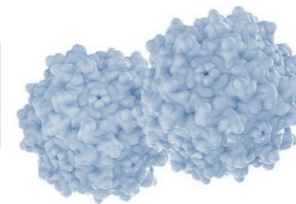
Please send your job application incl.

- ✦ motivation letter
- ✦ CV
- ✦ Certificate of Bachelor, Master and Doctoral studies
- ✦ 3 letters of recommendation

to Personnel department, University of Natural Resources and Life Sciences, Peter-Jordan-Straße 70, 1190 Vienna; E-Mail: kerstin.buchmueller@boku.ac.at. **(Reference code: 211)**

We regret that we cannot reimburse applicants travel and lodging expenses incurred as part of the selection and hiring process.

www.boku.ac.at



Vision

Our goal is the **advancement of modern gene therapy**, as it is one of the most promising treatments against gene defects, cancer, auto immune diseases as well as infectious diseases. With highly **efficient tools and reliable and scalable production platforms**, new and better therapeutics will be made available and contribute to human health and well-being.

Mission

This initiative intends to join expertise available at three different Institutes of the Department of Biotechnology at the University of Natural Resources and Life Sciences, Vienna. The integrated application of expertise in functional genomics, applied virology, up/downstream processing and analytics and the expertise at Baxalta Innovations on up-stream processing allows to **establish new strategies for developing highly efficient gene therapy vectors**. Fundamental understanding of cellular processes, viral packaging and influences by the production process will lead to new strategies for a **robust production platform for future gene therapy applications**.

Translation

The mission of the proposed CD Laboratory is to guide production of gene therapy vectors from empiricism driven approaches towards knowledge-based approaches which are in line with the **Quality-by-Design concept for pharmaceutical production**. This will be achieved by better understanding of the cellular response to virus production to be used for cell line optimisation. Advanced offline analysis will be established for better product characterisation. This information integrated with online analysis will be used as soft sensors for model based real time monitoring of the process enabling process control strategies. A miniaturized process development platform will enhance process understanding based on the investigation of interrelationship of subsequent process steps. The availability of all these methods will **enhance efficiency and safety of rAAV production** and will **increase accessibility of these valuable pharmaceuticals**.

The CD Laboratory will start **with January 2023** and offers the **following open positions**:

- **PostDoc Position**, Full Time (part time possible)
Research Topic: Bioprocess Engineering of AAV production – focus on downstream processing and analytics
- **PostDoc Position**, Full Time
Research Topic: Bioinformatics: Genomic, Epigenetic and Transcriptomic Characterisation of HEK cells
- **2 Lab Technician**, 30h
Focus: Cell Cultivation and Downstream Processing of AAVs & Analytics
- **PhD1** “Process analytics for production of AAVs as gene therapy vectors”
- **PhD2** “Model based real time monitoring (PAT) of downstream processes for production of AAVs as gene therapy vectors”
- **PhD4** “Genomic and epigenetic characterisation of HEK cells for production of AAVs as gene therapy vectors”
- **PhD5** “Stable cell lines for production of AAVs as gene therapy vectors”

For more information contact: **DI.Dr. Astrid Dürauer**, astrid.duerauer@boku.ac.at



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