




PhD position (Molecular biology / Biotechnology): Influenza A virus-derived defective interfering particles for antiviral therapy

 [Max Planck Institute for Dynamics of Complex Dynamical Systems](#)

 Magdeburg

The Bioprocess Engineering Group (Team: Molecular Biology) at the Max Planck Institute for Dynamics of Complex Technical Systems offers a PhD position (beginning from September 2019) with following topic:

“Influenza A virus-derived defective interfering particles for antiviral therapy”

Activities and responsibilities

One of the major research aims of the Bioprocess Engineering Group is the optimization of influenza vaccine manufacturing using cell culture-based systems (i.e., bioreactors). However, recently, virus-derived defective interfering particles (DIPs) are also discussed as a promising antiviral agent. Besides the establishment of a production process, we are also interested in molecular biological aspects in the replication and in the interfering mechanisms of such DIPs. In the context of the PhD work, both basic and applied research (in molecular biology) shall be conducted. Specifically, existing methods (and measuring methods) ought to be applied, new methods need to be established, and novel approaches for the efficient production of DIPs shall be developed.

Literature:

<https://jvi.asm.org/content/88/10/5217.long>

<https://jvi.asm.org/content/93/4/e01786-18>

Qualification profile

- aboveaverage Master's degree in biotechnology, biology, biochemistry, or similar
- profound theoretical knowledge in molecular and cell biology
- methodological competences (optional): cell culture, realtime RT-qPCR, molecular cloning, transfection and transduction techniques, and CRISPR/Cas9

Benefits

We offer a position that involves a diversity of tasks in an interdisciplinary and intercultural research group, an extensive training, a direct and competent supervision, and state-of-the-art instrumentation and laboratory equipment. The position is granted for three years with a salary according to the German pay grade (TVöD-Bund) and intended to conduct scientific research with the aim of acquiring a PhD. An extension is possible.

The Max Planck Society strives for gender and diversity equality. We welcome applications from all backgrounds.

Send application to

Please submit your application documents (including a CV, employer's / personal references, and copies of the Master's and high school certificates) only via email to:

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 Full-Time, Temporary  PhD Project  Updated on 05.06.2019