



The Rheinische Friedrich-Wilhelms-Universität Bonn is an international research university with a broad spectrum of subjects. With 200 years of history, around 31,500 students, more than 6,000 employees and an excellent reputation at home and abroad: The University of Bonn is one of the most important universities in Germany and has been recognized as a university of excellence.

The newly founded Bonn Institute of Organismic Biology (BIOB) of the Department of Biology at the Faculty of Mathematics and Natural Sciences / working group Prof. Dr. Nicolas Gompel is looking for a

Data Analyst for Gene Regulation as an Academic Functional Specialist (salary group A13 LBesO)

who translates the biological questions of our work into mathematical solutions and develops innovative programming to enable precise data analysis with passion and technical know how.

In the role of Data Analyst, you are a central component of Prof. Nicolas Gompel's team, which investigates the genetic origin of evolutionary changes (www.gompel.org). A major focus of the group is to characterize the molecular changes that lead to new gene regulation and phenotypic evolution. The Gompel lab combines dissection of enhancers with reporter constructs in transgenic *Drosophila* with quantitative imaging and statistical modeling to understand the molecular basis of regulatory changes. You will study these changes at the level of closely related *Drosophila* species as well as populations and adapt classical *Drosophila melanogaster* genetics to these different species to test evolutionary hypotheses.

Your tasks:

- Collaboration in several research projects in the field of gene regulation to support biologists in dealing with complex mathematical questions,
- Development of software and data analysis pipelines and application of mathematical/physical approaches to study the relationship between phenotype and genotype, based on experimental data generated by the research group in the Department of Biology,
- Interpretation of the generated data from a biological perspective together with the team,
- Composition of research articles, 1-2 publications are planned in each project, in which the post holder will be involved as co-author,
- Teaching (5 units per week), including lectures, course administration and supervision of a group of international and highly motivated students,
- If interested, there is the possibility of acquiring own third-party funding and conducting independent research projects.

Your profile:

- You have completed a Master's/Diploma degree in mathematics or physics or another natural science subject with an affinity for mathematical issues and a completed doctorate in a relevant subject,
- You have worked full-time in a relevant field for at least 3.5 years after completing your studies or at least 1 year after completing your doctorate, ideally in the field of genetics or molecular biology,
- You have the ability to work inter-disciplinarily and think conceptually,
- You are a flexible, approachable and open-minded person who is at ease in an inter-disciplinary and intercultural environment
- You have very good programming skills in Python, previous knowledge of the programs MATLAB, R and image analysis is desirable,
- You have a very good command of written and spoken English and a good command of German (some teaching will be held in German).

We offer:

- a permanent position with civil servant status (tenure for life), salary according to salary group A13 LBesO
- a position in an intercultural team, at an internationally connected university of excellence
- a workplace in a modern laboratory in the heart of Bonn, home office is possible
- further education and training opportunities
- access to numerous sport facilities through university sports
- Excellent transport options to the institute thanks to its central location close to the botanical garden

The employment or transfer to the civil service on probation is only possible until the completion of the 42nd year of life. Severely disabled persons and persons with disabilities according to § 2 paragraph 3 of the Ninth. Book of the Social Code, Rehabilitation and Participation of Disabled Persons (Article 1 of the Act of June 19, 2001, BGBl. I p. 1046, 1047), as amended, may also be hired if they have not yet reached the age of 45.

The University of Bonn is committed to diversity and equal opportunity. It is certified as a family-friendly university. Its goal is to increase the proportion of women in areas where they are underrepresented and to particularly promote their careers. It therefore strongly encourages applications from relevantly qualified women. Applications are handled in accordance with the State Equal Opportunity Act. Applications from suitable persons with proven severe disabilities and persons treated as such are particularly welcome.

If you are interested in this position, please send your application documents (copies of certificates, scientific background, a description of previous teaching experience and experience in the aforementioned area, as well as a description of your teaching philosophy) combined in to one single pdf-file by **30 June 2024** to Prof. Dr. Nicolas Gompel (ngompel@uni-bonn.de). For further information, please contact Prof. Dr. Nicolas Gompel (+49 228 73-4784).

Recent publications:

Bachem K, Li X, Ceolin S, Mühling B, Hörl D, Hartz H, Leonhardt H, Arnoult L, Weber S, Matarlo B, Prud'homme B and Gompel N*. Regulatory evolution tuning pigmentation intensity quantitatively in *Drosophila*. *Science Advances*, 10(4):eadl2616. doi: 10.1126/sciadv.adl2616.

Ling L, Mühling B, Jaenichen R and Gompel N* (2023) Increased chromatin accessibility promotes the evolution of a transcriptional silencer in *Drosophila*. *Science Advances*, 17;9(7):eade6529. doi: 10.1126/sciadv.ade6529. Epub 2023 Feb 17

Le Poul Y, Xin Y, Ling L, Mühling B, Jaenichen R, Hörl D, Bunk D, Harz H, Leonhardt H, Wang Y, Osipova E, Museridze M, Dharmadhikari D, Murphy E, Rohs R, Preibisch S, Prud'homme B* and Gompel N* (2020) Regulatory encoding of quantitative variation in spatial activity of a *Drosophila* enhancer, *Science Advances*, 6(49):eabe2955. doi: 10.1126/sciadv.abe2955

Xin Y, Le Poul Y, Ling L, Museridze M, Mühling M, Jaenichen R, Osipova E, Gompel N* (2020) Ancestral and derived transcriptional enhancers share regulatory sequence and a pleiotropic site affecting chromatin accessibility input, *Proc Natl Acad Sci U S A*, 10:202004003. doi: 10.1073/pnas.2004003117