



## **Position for Postdoctoral researcher**

The Laboratory of Genome Engineering at the Institute of Biochemistry and Biophysics (IBB) in Warsaw, headed by Prof. Matthias Bochtler, invites applications from young researchers for NCN funded postdoc position. Postdoc candidates must hold a PhD degree in natural sciences, obtained no earlier than December 31st, 2014.

The project is focused on downstream effectors of the CRISPR-Cas adaptive immune response of bacteria against phages. CRISPR-Cas immunity typically acts by targeted destruction of invading nucleic acids or conjugation plasmids. Recently, it has become clear that detection of specific targets does not only trigger their destruction, but can also initiate signaling cascades that activate CRISPR-associated effectors that interfere with phage infection either directly or indirectly.

The project is funded under the framework of the NCN DAINA grant “Novel effectors and terminators of CRISPR-Cas antiviral signaling” (as soon as the agreement with NCN will be signed and the grant will be active), and will be carried out in collaboration with dr Gintautas Tamulaitis from Vilnius University (<https://www.gmc.vu.lt/en/research/researcher-profiles/dr-gintautas-tamulaitis>). The Tamulaitis group has pioneered the research in the area of CRISPR-associated effectors by showing that type III CRISPR-Cas systems synthesize cyclic oligoadenylates (cAn, n=3-6) to signal infection. cAn binding triggers the activity of effector domains which interfere with phage infection, but also initiates the signal termination by cAn hydrolysis. In the project we plan to study novel effectors and terminators of type III CRISPR-Cas antiviral signaling.

### **Requirements for the candidate:**

The ideal candidate should have laboratory experience in protein cloning, expression, purification and protein sample quality assessment. Experience with crystallization, crystal cryo-cooling, X-ray data collection, X-ray data analysis, structure determination, refinement and deposition will be highly appreciated. Familiarity with cryo-EM sample preparation, preliminary analysis (DLS, negative stain), basic cryo-EM data analysis and quality assessment is desirable. Knowledge of protein and nucleic acid structural and biochemical properties is mandatory. Since the work will involve data analysis and visualization, prior experience with linux system would be an asset.

### **We offer:**

1. Full employment contract for 24 months, Gross monthly salary about 9 000 PLN (amount including seniority allowance and other)
2. Benefits including reduced-rate for an individual private medical care package and membership in MultiSport programme.
3. Participation in courses, scientific training, support from peers, and mentoring

Deadline for application submissions: 2024-12-20 00:00

Planned start date of the employment: 2025-01-02



**How to apply:**

- **Applications should be sent via recruitment platform:**  
<https://system.erecruiter.pl/FormTemplates/RecruitmentForm.aspx?WebID=cef6488e997d46dfbad0e812e96b118b>
- **In case of any difficulties please contact:** [recruitment@ibb.waw.pl](mailto:recruitment@ibb.waw.pl)
- Your application must be submitted in English and should contain:
  - CV including scientific achievements and a short description of used methodology
  - Copy of PhD diploma
  - Contact details to potential referees, including one of your PhD supervisor
  - **Please include the following statement in your application:** “In accordance with the personal data protection act from the 29th of August 1997, I hereby agree to process and to store my personal data by the Institution for recruitment purposes”.