



**MAŁOPOLSKA CENTRE OF  
BIOTECHNOLOGY**

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Cracow, April 16<sup>th</sup> 2018

**Rector of the  
Jagiellonian University  
announces a contest for a Postdoctoral position (Biochemistry/Bionanoscience)  
in the Laboratory of Bionanoscience and Biochemistry at the  
MAŁOPOLSKA CENTRE OF BIOTECHNOLOGY**

The laboratory of bionanoscience and biochemistry is an ambitious and expanding research hub for topoisomerase and bionanoscience research and is now actively recruiting Postdoctoral research candidates for a fully funded position.

**Details of Project:** The successful candidate will join a large multidisciplinary team investigating both wet-lab and in-silico based synthetic structural biology (i.e. protein and DNA-based nanomachines) as well as biochemical and structural studies of DNA gyrase. *The candidate will be given significant freedom in their research project.*

**Requirements**

The best candidate will be chosen **based on their qualifications and the strength of their proposed research ideas**. We encourage applications from enthusiastic candidates with exciting research ideas. Typically, useful qualifications may include some of the following:

- 1) Possess a PhD in biochemistry, structural biology, bioinformatics or related areas (Mandatory)
- 2) Experience in protein structural biology, particularly X-ray crystallography including data collection, analysis and refinement and the interpretation of such data and/or have experience in structural bioinformatics.
- 3) Experience in cryo electron microscopy for high-resolution protein structure determination
- 4) In silico DNA nanostructure and/or protein design/modeling experience (e.g. CaDNAo, Rosetta etc).
- 5) Enzyme design experience
- 6) Experience in modern molecular biology techniques useful for protein design e.g. directed evolution, mRNA display, orthogonal expression systems, novel labeling techniques, cell-free systems etc.
- 7) Experience in protein/DNA production and purification.
- 8) Experience in production and characterization of DNA gyrase
- 9) Have good written and oral communication skills in English (Mandatory)

**Important Dates**

- Application Deadline: May 14<sup>th</sup> 2018. The successful candidate will be notified shortly thereafter.
- Start Date: June-July 2018 or as soon as possible thereafter.

**Our Offer**

- Full time position;
- An exciting project in a new area of bionanoscience;
- Ability to join an international and dynamic group of excellent researchers
- Excellent training: In our diverse group you will be able to network with international researchers

- experience and learn new skills including in DNA origami design, enzyme biochemistry, structural biology, protein design etc.
- Discounted membership of sports facilities (“Multisport”, <https://www.benefitsystems.pl/en/for-you/multisport/>)
- Subsidised social events (theatre tickets, hotels etc)

### **How to Apply**

Send applications (in English) to [jonathan.heddle@uj.edu.pl](mailto:jonathan.heddle@uj.edu.pl) applications should be marked “ADK” and include the following:

1. Copy of PhD certificate.
2. Contact details of a minimum of two referees including a former academic/project supervisor.
3. Motivation Letter.
4. A short (max. 2-page) description of a proposed research project in the area of either DNA gyrase research or synthetic structural biology (i.e. DNA nanotechnology, protein design) or an attractive proposal in areas related to the laboratory’s research interests.
5. CV.
6. Your application must include the following statement: “I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Personal Data Protection Act as of 29 August 1997, consolidated text: Journal of Laws 2016, item 922 as amended.”

On behalf of  
the Rector of the Jagiellonian University  
prof. dr hab. Kazimierz Strzałka  
Head of Malopolska Centre of Biotechnology