

PhD Student Position Available in DNA Nanoscience

Bionanoscience and Biochemistry Laboratory (Heddle Lab) Malopolska Centre of Biotechnology, Krakow, Poland

We are now recruiting a PhD student to join our new team working to design and build DNA-membrane protein nanomachines for use in artificial cells. The project offers the opportunity to gain experience in a new area of synthetic biology, which will become increasingly important in the future. It also offers the chance to work in a dynamic, international team working closely with partners across the globe including Japan and Germany where we have an official collaboration with Max Planck Institute of Medical Research in Heidelberg.

You will join the Heddle lab (www.heddlelab.org), a newly established, innovative lab carrying out ambitious research aimed at designing and building artificial biological nanomachines using DNA, protein and lipid building blocks. We are located in a state-of-the-art laboratory, based at the new Malopolska Centre of Biotechnology, in the beautiful city of Krakow, Poland

Details of Project: The successful candidate will join a FNP "TEAM" project that aims to design and build novel DNA-based nanomachines able to interact with specific proteins and help construct artificial cells. The project is carried out in collaboration with Ilia Platzman at the Max Planck Institute of Medical Research in Heidelberg, Germany. Your contribution to the team will be: **1.** Designing of novel DNA origami nanomachines *in silico*, **2.** Production and assembly of designed DNA origami nanomachines. **3.** Structural assessment of designed DNA origami nanomachines using AFM and, where possible cryo EM (in collaboration with cryo EM experts in Japan). **4.** Interaction and measurement of DNA nanomachines with specific membrane proteins

Requirements:

1. A Masters degree in DNA chemistry, structural biology, biochemistry or related area
2. Experience in molecular biology methods including purifying and handling of DNA
3. Experience in DNA nanotechnology would be advantageous
4. Familiarity with structural biology (e.g. cryo EM) will be advantageous but not obligatory
5. Have good written and oral communication skills in English

Important Dates

- Application Deadline: August 10th 2017
- Start Date: October 2nd 2017

Our Offer

- PhD position with *internationally competitive* stipend payment
- Position for three years with possible extension after the project ends
- 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.

How to Apply

Send applications to jonathan.heddle@uj.edu.pl applications should be marked "FNPPHD1" and include the following:

1. Copy of Masters certificate
2. Contact details of a minimum of two referees including a former academic supervisor
3. Motivation Letter
4. CV
5. 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."

The best candidates may be interviewed shortly after the application deadline.

