

JOB OFFER

Position in the project:	PhD student
Scientific discipline:	DNA nanoscience, molecular biology, DNA –protein interaction.
Job type (employment contract/stipend):	Full-time stipend
Number of job offers:	1
Remuneration/stipend amount/month (“X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN”):	Gross stipend = 3500 PLN per month. Expected net stipend = 3500 PLN per month
Position starts on:	November 1 st 2017
Maximum period of contract/stipend agreement:	24 months
Institution:	Malopolska Centre of Biotechnology
Project leader:	Soumyananda Chakraborti
Project title:	<i>A Programmable Modular, Molecular “Ball-and-Glove” with Potential for Drug Delivery</i> <i>Project is carried out within the HOMING programme of the Foundation for Polish Science</i>
Project description:	We are now recruiting a PhD student to join a newly funded project to design and develop highly programmable DNA origami structure for delivery of therapeutic protein. 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 UK where we have an official collaboration with RIKEN Center for Life Science Technologies, Japan. You will join the Heddle lab (www.heddlelab.org), a newly established, innovative lab carrying out ambitious research aimed at <u>designing and building artificial nanomachines</u> using DNA and protein. 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
Key responsibilities include:	<ol style="list-style-type: none"> 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, TEM and cryo EM (in collaboration with cryo EM expert from Japan) 4. Interaction of DNA nanomachines with specific protein cage ferritin. 5. <i>In-vitro</i> delivery of DNA-origami/protein cage complex to cancer cell.
Profile of candidates/requirements:	<ol style="list-style-type: none"> 1. Should have a Masters degree in synthetic biology, structural biology, molecular biology, biochemistry or related discipline 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, particularly cryo EM will be advantageous but not obligatory

	5. Have good written and oral communication skills in English
Required documents:	<ol style="list-style-type: none"> 1. Copy of Masters Certificate 2. Contact details of a minimum of two referees including a former academic supervisor 3. Motivation Letter 4. CV
We offer:	<ul style="list-style-type: none"> ● PhD position with internationally competitive stipend payment ● Position for two 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, cryo-EM structure analysis, cell Biology. ● State-of-the-art research centre with access to the full suite of equipment necessary for bionanoscience, biochemistry and structural biology research and a network of international collaborators in Europe and beyond. Including a chance to interact with renowned Cryo-EM specialists Dr. Hideki Shigematsu.
Please submit the following documents to:	<p>Soumyananda Chakraborti, email: soumyabiochem@gmail.com</p> <p>Please include "HOMING-PHD" in the subject heading</p>
Application deadline:	August 5th 2017
For more details about the position please visit (website/webpage address):	www.heddlelab.org

Please include in your offer:

"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."