



CeNT-36-2021

Director of Centre of New Technologies of the University of Warsaw, with the Project Leader, announce opening of the competition for the position of Student in the Laboratory of Bioorganic Chemistry– Centre of New Technologies of the University of Warsaw.

JOB OFFER

Position in the project:	Student
Laboratory:	Laboratory of Bioorganic Chemistry
Scientific discipline:	Chemistry (bioorganic chemistry)
Keywords:	Nucleotide, inhibitors, mRNA 5' cap, therapeutic mRNA
Job type (employment contract/stipend):	stipend
Number of job offers:	2
Remuneration/stipend amount/month:	2000 PLN
Position starts on:	1st October 2021
Maximum period of contract/stipend agreement:	10 months
Institution:	Centre of New Technologies, University of Warsaw
Project leader:	Prof. Jacek Jemielity
Project title:	New selective inhibitors of cap dependent proteins: synthesis, delivery and characterization
Competition type:	TEAM
Financing institution:	Foundation for Polish Science
Project description:	Our research encompasses improving methods for the chemical synthesis of nucleotide analogs, designing new modified nucleotides as tools for molecular biology and conjugating nucleotides to labels, tags and new materials. One of our particular interests, is development of eukaryotic mRNA cap analogs with potential medicinal applications. The project aims at the design, synthesis, and evaluation of novel mRNA 5' cap analogs as selective inhibitors of three major cap-related proteins: the eukaryotic translation initiation factor 4E (eIF4E) and the two decapping enzymes (DcpS and Dcp2). The proteins were selected due to their key roles in mRNA function and an already-confirmed status as molecular targets for cancer and neuromuscular diseases.
Key responsibilities include:	1. Synthesis of cap analogs modified within 7-methylguanosine region



	<ol style="list-style-type: none">2. Synthesis of cap analogs modified within triphosphate bridge region3. Synthesis of molecular probes and bioconjugates
Profile of candidates/requirements:	<ol style="list-style-type: none">1. Enrolled as a student of first cycle studies or second cycle studies conducted in a higher education institution on the territory of Poland, in biology, chemistry, physics or related discipline.2. Great communication skills and a passion for life sciences3. Strong hands-on experience in organic chemistry techniques, with working knowledge of bioorganic compounds synthesis, purification and identification4. Practical experience with NMR, MS and HPLC support, NMR data analysis and graphic software is a big plus
Required documents:	<ol style="list-style-type: none">1. Cover letter2. Current curriculum vitae3. Copy of document confirming the student status4. Transcript of studies record5. Signed information on the personal data processing6. Publications and conference presentations list7. Contact details (phone numbers and e-mails) for previous research supervisor or other research associates
We offer:	Stimulating and friendly work environment
Please submit the following documents to:	j.jemielity@cent.uw.edu.pl
Application deadline:	03.09.2021
Date of announcing the results:	15.09.2021
Method of notification about the results:	e-mail