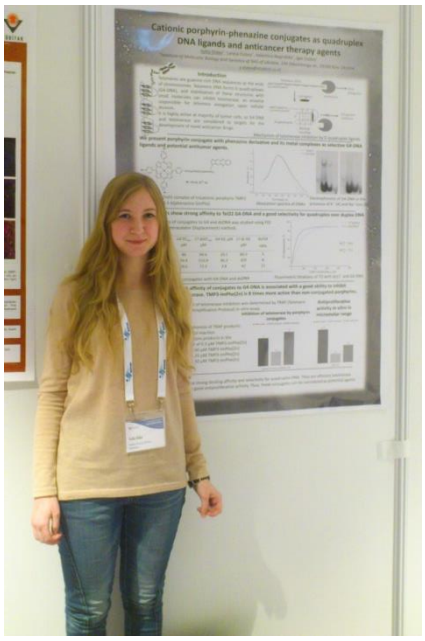
Yuliia Didan
13th International Congress on Targeted Anticancer Therapies, Paris, France

I am graduated student on the final year of master programme on biochemistry and in three months I will have my master thesis defence. The Society of Biology travel grant gave me an opportunity to participate 13th Targeted Anthicancer Therapy (TAT) Congress in Paris.



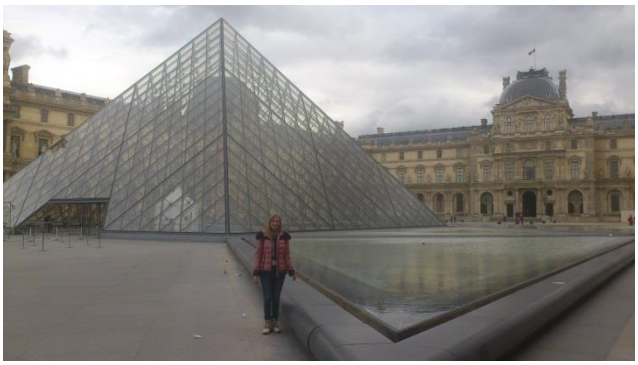
I benefited from the practical application of my master project - a necessary step in master thesis validation. The TAT Congress is one of the biggest meeting connected molecular biology scientists, clinicians and delegates from pharmacological industry. Such collaboration significantly improves drug development field. I presented a poster representing my master project devoted G-quadruplex DNA ligands.

For three years I have been working in the Institute of Molecular Biology and Genetics NAS Ukraine in the field of medical chemistry that is a part of my bachelor and master programmes. One of my major projects has been working on G-quadruplex DNA selective ligands. G-quadruplex DNA is a part of human telomere. Stabilisation of these structures with small molecules can inhibit telomerase, an enzyme responsible for telomere elongation upon cellular division. Telomerase is highly active at majority of tumor cells, therefore we can consider G-quadruplex DNA and telomerase as potential targets for the development of novel anticancer drugs. I presented porphyrin conjugates with phenazine derivative and its metal complexes as selective G-quadruplex DNA ligands and potential antitumor agents.

We studied these compounds for three years and performed almost all experiments, available in our labs, including such new techniques as Telomeric Repeat Amplification Protocol and Fluorescent Intercalator Displacement assays, which was noted at the Conference. I am happy that after three years of continuous work I finally could present results. My report provoked enthusiastic debates during each poster sessions. We even found new interesting ideas, such as use of our compounds as tracer as well as drugs to detect their localisation inside the cells. We actually have never tested this approach, but it can be possible as porphyrins have the properties of fluorophores. We also discussed some basic experiments such as toxicity assay that should be conducted to strength obtained data.

I also was glad to talk to Bio-techne company manager about our ligands, as possible implementation of studied compounds into industry is one of the major aims of our study. I hope we can cooperate with this company in the future. In general, most of participants noted an interesting approach of our work and our abstract was also published in the *Annals of Oncology* - a respectable journal with high impact factor.

Apart from huge scientific meaning it was good cultural contribution to my life. TAT Congress was held in Paris, in one of the most beautiful cities in Europe. For major part of my life I have been living in small cities and I was completely shocked by grandest and wonderful architecture of Paris. I also visited world-famous attractions such as the Louvre, the Eiffel Tower, the Champs Elysees and etc. It is so great to see live sights those previously I could just imagine and see only on pictures or films.



I am so grateful Society of Biology for travel grant that allowed me to participate in a significant scientific meeting. It has strongly enhances my current master project report and my future scientific career.