



Maria Teresa IORIO



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Supervisor: Marko Mihovilovic,
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Thesis title: New Modifications
of an old Scaffold: Pyrazolo-
quinolinone Derivatives and
Analogues as Active Compounds
on GABA_A Receptors.

Current Position and Employer:
Research Scientist at Takeda
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How would you summarize your thesis results in 3 sentences?

We designed, synthesized and evaluated a library of pyrazoloquinolinone (PQ) derivatives and analogues, as active compounds on GABA_A receptors. The aim was to modify the general PQ scaffold in order to accomplish compounds with better properties in terms of selectivity, potency and detectability. This study yielded a new scaffold with improved properties. To investigate the binding and mechanism of action of the new scaffold, we performed functional and mutational studies, as well as radioligand displacement assay.

What was the impact of the MolTag program on your further career?

Practically, **it gives you a good leverage in job interviews**. If you use all the opportunities, it also gives you a lot of experience. It shows potential employers that you are fit to work in many different teams, and on a variety of topics.

Did you keep connections with some former colleagues?

Yes, many actually...with the colleagues in Vienna we meet quite regularly, and with the others I am still in touch.

What did you particularly like about the MolTag program?

The lab rotations, or better the strong collaboration with other labs and scientists. The travelling opportunities. The lively exchange of ideas, and the possibility of having colleagues with different expertise.

What is your recommendation for current MolTag PhD students?

The interaction with experts in other areas of science and with students with varying tenure can be challenging. **Use it as a learning opportunity and do not get discouraged by comparing to others.** Also, take advantage of all the opportunities: visit other labs, create a network, go abroad, meet the other scientists and learn techniques that are not used in your lab. It will all be incredibly helpful. And last but not least, stay strong :)

