

**Name of the MSC Fellow: Antonino Puglisi**

**Nationality: Italian**

**Host organization: Istanbul Technical University**

**Country of the Host: Turkey**

**Project Acronym: NanoMop**

**Project start and end date: 1<sup>st</sup> April 2018 – 31<sup>st</sup> March 2020**

**Type of MSC action, H2020: IF**



**Your story:**

**Project objectives and research field:**

Niemann-Pick Disease Type C (NPC) is a rare genetic disorder caused by the accumulation of cholesterol mainly in the brain. Cyclodextrins (CDs) have shown potential therapeutic activity for the disease. In this project novel CD-based nanoparticles are prepared and investigated for an improved therapeutic effect in NPC. The fellowship blends together polymer chemistry and biological sciences. **Tell us why your topic is important and/ or how it brings to advancement in your research field:**

Currently, there is no effective treatment for Niemann-Pick Disease Type C. CDs represents a potential therapeutic intervention in the disease that in the European Union has an incidence of 1 per 120,000 people. The project addresses an important question that needs to be answered urgently and will contribute to the treatment of the neglected disease in line with the Horizon2020 health goal of providing better and more effective therapies. Moreover, this project's expected results may also contribute towards the treatment of other neurodegenerative disorders exhibiting impaired cholesterol metabolism such as Alzheimer's, Parkinson's and Huntington's diseases. **What are the benefits of participating in a MSC action?**

This MSC action points decisively towards my career advancement by complementing my profile in cyclodextrin chemistry with new skills and knowledge especially in macromolecular chemistry and in biosciences (range of biological assays). This is placing me in a position of strength to diversify my competences and skills while broadening my expertise into the life sciences. The fellowship is designed to strengthen my professional independence while reinforcing my professional maturity by the means of a personalised training-through-research approach. At the same time

the project will reach out to industry (CycloLab – Hungary) and charity organisations (International Niemann-Pick Disease Alliance - INPDA) in order to have a multiple knowledge-transfer effect. **Did you encounter any challenges during application/implementation and did you get any help?**

Throughout the proposal writing stage I got tremendous support from both the MSCA NCP in Turkey (at TÜBİTAK) and the EU office at my Host–Istanbul Technical University. I am particularly grateful to The Scientific and Technological Research Council of Turkey (TÜBİTAK) for the financial support to have my project pre-evaluated which helped me a lot to get my MSCA funding. I got a lot of support not only with all the technical information I needed but also through personal encouragement and a great sense of hospitality which really characterises the Turkish culture. Also during the phase of implementation I got a lot of help from both the Turkish NCP and EU office at ITU with all the paperwork which sometimes can be a bit challenging. I also got all sort of perks at my host including a free Turkish language course and access to sport facilities. Overall my experience within the Turkish academic environment has been a very positive one so far and colleagues very helpful and collaborative. **Why did you choose a widening country as a Host? What was the reason that convinced you? What is making you professionally happy here?**

A few years ago I had the opportunity to participate in an Erasmus Teaching Exchange programme. I had already seen most of Europe so when time came for me to choose a destination I challenged myself looking East and I picked Istanbul. I did not really know what to expect. I literally fell in love with the city! What appealed to me most was the sense of a place bridging the East and the West. But beyond that cultural element I suppose I was very impressed with the scientific level of the Turkish academic institutions. So when years later I matured the idea of applying for a MSCA-IF I naturally looked again at Istanbul and I found in Prof. Yusuf Yagci at Istanbul Technical University a first-class scientist as well as an extremely supportive supervisor. I am really happy to be in Turkey. I am surrounded by very kind and competent colleagues and I work in state-of-the-art facilities. Besides, I am also having a go with the language and I love the food and the culture. **Would you recommend others to apply? What useful advice/ tips can you give them?**

I would certainly recommend Turkey to anyone who is looking for a Host country for his or her MSC application. The academic level is high and you get a lot of support. If you are unsure whether to apply in a Widening Country my advice would be to visit for a short time and have a look around for yourself. You might find it useful to chat to the local NCP and the EU office at your potential Host. Talk to your potential supervisor and make sure you check the facilities in place. And of course you can always look for people like me who have already had the experience of doing research there.