My name is Arianna Oddo and I am a PhD Candidate at Faculty of Pharmacy and Pharmaceutical Science at Monash University, in Melbourne. The goal of my research is to develop an innovative, high throughput method that harbours the potential to reduce animal testing in the future, while providing more accurate results than current in vitro testing. The platform I developed during the first year of my PhD is based on 'lab-on-a-chip' technology, which means that human-derived cells can be grown in special microchips and exposed to chemicals in a way that better resembles human exposure. If you think about it, everything flows in our bodies: from the air getting into the lungs, to our blood constantly circulating. So, to closely mimic human physiology, chemicals and nanoparticles should also be administered under perfusion to human cells. This allows to better answer several questions: are these chemicals toxic to the cells? Do some chemicals alter cell morphology? At the Leibniz Institut für Neue Materialien (INM), in Saarbrücken, Germany, I worked under the supervision of Dr Annette Kraegeloh and Dr Jana Fledermann, where I employed superresolution microscopy to image cells grown in a lab-on-a-chip device and exposed to nanoparticles. I can say that this research exchange was a success! Despite being quite a short period of time and involving lots of hard-work, this collaboration absolutely paid off, as I was able to capture some really nice images. The work environment was very friendly, I enjoyed having lunch with team members on campus, and was happy to practice my rusty German. In my free time, I had the chance to visit other cities, including Munich and Hamburg. Many thanks to everyone for your support /Vielen Dank an alle für die Unterstützung: Sylvia und Melanie (aus dem DAAD), Annette und Jana (aus dem INM), Nico und Tommy (meine Betreuer aus Melbourne).

Free time in Germany: (left) Brezel and Radler in a Beer Garten in Munich, one of my favourite German cities, where I also did my Master's of Science in Chemistry and (right) beautiful lights in Hamburg, die Perle an der Elbe (the pearl of the river Elbe).



