

Thanks to the financial support of the SSM I had the great opportunity to attend the 1st EMBO conference on "Bacterial morphogenesis, survival and virulence: Regulation in 4D" in such an amazing location Thiruvananthapuram, Kerala, India.

The conference provided a full survey of various key areas of bacterial biology including cell division, persistence and virulence thanks to experts of the different fields. I had the chance to attend many exciting and inspiring talks and I decided to highlight two different ones not directly linked to my ongoing project that I particularly appreciated.

The first one was about persistence and dormancy by Dr Sophie Helaine from the Imperial College London. Persisters are non-growing, multidrug-tolerant bacteria involved in infections. She presented recent work about *Salmonella* that forms intramacrophages persisters thanks to acetyltransferase toxins (Cheverton et al., 2016) that will inhibit translation and how growth resumption is allowed thanks to a mechanism that detoxifies the acetylated tRNAs and then the cell. Her talk highlighted how the charged tRNAs are cleaved and addressed the question about the specificity in cleavage.

The second talk was given by a PhD student, Noémie Matthey, from Melanie Blokesch lab in EPF Lausanne, about the type VI secretion system (T6SS) killing device in *Vibrio Cholerae*. It was previously discovered that T6SS genes are co-regulated with genes involved in DNA uptake and that T6SS allows acquisition of free DNA (Borgeaud et al., 2015). Then, she suggested that *V. cholerae* can adapt and evolve in their natural environment by taking up preferentially genetic material released from the killed prey up to several hundreds of kilo basepairs.

This conference was also an excellent chance to meet and exchange during conferences, poster sessions, coffee breaks and conference dinner with academics but also a good opportunity to present my work to the scientific community. It enabled me to obtain, by experts in the field, a critical analysis of my research.

Borgeaud, S., Metzger, L.C., Scignari, T., and Blokesch, M. (2015). The type VI secretion system of *Vibrio cholerae* fosters horizontal gene transfer. *Science* 347, 63–67.

Cheverton, A.M., Gollan, B., Przydacz, M., Wong, C.T., Mylona, A., Hare, S.A., and Helaine, S. (2016). A *Salmonella* Toxin Promotes Persister Formation through Acetylation of tRNA. *Mol. Cell* 63, 86–96.