■ Participants' report

A Report on the ESP-IUPB 2019

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This year the European Society for Photobiology (ESP) and the International Union of Photobiology (IUP) for the first time held a joined World Congress on Photobiology under the motto "Light & Life". In the beginning, in the years 1954–1960 the IUP organized a conference every 3 years, from 1964–2004 every 4 years, and since 2009 every 5 years. The ESP holds a conference more often, with intervals of 1 year from 1986–1987, and since then every 2 years. Also, it was the first time that Barcelona hosted a photobiological conference of one of the two organisations bringing together scientist from many different disciplines of photobiology, like medicine, chemistry, physics, and biology.

It was impressive and very inspiring to meet such a lot of eminent researchers and listen to their ideas, results and questions. As an example, I can mention that I was fascinated by the talk of Dongping Zhong in the first keynote lecture. He explained vividly the newest results on the quantum yields of electron transfer processes within the UVR8 photoreceptor. Among many others the session on "Algal photobiology" also aroused my interest. The lecture by Patrick Neale about biological weighting functions in diverse microalgae explained the advantage of using polychromatic action spectra to estimate UV effects in an ecological context, and in interaction with elevated CO_2. Further, from the same session three presentations about UV protective substances in different classes of algae and their potential use as sunscreens in human sunlight caught my interest because the idea of an environmentally friendly sunscreen is very attractive to me. Within a session about climate change chaired by Janet Bornman the talk by Sharon Robinson discussed how ozone-driven climate change affects the ecosystems of the Southern Ocean in many ways, not only because of increased UV-B radiation.

On Wednesday during the session about plants' responses to UV-B, Gareth Jenkins drew attention towards the function of UVR8 in natural sunlight and under field conditions and discussed the possibility of another hitherto unknown UV photoreceptor. This was a perfect opening for Neha Rai to explain in her presentation on how UVR8 and the cryptochromes interact, in a redundant but also antagonistic way and co-regulate gene expression in *Arabidopsis thaliana*. Directly afterwards a short talk by Nicolas Tissot about cross-regulation of UV and visible radiation continued on the interaction of both photoreceptors and their common binding partners. Lastly, I want to mention a very interesting talk by John-Stephen Taylor who explained different energy transfer mechanisms with DNA molecules that can lead to photoproducts, either by direct absorption or by photosensitisation.

Definitely, I think, listening for 5 days to excellent presentations gave me strong motivation for my own research. Besides getting to know new people, I also noticed that, as a member of the UV4plants association, I

Figure 8.1: UV4Plant members at the conference

was feeling much less lonesome or lost in the crowd than can happen when joining such a big congress. Always someone from the community was around to spent time with and discuss the sessions. Therefore, for me the attendance at the EPS-IUPB has also increased my networking with the group of UV4plants members and through them the wider photobiology research community. Further, during the congress I met a collaborative partner of mine from Grenoble. For the first time we had the opportunity to discuss our project personally. This was a great chance and made me much more confident regarding the collaboration. During the poster session and on the following days I exchanged interesting thoughts about the prospects for my possible future research. Thanks to all discussion partners for their friendly comments!

I also would like to thankfully acknowledge Éva Hideg and the local organizers for the opportunity to put up an advertising poster for the upcoming Network Meeting of UV4plants next year in Kiel. Definitely, the time I have spent in Barcelona was an unforgettable positive experience. I enjoyed meeting colleagues, the city, and the food a lot!

Finally, I cordially want to thank the UV4plants association for awarding me with the travel bursary and for the relaxed and delicious dinner evening we had together as a society on Wednesday during the meetings!

Related readings

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