

Report of attending the international CILIA 2016 in Amsterdam

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Firstly, many thanks to the GDR for the funding which allowed me to attend the international conference on Cilia in Amsterdam, and, to people who helped me in applying and all the committee members. We present a poster named Role of the ciliopathy protein MKS1 in epithelial homeostasis.

It was a very exciting conference gathering most scientist working on cilia and associated diseases. Three hundred forty one years ago, first cilia were observed in a protozoan in a drop of rain water, and named as cilia by O .F .Muller in 1786. After being considered as vestigial organelles in mammals, the rebirth of cilia has been driven by the discovery that cilia dysfunction was associated to severe developmental diseases. Now, this research field is very active and many aspects of cilia functions in cell physiology and development are in progress and a growing number of laboratories is involved in this research area. This Cilia meeting 2016 attracted more than 370 registered participants and over 230 abstracts came from all around the world. During the meeting, many topics were under the spotlight, including new proteins in cilia transition zone and cilia composition, new findings related to ciliary protein transportation, the role of cilia in vesicle dependant signaling as well as the importance of developping the diversity of cell models to convey the complexity of cilia functions.

Many questions were addressed during the meeting. For example, where and when ciliogenesis happens? What is the function of tubulin complexity and centrosomes development ? How is the signaling components compartmentalized inside the cilia and how cilia derived vesicles take part in the cilia dependent signal pathways? Interestingly, the importance of these discoveries for patients, in terms of treatments or life quality improval was a center of concerns, as illustrated by a special session on ciliopathies and the presence and participation of associations of ciliopathies patients.

There were many impressive presentations both in oral and in poster sessions. I was specially interested by the work of a team from University of Oxford showing new location of MKS proteins at cilia transition zone their essential role in keeping cilia function in drosophila. They also found that Drosophila sensory cilia lacking MKS proteins exhibit striking defects during development but only subtle defects in adults. Interestingly, their results converge to our work in the conclusion that MKS proteins may play a role during tissue development, independantly of ciliogenesis.

The participation to this meeting also gave me a wide vision of cilia biology. At the same time, I met a lot of people and had nice discussions with them.

In conclusion, I got a lot from this conference, not only on research, but also on the social skills in communication with other scientists.

Finally, I want to renew my thanks to all people who contributed to give me the opportunity, by the way of this grant, to participate to this exciting meeting.