

Centre for Trophoblast Research Annual Meeting 2024

'Emerging models of human and non-human primate placental development'

1-2 July 2024, Churchill College, Cambridge (UK)

The Centre for Trophoblast Research Annual Meeting 2024, held at Churchill College on July 1-2, is the most important event in placental research. This annual meeting brings together pioneering researchers in the field of placenta studies. This year, the focus was on emerging models of human and non-human primate placental development.

The conference was organized over two days, featuring 13 main talks, 14 flash talks, and a poster session. There was also a conference dinner, lunch, and a final panel discussion on current methods to model the human placenta in vitro.

I was impressed by the selection of speakers and flash talks, which covered a range of perspectives on both existing and novel models of placenta development. Dr. Hiroake Okae's talk stood out to me. Dr. Okae, who first derived human trophoblast stem cells (hTSCs) in 2018, presented two significant advancements: new methods for genetically manipulating hTSCs and the successful establishment of hTSCs from term placenta, something he had not been able to do in 2018. Another interesting talk was by Dr. Thorsten Boroviak, who shared his work on establishing marmoset TSCs and the establishment of marmoset trophoblast-derived spheroids, able to recapitulate the behavior of trophoblast in non-human primate's superficial implantation. I particularly appreciated the detailed explanations of their experimental planning and execution. These talks were particularly relevant to my project, which aims to develop new models for studying placenta development in different mammals.

During the conference, I had the opportunity to give a flash talk. As a new PhD student, I was particularly grateful for this opportunity, which allowed me to draw attention to my poster and receive constructive and valuable feedback from many people. It was exciting and encouraging to see that my research was well-received and sustained by the attendees.

One of the most significant takeaways from this conference was the networking opportunities it afforded. I met many researchers interested in my project, which could lead to future collaborations. I gained new ideas for my current and future research and a better understanding of the field's direction.

However, the conference did have some areas for improvement. The poster session was held in a narrow corridor, making it difficult for people to view the posters and talk. Also, the timing of the poster session coincided with the first opportunity for attendees to socialize, which somewhat reduced the focus from the posters.

The Centre for Trophoblast Research Annual Meeting 2024 was a highly rewarding experience. It was not only fun and engaging, but also significantly beneficial for my research. The knowledge I

gained and the connections I made will positively influence my work in the field of placental development.

Sincerely,
Ornella Elezaj