

Poster prizes at 2nd CAM Conference

We proudly present our poster prize winners: Valeria Elisa Marotta and Ryan Mc Nelis



Valeria Elisa Marotta, University of Liverpool

DNA-damage dependent KIFC1 accumulation: translation from cell biology to in ovo breast cancer model



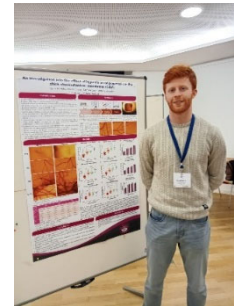
The study explores OTUD6B's role in regulating KIFC1 stability during DNA damage in TNBC. High OTUD6B mRNA levels correlated with poor overall survival in breast cancer and KIFC1 protein overexpression in TNBC, as revealed by bioinformatic analysis. In vitro experiments using MDA-MB-231 cells treated with etoposide or cisplatin showed increased centrosome amplification and KIFC1 protein, which was mitigated by OTUD6B depletion. In vivo, MDA-MB-231 CAM xenografts treated with etoposide exhibited DNA damage and KIFC1 accumulation, while cisplatin treatment reduced tumour weight and glucose uptake, confirmed by PET/CT and histological analysis. The CAM model effectively translated in vitro findings, with tumour weight serving as a reliable therapeutic indicator and PET/CT superior to in ovo IVIS for treatment response assessment.

Impressions:

"I was really happy and surprised to win the poster prize. This opportunity not only provided invaluable feedback, especially as I'm in my final year of my PhD, but also recognized my efforts among peers and experts in the CAM field. Furthermore, this recognition has enhanced my CV for future work opportunities, serving as encouragement to continue striving for excellence in my research".

Ryan McNelis, University of Galway

An investigation into the effect of hypoxia on angiogenesis in the chick chorioallantoic membrane (CAM)



We investigated the effect of hypoxia on chick chorioallantoic membrane (CAM) angiogenesis. Using in-ovo culture techniques, we exposed CAMs to either 21% (normoxia) or 15% oxygen (hypoxia) from embryonic day (ED) 4 to 11. Quantitative measurements including vessel length, vessel density, vessel segmental length, and vessel order diameter were recorded on ED 4, 6, 8, and 11. Results of vessel length, vessel density, and vessel segmental length showed no effect of oxygen concentration on CAM angiogenesis. Analysis of vessel order diameters showed significant differences in vessel patterning. The pattern of increasing vessel order diameter from 1st to 3rd order, seen in normoxic CAMs, was not observed in hypoxic CAMs. Furthermore, 3rd order vessel diameters were reduced in hypoxic CAMs compared to normoxic CAMs at ED11. Our study suggests that while hypoxia may not have a stimulatory effect on CAM angiogenesis, it may induce angio-adaptation and changes in vessel order diameter.

Impressions:

"Being awarded the poster prize at the 2nd international CAM conference holds great significance for me as a young researcher. It serves as a reminder that hard work and perseverance pay off and inspires me to continue in the field of angiogenesis research".