

19 JAN  
2023

Thursday  
LECTURE\*

MEET & EAT\*  
Light lunch provided

11.00am - 12.00noon

12.00 - 1pm



# The complexity of AHR activity in gliomas

## ABSTRACT

Gliomas are brain tumors with a high medical need for improved therapies. The aryl hydrocarbon receptor (AHR) is a critical regulator of glioma progression by modulating tumor cell malignancy and anti-tumor immunity. The detection of AHR activity in tissues mainly relies on quantitation of AHR target genes. Until recently, the context-specificity of AHR target gene expression had impeded investigation of AHR activity across different cell types. Our team developed a transcriptional signature that detects AHR activity and the biological functions it mediates irrespective of cell type or ligand. In this presentation, I will give an overview of the upstream metabolic enzymes involved in AHR activation in gliomas as well as the AHR downstream mediators driving functional outcomes. In addition, as gliomas heavily catabolize tryptophan, I will delineate how tryptophan limitation affects AHR activation in gliomas. The identification of the modulators of AHR activity will open up new avenues for the development of markers and drugs tailored to specific mechanisms and downstream effects of AHR activation in gliomas.



## SPEAKER

**Dr Christiane A. Opitz**  
German Cancer Research Center, DKFZ

## HOST:

Department of Cancer Research (LIH)

## RESPONSIBLE SCIENTIST:

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\*Please note that registration is mandatory by sending an email to [siu-thinh.ho@lih.lu](mailto:siu-thinh.ho@lih.lu)

## Locations:

### Lecture

CHL - Centre  
Room: **Amphitheatre**  
4, rue Ernest Barblé  
L-1210 Luxembourg

### Meet & eat

LIH - DoCR (BAM)  
Room: **Robin Holliday**  
6A, rue Nicolas-Ernest Barblé,  
L-1210 Luxembourg