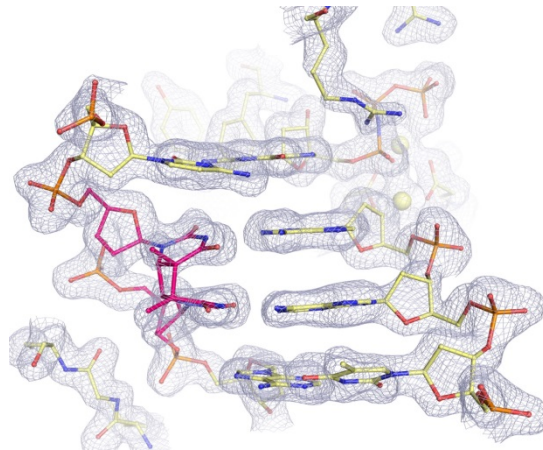




Dr. Christian Biertümpfel

Max Planck Institute of Biochemistry



Seminar

Date: Monday, May 11th, 2015 Time:

11:00 am– 12:00 pm

Venue: C016, Lab 1, Level C

"Structural Studies on Translesion DNA Synthesis"

Abstract:

DNA Replication is a fast and accurate process. However, when a replicative polymerase encounters a severe DNA lesion like a UV light-induced crosslink, the replication fork can stall or collapse. In order to avoid such a situation the replication machinery can readily switch from “replicative” to “translesion” mode which employs specialized polymerases to bypass replication-blocking lesions. Much is known about the signalling behind this process, however, it remains elusive how the actual switching takes place. In order to address this question we perform structural and functional studies on the human TLS polymerase η and on its connection to the replication machinery as well as other TLS polymerases.