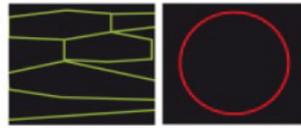




**CRC 670**



CELL-AUTONOMOUS IMMUNITY



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# Seminar

## **Gregor Ebert**

Infection and Immunity Division  
Walter and Eliza Hall Institute of  
Medical Research  
Australia

**“Dying to survive”**  
Killing infected cells to eliminate  
overwhelming infections

**Thursday, June 21, 2018, 12:00**  
**Main Lecture Hall, CECAD Research Center**

**Host: Hamid Kashkar**

**Gregor Ebert, PhD**  
**Infection and Immunity Division**  
**Walter and Eliza Hall Institute**  
**of Medical Research**



### **Dying to survive: Killing infected cells to eliminate overwhelming infections**

Greg's research focuses on the identification of host immune factors and mechanisms that attenuate or restrict the ability to eradicate chronic and overwhelming human infections. His main focus are viral and parasitic infections, such as hepatitis B virus (HBV) infection, dengue and malaria.

Tumour necrosis factor (TNF) is a critical component of an effective host immune response against intracellular infections. Cellular inhibitor of apoptosis proteins (cIAPs) have an important role in death receptor signalling and are critically required for the promotion of cell survival downstream of TNF receptor engagement. However, drug or genetic targeting of cIAPs results in programmed cell death downstream of death receptor signalling and small molecule inhibitors of cIAPs (Smac mimetics) were originally developed to promote immune / TNF mediated killing of cancer cells.

Greg's recent work has uncovered that by antagonising cIAPs with SMAC mimetics, immune mediated killing of HBV infected hepatocytes can be induced to eliminate chronic HBV infection in preclinical models. Importantly, this novel strategy to fight overwhelming infections is not restricted to chronic HBV. He now applies his findings to other overwhelming intracellular infections such as malaria and dengue.

Greg performed his graduate studies at the Institute for Medical Microbiology, Immunology and Hygiene at the University of Cologne and at the Institute for Virology at the Technical University in Munich, Germany. After he obtained his PhD, he had a short postdoctoral experience in Munich and is currently a Research Officer in the Pellegrini lab in the Infection and Immunity Division at Walter and Eliza Hall Institute of Medical Research.