



**SARA CAJANDER** was born in 1980. She grew up in the northern part of Sweden, Umeå. Sara obtained the Medical Degree at Umeå University in 2005. Since 2007 she has been employed at the Department of Infectious diseases at Örebro University Hospital, where she got the Specialist Degree in Infectious Diseases in 2013. With a special interest in sepsis and immunology she started her research work in 2012 supervised by Associate Professor Jan Källman.

The loss of human leukocyte antigen-D related expression on monocytes is suggested to be used as a marker of sepsis-induced immunosuppression. However, the levels and dynamics of monocytic HLA-DR are difficult to study by the recommended technique used today and are poorly studied in relation to the pathogen responsible for the infection. In this thesis, HLA-DR measured at the transcription level, by quantitative real-time PCR, was shown to be a promising alternative approach. Moreover, the dynamic pattern of monocytic HLA-DR expression was shown to be associated with the etiology of infection. Sepsis is a life-threatening syndrome that may be caused by many different pathogens. The results of this thesis implicate that etiology or site of infection should be taken into consideration in future studies of translational immunology in sepsis.

ISSN 1652-4063  
ISBN 978-91-7529-191-8

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ÖREBRO  
STUDIES IN  
MEDICINE  
161  
2017

Doctoral Dissertation

## Dynamics of Human Leukocyte Antigen-D Related expression in bacteremic sepsis

SARA CAJANDER  
*Medical Science with a specialisation in Medicine*



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Örebro Studies in Medicine 161 | ÖREBRO 2017