

## Press release

Please fill in this form and return it to [graduateschoolhealth@au.dk](mailto:graduateschoolhealth@au.dk) in Word format no later than three weeks prior to your defence.

### Basic information

Name: Sidsel Støy Email: sidsel.stoy@clin.au.dk Phone: 61664565

Department of: Clinical Medicine

Main supervisor: Hendrik Vilstrup

Title of dissertation: Immune mechanisms in alcoholic hepatitis

Date for defence: 23.01.2020 at (time of day): 14.30 Place: Auditorium C114-101  
Indgang C, Plan 1  
Aarhus Universitetshospital  
Palle Juul-Jensens Boulevard 99  
8200 Aarhus N

Press release (Danish)  
Ny immunologisk indsigt i alkohol-betinget leverbetændelse

Et nyt ph.d.-projekt fra Aarhus Universitet har undersøgt immunologiske mekanismer ved alkohol-betinget leverbetændelse og har herved identificeret et signal molekyle, der har potentielle som ny behandling af denne og muligvis andre leversygdomme. Projektet udgår fra Afdelingen for Lever-Mave og Tarmsygdomme, Aarhus Universitetshospital og er gennemført af Sidsel Støy, der forsvarer det d. 23. januar 2020.

Alkohol-betinget leverbetændelse er en akut leversygdom, der opstår hos relativt unge individer og en har en dødelighed på op til 40% indenfor den første måned efter diagnose af leversvigt og infektioner. Ingen af de etablerede medicinske behandlinger øger langtidsoverlevelsen. Det overordnede mål med dette Ph.d.-projekt var derfor at øge forståelsen af de immunologiske sygdomsmekanismer i håb om at identificere angrebspunkter for nye behandlingsstrategier. Ph.d.-projektets undersøgelser har som det mest markant fund vist, at signal molekylet interleukin-22 har en beskyttende effekt under alkohol-betinget leverbetændelse, fordi det reparerer leveren og styrker forsvarer mod infektioner, men også, at signal molekylets bindingsprotein er vigtigt for at udnytte de gunstige effekter. Disse data dannser baggrund for at undersøge om interleukin-22 systemet kan anvendes som ny behandling af alkohol-betinget leverbetændelse.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 23. januar kl. 14.30 i auditorium C114-101, Indgang C, Plan 1, Aarhus Universitetshospital, Palle Juul-Jensens Boulevard 99, Aarhus. Titlen på projektet er "Immune mechanisms in alcoholic hepatitis". Yderligere oplysninger: Ph.d.-studerende Sidsel Støy, e-mail: sidsel.stoy@clin.au.dk, tlf. 61664565.

Bedømmelsesudvalg:

Schalk W. Van der Merwe, Associate Professor, MD, PhD, University of Leuven.

Peter Højholt Holland-Fischer, Associated Professor, MD, PhD, Aalborg Universitetshospital,  
Steffen Thiel, professor, PhD, Aarhus Universitet

Press release (English)  
New immunological insight into alcoholic hepatitis

A new PhD project from Aarhus University has investigated the immunological mechanisms in alcoholic hepatitis and has identified a signal molecule, which may serve as a new treatment for this deadly disease and possibly other liver diseases. The project was carried out at the Department of

Hepatology and Gastroenterology, Aarhus University Hospital by Sidsel Støy, who is defending her dissertation on the 23<sup>rd</sup> of January 2020.

Alcoholic hepatitis is an acute liver disease, which arises in relatively young individuals and with a mortality reaching 40% within the first month after diagnosis, predominantly from liver failure and infections. None of the currently established pharmacological interventions have long-term effects on reducing mortality. The goal of this PhD project was therefore to enhance the understanding of the immunological processes during alcohol hepatitis as a pre-requisite to identify new treatment targets. The main finding of this PhD project has been that the signal molecule interleukin-22 exerts protective effects during alcoholic hepatitis by repairing the liver and boosting resistance to infections. Also, that the signal molecules binding protein may be pivotal to therapeutically exploit interleukin-22 in the treatment of alcoholic hepatitis. The defence is public and takes place on the 23<sup>rd</sup> of January at 2.30 pm in auditorium C114-101, Indgang C, Plan 1, Aarhus Universitetshospital, Palle Juul-Jensens Boulevard 99, Aarhus. The title of the project is "Immune mechanisms in alcoholic hepatitis". For more information, please contact PhD student Sidsel Støy, email: sidsel.stoy@clin.au.dk, Phone +45 61664565.

**Assessment committee:**

Schalk W. Van der Merwe, Associate Professor, MD, PhD, University of Leuven.

Peter Højholt Holland-Fischer, Associated Professor, MD, PhD, Aalborg University Hospital,  
Steffen Thiel, professor, PhD, Aarhus University

**Permission**

By sending in this form:

- I hereby grant permission to publish the above Danish and English press releases.
- I confirm that I have been informed that any applicable inventions shall be treated confidentially and shall under no circumstances whatsoever be published, presented or mentioned prior to submission of a patent application, and that I have an obligation to inform my head of department and the university's Patents Committee if I believe I have made an invention in connection with my work. I also confirm that I am not aware that publication violates any other possible holders of a copyright.