

Press release

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Basic information

Name: Anne Louise Hansen Email: annelouisehansen@biomed.au.dk Phone: +45 24835146

Department of: Biomedicine

Main supervisor: Christian Kanstrup Holm

Title of dissertation: Inhibition of the adaptor molecule STING by nitrated fatty acids

Date for defence: 10th January 2019 at (time of day): 2 pm Place: "Søauditorierne" - Eduard Biermann Auditorium (1252-204), Bartholins Allé 3, 8000 Aarhus C

Press release (Danish)

Fedtsyrer bremser overophedet immunforsvar

Et nyt PhD projekt fra Aarhus Universitet, Health, giver vigtig viden om hvordan et overophedet immunforsvar kan bremses.

I PhD projektet er nitratede fedtsyrer blevet identificeret som en vigtig bremse for et immunforsvar som løber løbsk. Normalt opdager vores immunforsvar infektioner og igangsætter et passende respons til bekæmpelse af disse. Her spiller immun-proteinet kaldet STING en central og vigtig rolle. Men ved et hyper-aktivt STING kan reaktionen resultere i diverse kroniske betændelsestilstande og dette ses særligt i den nyopdaget og ødelæggende sygdom SAVI (STING-associated vasculopathy with onset in infancy). Men nitratede fedtsyrer kan binde direkte til STING og dermed hæmme proteinets funktion. Kort sagt, så bremser de nitratede fedtsyrer det hyper-aktive immun-respons. Denne opdagelse skaber mulighed for at udvikle effektiv medicin til betændelsesygdomme hvor STING-aktivering spiller en central rolle.

Projektet er gennemført af Anne Louise Hansen. Forsvaret af PhD projektet er offentligt og finder sted d. 10. januar 2019 kl. 14 i Søauditorierne - Eduard Biermann auditorium (1252-204), Aarhus Universitet, Bartholins Allé 3, Aarhus. Titlen på projektet er "Inhibition of the adaptor molecule STING by nitrated fatty acids". Yderligere oplysninger: Ph.d.-studerende Anne Louise Hansen, e-mail: annelouisehansen@biomed.au.dk, tlf. 24835146.

Bedømmelsesudvalg:

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Links til tidligere presse omtale:

<https://ing.dk/artikel/fedtstof-kan-stoppe-immunforsvar-loeber-loebesk-214342>

<http://newsroom.au.dk/nyheder/vis/artikel/fedtstoffer-kan-bremse-overophedet-immunforsvar/>

Press release (English)

Fatty acids hold the immune system in check

A new PhD project from Aarhus University, Health, provides new knowledge on how an over-active immune system is contained.

The PhD project has identified nitrated fatty acids as an essential brake on an immune defence running wild. Our immune defence normally detect infections and employ an appropriate response to combat these. The central immune protein called STING plays a central and crucial role for this response. However, a hyper-active STING can result in various chronic inflammatory conditions and in particular the newly discovered and damaging disease SAVI (STING-associated vasculopathy with onset in infancy). But nitrated fatty acids can bind directly to STING and thereby inhibit the function of the protein. In short, the nitrated fatty acids hold the hyper-active immune response in check. This discovery foster the opportunity to develop effective treatments of inflammatory diseases were STING-activation plays a pivotal role.

The project was carried out by Anne Louise Hansen. The defence is public and takes place on 10th January 2019 at 2 pm in "Søauditorierne" - Eduard Biermann auditorium, Aarhus University, Bartholins Allé 3, Aarhus. The title of the project is "Inhibition of the adaptor molecule STING by nitrated fatty acids". For more information, please contact PhD student Anne Louise Hansen, email: annelouisehansen@biomed.au.dk, Phone +45 24835146.

Assessment committee:

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Medical Research Institute, School of Medicine, University of Dundee, Scotland.

Links to former presse releases (in Danish):

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