

## Media release

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### Basic information

Name: Peter Skov Jensen      Email: [pesj@clin.au.dk](mailto:pesj@clin.au.dk) Phone: 40426777

Department of: Clinical Medicine

Main supervisor: Professor Toke Bek

Title of dissertation: Studies of diameter regulation in retinal vessels with different caliber in the porcine retina ex vivo

Date for defence: January 13 at (time of day): 14.00 Place: Søauditorierne - Jeppe Vontillius Auditoriet (Bygning 1252, lok. 310) Bartholins Allé 3, 8000 Aarhus C

### Media release (Danish)

Ny viden: Griseøjne ændrer vores viden om blodgennemstrømningen i øjets nethinde

Et nyt forskningsprojekt fra Aarhus Universitet, Health, Øjenafdelingen viser, at de mindste blodkar i øjets nethinde kan være potentielle nye mål for fremtidig behandling af diabetisk nethindessygdom. Ph.d.-projektet er gennemført af læge Peter Skov Jensen og forsvares fredag d. 13/1 - 2017.

Målet med forskningsprojektet har været at etablere en ny laboratoriemetode, der gør det muligt at undersøge det komplekse samspil mellem store og små blodkar i reguleringen af nethindens blodgennemstrømning. Undersøgelserne er gennemført under efterligning af de ændringer som ses i nethinden ved sukkersyge, herunder iltmangel og ændringer i blodsukkeret. Undersøgelserne har vist, at nethindens mindste blodkar spiller en større rolle på blodgennemstrømningen end hidtil antaget, hvilket har stor betydning for forståelsen af skader på øjets nethinde ved sukkersyge. Dette åbner for nye måder at behandle sygdomme karakteriseret af forstyrrelser i nethindens blodgennemstrømning, som f.eks. diabetisk nethindesygdom.

Forsvaret af ph.d.-projektet er offentligt og finder sted fredag den 13/1 - 2017 kl. 14.00 i Søauditorierne - Jeppe Vontillius Auditoriet (Bygning 1252, lok. 310), Aarhus Universitet, Bartholins Allé 3, 8000 Aarhus C. Titlen på projektet er "Studies of diameter regulation in retinal vessels with different caliber in the porcine retina ex vivo". Yderligere oplysninger: Læge, ph.d.-studerende Peter Skov Jensen, e-mail: [pesj@clin.au.dk](mailto:pesj@clin.au.dk), tlf. 40426777.

### Media release (English)

New knowledge: Porcine eyes change the view on the current knowledge of retinal blood flow regulation

A new research project from Aarhus University, Health and the Research Lab. at the Department of Ophthalmology, Aarhus University Hospital, shows that the smallest retinal blood vessels may have a special role for future treatment of diabetic retinopathy.

The aim of the project has been to establish a new laboratory method for the study of the complex interplay between vessels of different calibers for the regulation of retinal blood flow. The investigations have been performed during simulations of changes in the retina in diabetic patients, such as hypoxia and changes in the glucose concentration. The investigations have shown that smaller retinal vessels play a special role in the regulation of retinal blood flow, which has not previously been known. The results open for potential new target for the treatment of diseases characterized by disturbances in retinal blood flow, such as diabetic retinopathy. The PhD project was carried out by Peter Skov Jensen M.D., who is defending his dissertation on Friday January 13.

The defence is public and takes place on 13/1 at 14.00 in the Lakeside lecture theatres ("Søauditorierne") - Jeppe Vontillius Auditorium (Building 1252, room 310), Aarhus University, Bartholins Allé 3, 8000 Aarhus C. The title of the project is "Studies of diameter regulation in retinal vessels with different caliber in the porcine retina ex vivo". For more information, please contact PhD student Peter Skov Jensen M.D., email: pesj@clin.au.dk, Phone +45 4042 6777.

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