

Press release

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Basic information

Name: Pernille Bogetofte Thomase Email: pbt@biomed.au.dk Phone: 61462124

Department of: Biomedicine

Main supervisor: Anders Nykjær

Title of dissertation: "SorCS2 in motor axonal outgrowth

Date for defence: 22/11-2019 at (time of day): 13.00 Place: Jeppe Vontilus Aud., Lakeside Lecture Theatres, Bartholins Allé 3, 8000 Aarhus C.

Press release (Danish)

Rollen af overflademolekylet SorCS2 i udviklen af nervesystemet

Udviklingen af nervesystemet er en kompleks proces, der kræver et koordineret samspil mellem mange forskellige molekyler, der samlet guider nervefibrene mod deres mål. Fejl under udviklingen kan medføre sygdomme senere i livet, og på sigt vil en bedre forståelse af nervesystemets udvikling forhåbentlig kunne bidrage til behandling af sygdomme som rygmarvsskader og amyotrofisk lateral sklerose (ALS).

Et nyt Ph.D.-projekt fra Aarhus Universitet, Health, har undersøgt funktionen af overflademolekylet, SorCS2, som er udtrykt på de nerver, der sender signal fra hjernen til vores muskler. I projektet er cellebiologiske eksperimenter blevet kombineret med studier i zebrafisk og mus til at visualisere nervebanerne og lokalisere, hvad der specifikt ændres, når SorCS2 ikke er til stede. Resultaterne viser, at SorCS2 spiller en hidtil ukendt men vigtig rolle under udviklingen af og i regenerering af de nerver, der signalerer til muskler. Projektet er gennemført af Pernille Bogetofte Thomasen, der forsvare det d. 22. november 2019.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 22/11-19 kl. 13.00 i Jeppe Vontilus auditorium i Søauditorierne, Aarhus Universitet, Bartholins Allé 3, Aarhus. Titlen på projektet er "SorCS2 in motor axonal outgrowth". Yderligere oplysninger: Ph.d.-studerende Pernille Bogetofte Thomasen, e-mail: pbt@biomed.au.dk, tlf. 61462124.

Bedømmelsesudvalg:

Professor Andrew Bateman

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Press release (English)

The role of the receptor SorCS2 in the development of the nervous system

The development of the nervous system is a complex process that requires a coordinated interaction between many different molecules that collectively guide the nerve fibers towards their goals. Defects

during development can lead to diseases later in life, and in the long term, a better understanding of the development of the nervous system will hopefully contribute to the treatment of diseases such as spinal cord injury and amyotrophic lateral sclerosis (ALS).

A new PhD project from Aarhus University, Health, has investigated the function of the surface receptor, SorCS2, which is expressed on the nerves that signal from the brain to our muscles. In the project, cell biological experiments have been combined with studies in zebrafish and mice to visualize the nerve pathways and locate what specifically changes when SorCS2 is not present. The results show that SorCS2 plays a novel but important role in the development of and in the regeneration of the nerves that signal to muscles. The project was carried out by Pernille Bogetofte Thomasen, who is defending her dissertation 22. of November 2019.

The defence is public and takes place on 22/11-2019 at 1 PM in Jeppe Vontilus Aud., Lakeside Lecture Theatres, Aarhus University, Bartholins Allé 3, Aarhus. The title of the project is "SorCS2 in motor axonal outgrowth". For more information, please contact PhD student Pernille Bogetofte Thomasen, email: pbt@biomed.au.dk, Phone +45 6146 2124.

Assessment committee:

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