

Media release

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Basic information

Name: Anders Krogh Brøndberg

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Department of: Clinical Medicine

Main supervisor: Henrik Kjærulf Jensen

Title of dissertation: Novel clinical and molecular genetic aspects in hereditary heart disease

Date for defence: 20/12 2017 at (time of day): 14.00 Place: Auditorium A, Skejby Sygehus

Media release (Danish)

Nye kliniske og molekylære genetiske aspekter ved arvelige hjertesygdomme

Et nyt ph.d.-projekt fra Aarhus Universitet, Health, bidrager med ny viden angående de genetiske årsager til arvelig hjertesygdom samt den kliniske præsentation af de arvelige sygdommene. Projektet er gennemført af Cand.Med. Anders Krogh Brøndberg, der forsvare afhandlingen d. 20/12 2017

Ved mulig arvelig hjertesygdom har man indtil nu foretaget molekylær-genetisk diagnostik ud fra den formodede fænotype, som ofte kan være ganske vanskelig at definere. Derved kan vigtig molekylær genetisk viden om årsager ofte ikke blive afdækket i tilstrækkelig grad, hvilket forhindrer en hensigtsmæssig rådgivning og opsporing af familiemedlemmer med den samme høje risiko. Med Next generation sequencing (NGS) kan man lave omfattende molekylær genetisk undersøgelse, som forbedre den molekylær genetiske diagnostik, hvilket belyses i delstudie 1. Korrekt opsporing af den genetiske årsag til sygdom kan i nogle tilfælde medfører skræddersyet medicinsk behandling, som reducerer risikoen for pludselig død, hvilket belyses i studie 2. Studie 3 er et nationalt studie hvor vi følger patienter med en sjælden arvelig hjertesygdom (CPVT), som er associeret til pludselig hjertedød hos børn og unge mennesker. Tidlig opsporing og iværksættelse af forebyggende behandling hos disse patienter kan forebygge pludselig hjertedød.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 20/12 kl. 14.00 i Auditorium A, Aarhus Universitetshospital, Palle Juul-Jensens Boulevard 99, 8200 Aarhus N. Titlen på projektet er "Novel clinical and molecular genetic aspects in hereditary heart disease". Yderligere oplysninger: Ph.d.-studerende Anders Krogh Brøndberg, e-mail: anders.kragh@clin.au.dk, tlf. 20868250.

Bedømmelsesudvalg:

Vibeke Hjortdal (formand for bedømmelsesudvalget)

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Aarhus University Hospital, Denmark

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Department of Cardiology, Lund University Hospital

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Media release (English)

Novel clinical and molecular genetic aspects in hereditary heart disease

A new PhD-project from Aarhus University, Health, contributes to understanding the molecular genetic aspects of hereditary heart disease, and the associated clinical phenotype. The project was carried out by Anders Krogh Brøndberg, who is defending his dissertation on 20/12 2017.

Hereditary heart disease covers a broad spectrum of different diseases. However, the clinically phenotype is not always completely evident, which prevents cascade testing of family members and correct identification of family members with the same high risk of adverse events and potentially fatal outcome. With the introduction of Next generation sequencing (NGS) we can now perform extensive molecular genetic screening in patients with suspected hereditary heart disease. NGS improves the molecular diagnostic methods in patients with hereditary heart disease, as illustrated in paper 1. As illustrated in paper 2, correct identification of the genotype might lead to tailored anti-arrhythmic treatment, which reduces the risk of adverse events. paper 3 assess the clinical outcome in patients with a rare inherited heart disease (CPVT). CPVT is associated with malignant ventricular arrhythmias and sudden cardiac death in children and young adults. Early and correct identification of these patients and initiation of preventive treatment is life-saving.

The defence is public and takes place on 20/12 2017 at 2.00 pm in Auditorium A, Aarhus University Hospital, Palle Juul-Jensens Boulevard 99, 8200 Aarhus N. The title of the project is "Novel clinical and molecular genetic aspects in hereditary heart disease". For more information, please contact PhD student Anders Krogh Brøndberg, email: anders.kragh@clin.au.dk, Phone +45 20868250.

Assesement committee:

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