# **Danish Hematological Research Educational Network**

### 2018 Annual PhD course: "Precision medicine in Hematology"

Hotel Severin, Middelfart, 8-9 March 2018

Course leadership: Karen Dybkær, professor, AAU

Provided by: PhD school, Aalborg University, AAU

## **Description of the course:**

This PhD course is aimed at PhD students working within the field of hematology as either experimental or medical researchers. The course will cover technologies often used in precision medicine, discussions on how to interpret and implement genetic information in a clinical setting and touch upon future improvements.

**ECTS:** 1.5

# Thursday 8 March 2018

11:00 - 12:00	Arrival and Lunch
12:00 - 12:10	Welcome Karen Dybkær
12:10 - 12:55	<i>Next-Generation Sequencing</i> – technique and data analysis, Mads Sønderkær, Post doc. (AAU)
12:55 - 13:40	Single gene and gene panel sequencing Anni Aggerholm, Mol Biol (AUH)
13:40 - 14:00	Coffee and Networking
14:00 - 14:45	<i>Plasma DNA in precision medicine.</i> Methods, technology, equipment and application for diagnosis and monitoring of treatment effect. Rikke Fredslund. Ass. Professor (Vejle, SDU)
14:45 - 16:10	<ul> <li>Colloquia on genetic landscape and impact on disease and treatment</li> <li>Reading and discussion of key papers –</li> <li>1. Genetic and Functional Drivers of Diffuse Large B Cell Lymphoma. Reddy et al, Cell. 2017, PMID: 28985567</li> <li>2. Distinct biological subtypes and patterns of genome evolution in lymphoma revealed by circulating tumor DNA. Scherer et al. Sci Transl Med. 2016. PMID: 27831904</li> <li>Karen Dybkær, professor (AAU)</li> </ul>
16:10 - 16:40	Project "walk and talk"
16:40 -18:00	PhD project presentations
18:30 - 20:00	Dinner
20:00 - 21:30	<i>Networking and Discussion.</i> Professors Peter Hokland (AU), Henrik Sengeløv (KU), Hans Hasselbalch (RUH), Niels Abildgaard(SDU), Lars Møller Pedersen (KU), Niels Pallisgaard (Reg Sjaelland), Karen Dybkær (AAU)

### Friday 9 March 2018

08:00 - 09:00	Breakfast
09:00 - 09:45	<i>Critical methodological factors in diagnosing MRD</i> Charlotte Nyvold, professor (SDU)
09:45 - 10:30	Functional screening of the genome using lentivirus-based CRISPR libraries Emil Aagaard Thomsen, phd student (AU)
10:30-10:50	Coffee and Networking
10:50 – 12:00	<ul> <li>Precise Genome Editing of Hematopoietic Stem Cells and colloquia Rasmus O Bak, Ass. Professor, (AU)</li> <li>1. CRISPR/Cas9 β-globin gene targeting in human haematopoietic stem cells. Dever DP, Bak RO et al. Nature. 2016. PMID: 27820943</li> </ul>
12:00 -12:15	Evaluation and closing remarks
12:15 -13:00	Lunch and Adjourn

#### The course is open for sign-in by

Electronic assignment at PhD moodle: <u>https://phd.moodle.aau.dk/login/index.php</u> or <u>http://phdcourses.dk/</u>

or

1. Mail to research secretary Anne Lindblom Hansen: <u>a.lindblom@rn.dk</u> Please note that you only are accepted at the course when you have received a mail of confirmation from Anne Lindblom.

Dead-line for registration is 20 February 2018.

The number of students will be 20 and PhD students have priority, but master and research year students will be considered if not all seats are occupied.