

Opening of the Danish National Research Foundation DNRF, Center of Excellence:

Center for microbial secondary metabolites (Cemist)

Opening speech 27.02.2017, DTU Prof. Liselotte Højgaard, Chair, Board of Directors, DNRF

To Center of Excellence leader professor Lone Gram

Dear Lone Gram, Dear members of Cemist, dear DTU,

On behalf of DNRF The Danish National Research Foundation – it is a privilege, a pleasure and a joy to congratulate you with your new center of excellence Cemist- Center for microbial secondary metabolites. 65 mio. for the first 6 years, and if all goes well, 4 more years and over 100 mio. kr in total. Congratulations to DTU and the department. It is a major achievement to land such a center of excellence grant from DNRF. Congratulations to prof. Lone Gram and the whole team. We look forward to follow your development and help you where we can.

A center of excellence grant from DNRF is a major achievement and a great opportunity. It is highly competitive – 175 send in an expression of interest, a relatively short application, but nonetheless where the vision was conceived and planned. All 9 board members, scientist of all types, 5 from outside Denmark, 4 from Denmark read all the proposals, and then go through them one by one, decide on the best, and this time we invited the 25 best to send in a full application.

This second round application is a thorough plan, with CVs and budgets etc. and most important a clear vision – the great ideas, the cutting edge dream with curiosity and creativity combined. The full applications are send to the 3 toughest peer reviewers we can find internationally, then the applicants are allowed to comment on the 3 reviews, and then the board reads all 25 times 100 pages and then we invite all 25 for interview – the same interviews, and the we spend some days talking through the applications, and trying to decide on the best. This time in the 9th round we granted 10 Centers of Excellence. We decide on the basis of 3 elements 1) the research idea and vision 2) the center leader 3) the group and place. Due to the fierce competition all 3 elements need to be excellent.

Here you are - so professional already – so prepared and eager to get going. So well planned and organized. We wish for you that the research will be a success, for you, but most important for the sake of science. Science is global, and the results that you will discover will be important for a whole world. The world should be an open place, where students, researchers, knowledge and data can travel and stay without borders, as it has been for academia and universities for more than 1000 years. We have an obligation to secure that also Denmark is part of the global science community.

Cemist will work with microbial secondary metabolites - complex molecules often produced by biosynthetic gene clusters. Despite their enormous societal importance as antibiotics, their ecological functions are poorly understood and their roles and impact in natural microbial niches are not known. It remains a central question *why* microorganisms acquire and maintain genes encoding for production of such complex molecules. The predominant thinking is that microbial secondary metabolites protect the producer or bacteria from competitors. Very little data exist – and you have the possibilities for new original breakthrough knowledge of potential huge importance for science and society. I look forward to listen to prof. Lone Gram explain and unfold.

To DTU and departments: congratulations. There is a lot prestige and credit with such a center, also an obligation. I trust that you will help, support and take good care of them. We have several fine centers here at DTU, and are grateful for the fine collaboration. It is highly appreciated. We will as usual come and visit you at the annual follow up meetings. The DNRF with board and secretariat visit all centers once a year at the annual follow up meetings. It is one of the secrets of your successes, we believe. The international evaluation of DNRF concluded in 2013 on the basis of a thorough peer review that our researchers are on par with the best in the world. The evaluation report emphasized the annual follow up meetings as important for the function and success of the centers. We visit you to strengthen your possibilities, to unfold the greatest potential, to help when you meet challenges.

Every year we have a new theme to discuss with you at the follow up meetings. To secure that future politics and strategy are based on your voices. The subjects we have discussed have been research integrity – one rotten apple in a bowl will ruin the whole lot. It has been gender aspects

in research, it had an impact and the task force for strengthening the possibilities for females in research in Denmark was established. Now the universities are working with the recommendations- based on the recommendations we heard from the researchers. But very important Lone, you were not given the COE because of gender - but due to excellence.

That is our methodology in DNRF – we listen to the researchers – convey the message to the decision makers, and with the aim of addressing imbalances and problems in the delicate research ecosystem. Last year we addressed open science, this year it is diversity. Gender is only a small fraction of this. We need to assure that DNRF, all the universities and Denmark as society is geared to exploit all the benefits of diversity and behave decently to all human beings.

In the board we have a thorough discussion about the choice of subjects to debate with you – based on what's hot on the international and national agenda. We have had a thorough discussion on the post doc problem – take care of their career plans, help them, guide them, mentor them, and get them out of research and further on in their lives if their destiny is not research. You have a huge responsibility for all the fellow human beings working for you and with you in your centers.

So with this introduction congratulations to **Center for microbial secondary metabolites (Cemist)** and Lone Gram, the whole team, DTU and department.

Cemist is doing research in an area of importance for mankind – with new emerging disease for man and animal, antimicrobial resistance and new concepts in research. An area where basic research is crucial for social benefit and for solving the UN Global Goals. We wish you success, Pasteur said, success favors the prepared mind, and Robert Koch the father of bacteriology claimed that: “a pure culture is the basis for all research on infectious diseases”. Extrapolated to today: “curated and robust data are as important as even together with curiosity and audacity so that we can interpret what the data really tries to tell us.”

Lone, your famous ancestor the Danish doctor Hans Christian Gram developed the GRAM staining for bacteria in Berlin in 1884. This method is still used as a routine every day in labs in hospitals all over the world today. All bacteria are in fact named as Gram positive or Gram negative. So you have a famous family name. We hope that the great expectations will not be a heavy burden, but

that the science in your center will bring joy and be a creative period with a lot of pivotal moments, happiness - and hard work. Congratulations and *bonne chance* to all of you.