

Opening of the new Center of Excellence BASS, Center for Bacterial Stress Survival, Danish National Research Foundation and Novo Nordisk Foundation, August, 27th 2015, Chair of the Board, Professor Liselotte Højgaard

Dear Professor Kenn Gerdes,

Dear members of the new Center of Excellence Bass,

Dear University of Copenhagen

It is a privilege, an honour and a joy to open this new Center of Excellence BASS Center for Bacterial Stress Survival funded by DNRF the Danish National Research Foundation and Novo Nordisk Foundation and dedicated to research on bacteria, and how they behave to overcome stress, as we will hear more about in a while. **Congratulations to Prof. Kenn Gerdes and to all researchers involved in BASS. This project is truly a major achievement.**

Kenn Gerdes and his team of excellent scientists behind the BASS center landed the 50 mio grant as they full filled the three important criterias for a Center of Excellence from the DNRF. 1) A new, brilliant, creative frontline idea, 2) a centerleader with unique personal competencies and an excellent track record in research, and 3) an excellent group of researchers in a very good place for research. All three were fulfilled.

The researchers in the BASS team, present here these days for the opening symposium, are many of you top leading scientists yourself, so it will be an orchestra with many stars, and what a nice place you have chosen for your opening concert.

Bacteria as origin for disease was suspected more than two thousands years ago by the ancient Roman scientist Marcus Varro: “ certain minute animals, invisible to the eye, breed in the swamps, and borne of the air reach the inside of the body by way of the mouth and cause disease”. Then another 1500 years passed and in the Italian Renaissance the interdisciplinary scientist Gerolamo Frascatore and Gerolamo Cardano suspected tiny living creatures as origin of disease. But it was not until the 18.hundreds that the real pathophysiology of bacteria was discovered.

Semmelweis at Allgemeines Krankenhaus in Vienna described the reduction of the maternal mortality rate from 20 % to 2 % by reducing the post partum infections after introducing washing of the hands for the doctors going from the autopsy room to the mother giving birth. Semmelweis he was too early, so nobody listened and he died unhappy and poor in an asylum. In Boston at the same time, in 1843 Oliver Wendel Homes read a paper to the “Boston Society for Medical Improvements” about the same subject. Then Lister in Glasgow established the antiseptic technique and Roberts Koch in Berlin founded bacteriology with his postulates. They all got inspiration from Louis Pasteur in Lille and Paris. Paul Ehrlich was the first to understand and describe immunology and infections, and his search for “the magic bullet seeking out and killing germs in the body”, was somehow accomplished by Alexander Flemming (later Sir) in 1929 in the British Journal of Experimental Pathology publishing his observations on the antibacterial action of penicillium. So you Kenn and co-workers will continue a long history on a subject vital to man, animals and plants – vital since time began. You will search and find the mechanisms behind the persistence of bacteria – how they survive antibiotics and many other types of environmental stress, and hopefully you will develop the true magic bullet. As we will hear more about in a while.

Success is favoured by “preparedness” to quote Pasteur, one of your ancestors. Kenn, you and your team will have success, as you have prepared very well. First you wrote an expression of interest as reply to our call. We received 186 applications and the board read them and selected the 30 best and invited a full application. These 30 applications were each sent to the best and toughest international peer reviewers we could find, and then you were invited to comment on the peer reviews. We use a transparent system, double open, you know the peer reviewers and they know you. Then the Board read the 30 full applications, the 90 peer reviews and the 30 comments, more than 3000 pages, and then we invited all 30 applicants to a personal interview with the Board. After this careful selection process the Board chose the 12 best. Your BASS application was obviously a very good one, with brilliant ideas and an excellent team of researchers and with you Kenn Gerdes as leader. **Warm congratulations.** Success is favoured by preparedness; we have all tried to do our very best, you and your team in particular.

The Center of Excellence contract has been developed and written carefully, agreement has been reached between all partners and today we can celebrate that. Such a meticulous effort is needed to be sure, that we all are aware of what we have promised each other, and the contract is signed by Professor Kenn Gerdes, Center of Excellence leader, Rektor Ralf Hemmingsen , University of Copenhagen and by me from the Danish National Research Foundation.

So now the scene is set for the next 6 years, and if everything goes well as anticipated, “4 more years”, in total 10 years for you and your team for the most excellent and interdisciplinary research in bacterial persistence. With a large sum of public money, 50 mio DK for the first 6 years and in a collaboration with Novo Nordisk Foundation, so very positive when private and public foundations can go together – So it is for you and your team the job to turn this funding into brilliant research in an atmosphere of trust, flexibility and freedom from our side.

We from the Foundation wish you all success and joy. It will be a lot of hard work, but hopefully also a lot of fun and enthusiasm and creativity. The location here proves you can master that too. From the DNRF we will support you, your success is our success, and we will do what we can to engage, encourage and if needed fight for you. We will visit you annually board and director, and look upon the Foundation as an exclusive senior mentor system. Our first advice to new centers is to buy a very good coffee machine for our money– I guess that you have done that already. Our advice nr. 2 is to hire a very good center manager -- you are researchers, not managers.

With these 12 new centers DNRF has now established 100 Centers of Excellence since the Foundation was established in 1991 --for the benefit of research in Denmark and internationally. I would like to congratulate and compliment the university, the Faculty of Science, you are the hub for many COE from DNRF.

The DNRF has at present a fund of 6,5 bio DKK. The foundation hand out about half a billion every year to the most exquisite curiosity driven research in Denmark. It is a privileged situation that the Danish public system and the politicians of Denmark

support the finest frontier research. Your predecessors as Center of Excellence leaders have been evaluated and our research centers are among the world leaders and peers with Stanford, MIT, Harvard, Oxford and Cambridge.

I wish you success and joy with your endeavor , and would like to compliment you with the fine program for the next days. Enjoy ! You all deserve that.

Congratulations to Professor Kenn Gerdes and all members of the BASS team. To Danish and international research. From us in the Danish National Research Foundation, Danmarks Grundforskningsfond, it is a privilege and an honour to congratulate you and open this center, and we look forward to follow your progress towards the stars, for the benefit of science and society and for the benefit of future patients, animals and plants, for society at the very large scale hopefully.

Your new endeavours might change the world and the way we work in science and medicine.