

# Space for Research and Teaching



Klaus P. Kohse (left) and Hans Gerd Nothwang: A curriculum with a European dimension is still one of its kind.

Transnational, practical, interdisciplinary – the medical degree programme at the European Medical School Oldenburg-Groningen (EMS) is setting new standards. The new Medical School also has great potential in the field of medical research. Founded in 2012 and bolstered by the success of the Cluster of Excellence Hearing4all, a number of new professorships have been added in the last few years. In an interview Dean Hans Gerd Nothwang and Dean of Academic Affairs Klaus P. Kohse talk about the progress made thus far and future developments in teaching and research

**How far on is the Oldenburg School of Medicine today? How much progress has been made with its development?**

**Nothwang:** The first students have now passed the second state examination, all at the first attempt and many of them with above average performances. This positive outcome was in evidence across all cohorts, as the Charité's nationwide comparison "Progress Test Medizin" shows. As regards the further development of the faculty, we have appointed thirteen new colleagues in the area of clinical practice and clinical theory, five in healthcare research and two in the natural sciences. By the end of 2019, we will establish as many as fourteen more professorships.

**The faculty's original objective was to rethink and redesign medical education, adding a European dimension. Has this been achieved?**

**Kohse:** We're certainly at too early a

stage to draw conclusions; after all, the first cohort in our programme is only just completing its studies now. We can, however, say that we have created an innovative medical degree programme. Together with our colleagues in Groningen, we have established a cross-border curriculum in which students get to know both the German and the Dutch healthcare systems. This European dimension is so far unique.

**As you said yourself, the Human Medicine programme in Oldenburg is seen as a pioneering model. What makes it so special?**

**Kohse:** The main distinctive feature is the early interaction with patients. The very first course for medical students in Oldenburg is a so called "Patientenkolleg" in which they interact with real patients. Another special feature is of course the mandatory year of study at the internationally renowned University Medical Center Groningen. Outpa-

tient care also plays a major role in our training programme. From the outset, internships at one of the University's more than 120 cooperating doctors' offices are part of the programme.

**"We have created an innovative medical degree programme."**

Klaus P. Kohse

**The government of Lower Saxony is planning to considerably increase the number of students on the course: there's talk of 200 instead of 40 per year. What challenges does this pose for a study programme that has been "small and select" until now?**

**Kohse:** We plan to remain select – but that doesn't mean we have to remain small. It doesn't make economic sense either. One of the most urgent tasks will be to improve the amount of space

we have at the University. We'll also need additional teaching capacities. **Nothwang:** And naturally we'll need to expand our cooperation with Groningen. Our intermediate goal is to increase the number of students who complete part of their medical studies in the Netherlands to up to 80 per year.

**The hope is that Oldenburg's School of Medicine will improve medical care in the region – the familiar phrase here being the shortage of doctors in rural areas. Is this going to happen?**

**Kohse:** In my view, the Oldenburg School of Medicine can make an important contribution here – although naturally the overall quality of the location is the main criterion for keeping young doctors in the region. With our programme, students get a good insight into outpatient care at a very early stage of their career in the coope-





## Prof. Dr. Hans Gerd Nothwang

Hans Gerd Nothwang has been Professor of Neurogenetics at the University since 2007. He built up the Neurogenetics research group and from 2014 to 2016 he was the founding director of the Department of Neuroscience. In 2018 Nothwang was appointed Dean of the School of Medicine after having played a key role in its development as a founding member, member of the Faculty Council, Vice Dean for Groningen Affairs and Structure and as Acting Dean.

rating doctors' offices, and also into general medical practice in a rural area. This will no doubt prompt a number of them to remain in the region as general practitioners.

**The German Council of Science and Humanities' decision to establish a medical school in Oldenburg was also based on the prospect of building on the excellent research conducted here. What is the situation in these areas?**

**Nothwang:** At the time the neurosensory science research, with its close ties to medicine, was a strong argument for setting up a medical faculty here. In this area we had already proven that top-level research in the field of

medicine was being conducted in Oldenburg. And this research excellence continues: in 2018 our Cluster of Excellence Hearing4all was once again approved for funding; the Cluster has already developed key building blocks for improving diagnostics, hearing systems and assistive technologies. Our DFG Research Training Group "Molecular Basis of Sensory Biology" has also entered its second funding phase after receiving an outstanding rating. A new addition and another major success is the Collaborative Research Centre "Hearing Acoustics", which started its activities in July, is to receive just under nine million euros in funding and offers research perspectives for the next 12 years.

**Unlike the neurosensory science and hearing research, the health services research has had to start from scratch. What are the focus points in this area?**

**Nothwang:** Our health services research is making very good progress, mostly thanks to the newly appointed colleagues. We now have Germany's sole Professorship of Organizational Health Services Research and we will continue to systematically develop the spectrum of professorships in this area in the future. Key topics will be the health and care of older people, emergency and intensive care medicine, prevention, rehabilitation and after-care. We also want to make the most of the opportunities offered by

## Prof. Dr. Dr. Klaus P. Kohse

Klaus P. Kohse has been the Director of the Institute for Laboratory Diagnostics and Microbiology at the Klinikum Oldenburg since 1992 and Professor of Clinical Chemistry and Pathochemistry at the medical faculty since 2013. Since 2016 Kohse, who studied medicine and chemistry, has also held the post of Dean of Academic Affairs. He has made a valuable contribution to the advancement of the European Medical School for several years and continues to do so in the teaching of biochemistry and laboratory medicine.



our close cooperation with our Dutch partners – and in particular with the newly founded Aletta Jacobs School of Public Health in Groningen. This gives us the unique possibility to compare two world-leading healthcare systems which are nonetheless very different in key structural aspects, and to gain important insights from this analysis.

**The clinical research activities are also being expanded. What are the focuses here?**

**Nothwang:** We have defined four areas with huge potential for future research. One is the immunology of chronic diseases – we want to study the biological and biochemical foundations of the body's defence mechanisms against the pathogens that lead to chronic conditions. A second area of potential is oncology, with an emphasis on innovative diagnostics and therapy. Several of our university clinics are highly specialized in cancer medicine. In the third focus area we are studying rare diseases: this includes genetically determined neurosensory disorders such as blindness or deafness, and also certain allergies. The fourth area concentrates on IT-based mobile health applications that for example aim to provide access to screening, self-diagnosis or recommendations for diagnostic and therapeutic measures via smartphones.

**The University of Oldenburg has a tradition of implementing interdisciplinarity. What potential do you see for this at the School of Medicine?**

**Nothwang:** The potential is enormous. An excellent interlocking of clinical and basic research is currently developing within our faculty. This will enable

us to increasingly pursue translational research strategies in the future, or in other words to efficiently translate basic research findings into potential clinical applications – taking them from the lab to the patient's bed, so to speak. Individual fields such as internal medicine or neurology have long since ceased to be regarded in isolation. The keyword here is integrative medicine. The treatment of complex diseases with multiple symptoms and various underlying pathologies requires an interdisciplinary approach.

**"Oldenburg's School of Medicine is growing and needs more space for research and teaching."**

Hans Gerd Nothwang

**Early career scientists are also essential for a faculty. In Oldenburg they are already participating in OLTECH – the Graduate School Science, Medicine and Technology. Are there also cross-border initiatives here?**

**Nothwang:** Yes, in 2018 together with Groningen we set up the Joint Graduate Research Training Group "Translational Research: From Pathological Mechanisms to Therapy". In seven projects in total, one faculty member from Oldenburg and another one from Groningen jointly supervise a PhD candidate. These candidates do research at both locations and in the end earn a "joint PhD degree". This gives our early career scientists excellent opportunities to benefit from the complementary courses of a large medical school.

**Kohse:** And besides that, the study

programme itself offers a fine basis for doctoral studies and research. We pursue a research-based teaching approach – our longitudinal research curriculum. Students learn right from the start how to conduct research independently and how to write scientific papers and take a critical approach to other publications. In the fifth year of their studies, they must write their own research paper, comparable with the Master's thesis in Groningen.

**What goals do you want to set for the future?**

**Nothwang:** We need to continue the consolidation process. In addition to appointing new colleagues as professors, this primarily involves creating the necessary infrastructure. Oldenburg's School of Medicine is growing and needs more space for research and teaching, and the corresponding equipment. As dean, I will also work to ensure that our faculty makes even more effective use of the unique potential offered by the interaction between medicine, health services research and the natural sciences. I also consider it vital to give early career researchers the best possible support. And in the area of clinical practice, where patient care is naturally the main priority, we want to create more space for research and teaching.

**Kohse:** And naturally we will also further expand and develop our Human Medicine programme. We want to maintain the excellent reputation we have acquired with our curriculum in the last few years. Even when the number of students quadruples as envisaged over the next few years.

*Interview: Volker Sandmann,  
Petra Wilts*



At the University's Clinical Training Centre medical students can practice procedures in a protected environment. For general check-ups students adopt the role of patient themselves.