

**SPEECH BY NUSS VICE-PRESIDENT MR TONG HSIEN-HUI  
AT NUSS PROFESSORSHIP LECTURE WITH PROFESSOR RALPH MÜLLER  
21 OCTOBER 2019, MONDAY  
7PM AT KENT RIDGE GUILD HOUSE**

**1. Address the Audience**

Good evening Professor Ralph Müller, Management Committee members, fellow NUSS members, and friends. Thank you for taking the time to join us for tonight's Professorship Lecture. For those who are here for the first time, a very warm welcome to you.

**2. About the NUSS Professorship Lecture**

NUSS established the NUSS Professorship in 1996 with an endowment of \$1.5 million to fund talks by eminent professors from different disciplines. The purpose of this series of lectures is to share knowledge with the NUS community and the general public, and is in line with the Society's continuous efforts to contribute towards the development of meaningful interactions with its alma mater through academic pursuit. In addition, this lecture session is also open to members of the public.

I'm pleased to extend a warm welcome to Professor Ralph Müller, Professor of Biomechanics at the Department of Health Sciences and Technology at ETH Zurich, one of the world's leading universities in Science and Technology.

I would also like to thank Associate Professor Wilson Wang, from the Department of Orthopaedic Surgery of Yong Loo Lin School of Medicine, in the National University of Singapore, who has kindly agreed to moderate the Q&A segment for this evening.

**3. Introduce the Session**

For tonight's lecture, Prof Ralph Müller will be speaking on the importance of mechanical loading of the bone, and how this process is important when it comes to regulating the body's bone mass and shape. Using advanced imaging and computational technologies, he has seen how individual bone cells can sense vibrational forces derived from exercise and how this can strengthen the bones to combat disease and aging. This in turn can help develop therapies for skeletal diseases such as osteoporosis.

Based on projections from the United Nations, 47% of Singapore's total population will be aged 65 years or older in 2050. As Singapore faces an aging population, our healthcare system needs to be more developed and equipped to handle the changing demographic.

Given the topic's relevancy in Singapore, and Prof Ralph Müller's extensive research experience and expertise, I hope that you will find this session an enriching and stimulating one.

Have a pleasant evening ahead!

**4. Thank You**