

## **Professor Dabing Zhang**

### **Citation for conferral of Doctor of Science (honoris causa) Ceremony 17, Wednesday 17 September 2014, 2:00pm**

Chancellor, it gives me great pleasure to present to you Professor Dabing Zhang.

Professor Dabing Zhang of Shanghai Jiao Tong University is being admitted to the degree of Doctor of Science (honoris causa) for his scientific achievements in unravelling critical control mechanisms of male reproduction in rice and for his critical role in driving and facilitating significant, unique and fruitful interactions between the University of Adelaide and Shanghai Jiao Tong University.

Professor Dabing Zhang's has made a number of significant contributions towards understanding the mechanisms of inflorescence development and the regulation of male reproductive development in the important crop, rice. For example, he was the first person to demonstrate the essential role of fatty acid metabolism in rice pollen development using molecular genetic approaches. Subsequently, he has pioneered the use of metabolomic approaches to further understand fatty acid metabolism during pollen development. Professor Zhang has also made several contributions towards understanding the mechanism of inflorescence development in rice. For example, he was the first to demonstrate the evolutionarily conserved MADS box gene family has essential roles in floral meristem determinacy and Reactive Oxygen Species production. These discoveries have opened the door to selecting and engineering novel varieties of higher yielding rice, a significant impact at a time when the issue of food security is a global issue. Professor Zhang has published these significant discoveries in the highest ranked plant science journal, *The Plant Cell* and in the prestigious multidisciplinary journals *Nature Communications* and *PNAS*. At this stage of his career, Zhang's original and significant research contributions are equivalent to plant science peers in the US National Academy Sciences, e.g. Susan Wessler (University of California Riverside), and in the Royal Society, e.g. Professor Sir David Baulcombe (The University of Cambridge).

Shanghai Jiao Tong University is one of the Chinese C9 universities (equivalent to our Go8) and produces the highly influential annual Shanghai Jiao Tong University University Rankings.

The School of Molecular and Biomedical Science at the University of Adelaide has built a strong relationship with the School of Life Science & Biotechnology of Shanghai Jiao Tong University over the past three years.

One of the key personal relationships is with Professor Dabing Zhang who has championed the creation of a joint masters degree between the two universities. We have now hosted our first cohort of students from Shanghai Jiao Tong University and had our first debrief with respect to this experience with our Shanghai Jiao Tong University colleagues. The consensus is that the experience was positive for both institutions.

In addition to research and higher-degree-by-research training, we have engaged with Shanghai Jiao Tong University to help them with infrastructure planning, local finance management and most critically, maximising return on equipment infrastructure by demonstrating best practice in shared equipment purchasing, centralised technical support and research core facilities.

Professor Dabing Zhang, in addition to being a world recognised scientist in rice genetics has been a champion for the University of Adelaide at Shanghai Jiao Tong University and it is in very large part due to him that our relationship has progressed so effectively in a relatively short period of time. He agrees with our identified need for more joint research to underpin future growth in enrolments in our current joint degree and staff exchanges and has proposed to initiate with us, a multidisciplinary joint research institute or centre. The scope of the proposed institute is much broader than our current collaborations and will be a very significant increase in the magnitude of our engagement with Shanghai Jiao Tong University and China. The University of Adelaide would not have such a significant interaction with a C9 university were it not for the persistence and enthusiasm of Professor Dabing Zhang, who has demonstrated over and over that he is a true friend of the University of Adelaide. It is therefore fitting that he be awarded the honorary degree of Doctor of Science (honoris causa) for his tireless efforts to increase, improve and accelerate our engagement with Shanghai Jiao Tong University.

I am very pleased and proud to present to you Chancellor, for admission to the honorary degree of Doctor of Science (honoris causa) — Professor Dabing Zhang.