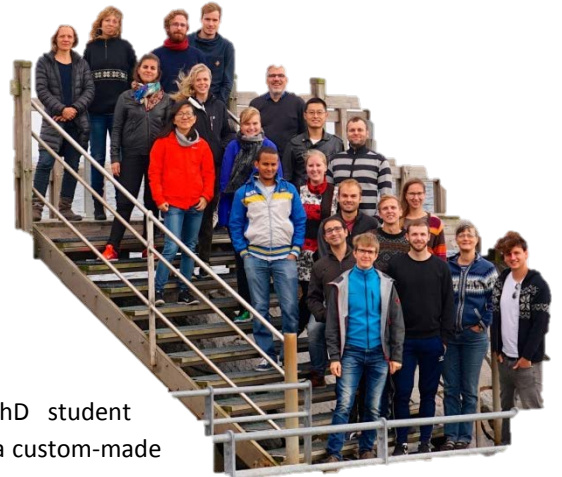


## DYNAMO YEAR 4 & HIGHLIGHTS FROM 2015

DynaMo Center was established 1 January 2012 with a vision to discover universal principles underlying the higher order of structure which enables a multicellular organism to function and to respond to the environment.



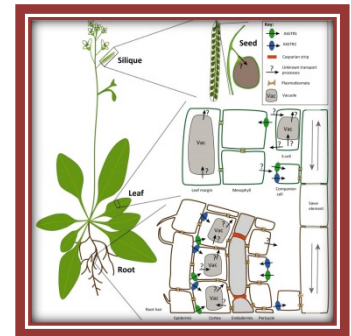
Marie, Lea, Bo and Morten on the day of their PhD defenses

### MOVING ON

In 2015, the first DynaMo funded PhD student received her PhD degree - together with a custom-made PhD hat created by fellow members in DynaMo. Being a training ground for the next generation of young scientists involves saying hello and goodbye to center members and in 2015 we said goodbye to several long-term members, who had been at DynaMo since the beginning and who moved on to take up competitive postdoc positions at high class research environments. Lea Møller Jensen is now at the Carlsberg Laboratory, Marie Pireyre and Bo Larsen are at the Sainsbury Laboratory in Cambridge, and Morten Egevang Jørgensen will go to University of Würzburg on an individual postdoc grant from the Danish Research Council.

### STRONG RESEARCH RESULTS

Yet again during 2015, DynaMo made significant progress within all areas of our research plan and many projects showed conclusive results. This led to the hitherto highest annual number of publications. A review summarizing our learnt lessons in transport biology in Trends in Plant Science by Barbara Halkier, Hussam Nour-Eldin and Morten Egevang Jørgensen was featured as video abstract. Our American partner Daniel Kliebenstein published a key paper in eLife showing that natural genetic variation in *Arabidopsis thaliana* defense metabolism modulates plant fitness in the field. This suggests that changes in the environment contribute to the maintenance of genetic diversity and raises the questions of how many other genes in plants (or other species such as humans) have genetic variation that contributes to fitness across varied environments.



Model of glucosinolate transport processes featured as video abstract



Fruitful kick-off meeting for innovative transport engineering project

### SUCCESSFUL YOUNG INVESTIGATORS

In April 2015, Associate Professor Hussam Nour-Eldin obtained one of only ten highly competitive Young Investigator grants from the Human Frontier Science Program (HFSP). Together with partners in the US and Israel, he can now explore the fascinating and complex signaling system of how plants utilize hormones to integrate environmental stimuli - such as water, sunlight, and nutrients - to grow and survive. In December, Associate Professor Meike Burow was awarded 7 million kr from the Villum Foundation Young Investigator Program. This will enable her to investigate structure-function relations of disordered proteins that bind to DNA to activate or inactivate genes in higher organisms. In addition, Meike Burow received a grant of 2.5 mill kr from the Danish Council for Independent Research during 2015 and Hussam Nour-Eldin obtained a grant from Innovation Fund Denmark together with Head of Center Barbara Ann Halkier to explore their transport engineering technology platform.

