



CEPLAS

Cluster of Excellence on Plant Sciences

CEPLAS – Cluster of Excellence on Plant Sciences

From complex traits to synthetic modules

Aims of the cluster:

CEPLAS is the only German Cluster of Excellence focusing exclusively on plant science. As the climate changes and the world's population increases in unprecedented rates, arable land, water and nutrients are becoming scarce. To ensure a sustainable supply of plant-based raw materials, innovative strategies for crop improvement are required.

The Cluster's mission is to decode different complex plant traits, which have an important impact on growth, yield and the use of resources. By understanding the molecular and genetic basis of these plant traits we aim to create the basis for a future sustainable cultivation of food, feed and energy crops.

Research:

The interdisciplinary approach of the cluster focuses on four different research areas:

- **Annual and Perennial Life Histories**
- **C4 Photosynthesis**
- **Plant-Microbe Interactions**
- **Metabolic Interactions**

Additionally, CEPLAS has established a technology platform on „Plant Metabolism and Metabolomics Facility“

Methods:

Synthetic Biology, Evolutionary Genetics and Genomics, Quantitative Biology, Interdisciplinary Approaches of Theoretical and Experimental Biology

Partner Institutions:

Heinrich Heine University Düsseldorf, University of Cologne, Max Planck Institute for Breeding Research Cologne, Forschungszentrum Jülich

Funding programme:

Excellence Initiative of the German federal and state governments, second round.

Funding period: 2012-2018

Funding: € 34 million



Promotion of young researcher:

- Bachelor Programme in Quantitative Biology
- CEPLAS Graduate School
- Structured Postdoc-Programme

Members:

In 2017, the number of people directly financed by the cluster slightly decreased due to the official funding end in October 2017. From November 2017 to December 2018, the cluster is financed by a bridge funding from the DFG covering only costs for the maintenance of the cluster, the new faculty and some postdoc and PhD positions. Although the cluster personnel decreased to around 60 people, the number of researchers working in CEPLAS labs on CEPLAS relevant topics remained constant with currently around 200 researchers.

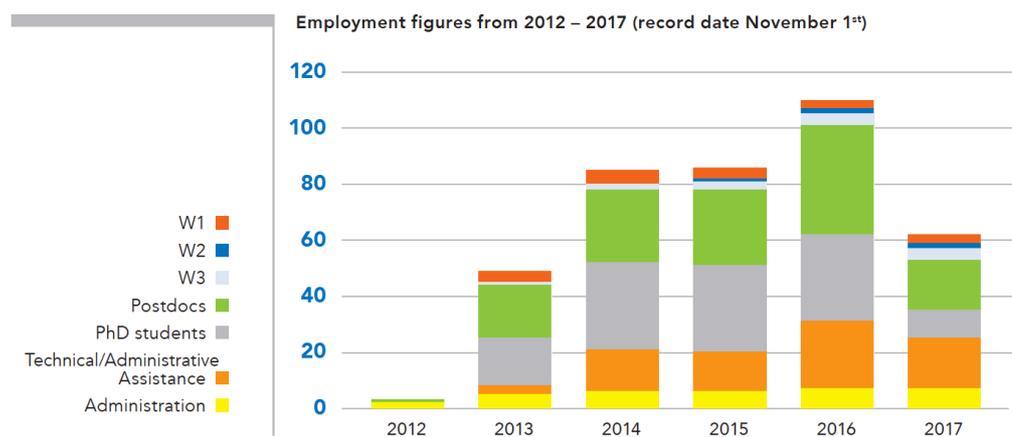


Figure 1: Development of personnel between 2012 and 2017

Contact:

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