

## C-Bio セミナー

日時: 9月6日(金) 10:00~11:00

場所:ゲノミクス研究棟 2階セミナー室

講師: Mark Aarts 教授 Wageningen 大学

<https://www.wur.nl/en/persons/mark-aarts.htm>



### 講演タイトル:

Genetic analysis of photosynthesis efficiency, clues for breeding improved yield?

光合成効率の遺伝子解析、収量向上の手がかり？

### 講演内容:

Photosynthesis is the main driver of plant biomass production. While crop yields have been increased impressively through breeding the past century, there never has been a strong selection on high photosynthesis efficiency. My group explores the opportunities to characterize the genetic variation for photosynthesis efficiency in the model species *Arabidopsis thaliana*. One of the challenges in investigating such genetic variation is the ability to adequately phenotype photosynthesis parameters. For this purpose, we use sophisticated phenotyping platforms designed for high-throughput imaging of light use efficiency of photosystem II electron transport ( $\Phi_{PSII}$  or  $F_q'/F_m'$ ) and related photosynthetic parameters through chlorophyll fluorescence measurements, such as available in the Netherlands Plant Eco-phenotyping Centre ([www.npec.nl](http://www.npec.nl)).