



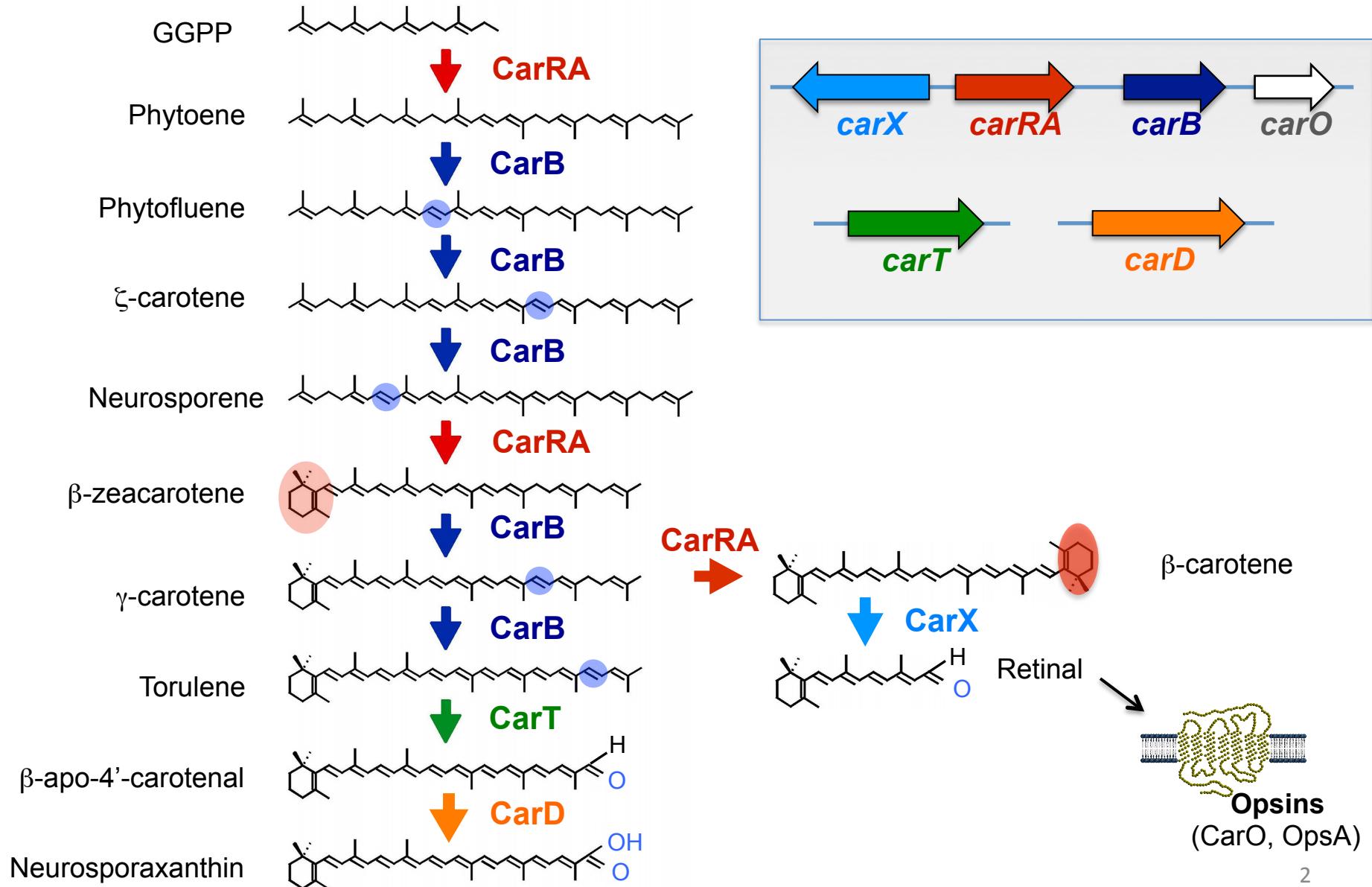
ECFG15, Rome, Italy
17-20 th February 2020

**Functional studies
on the role of the
RING-Finger protein
CarS
in *Fusarium fujikuroi***
M. Carmen Limón

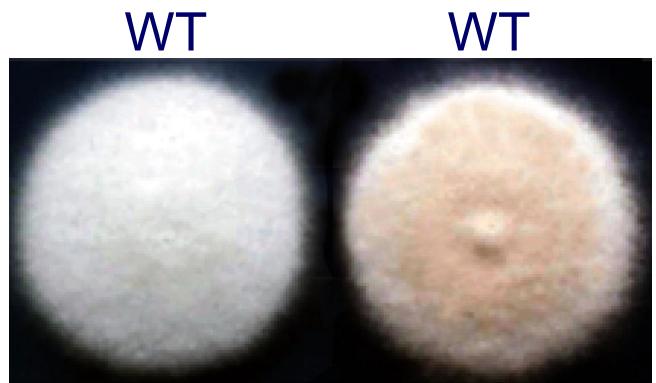
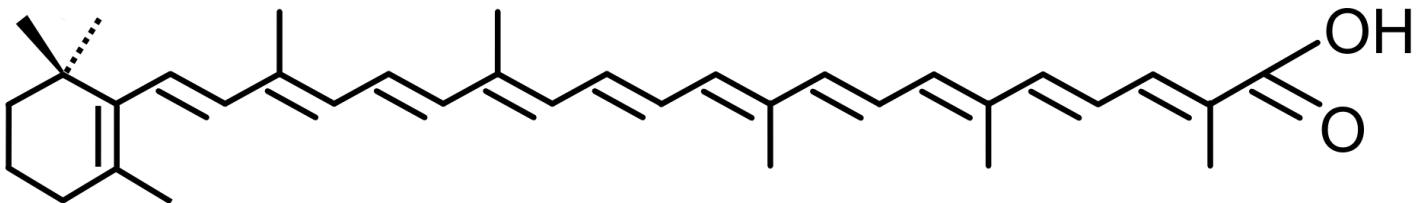
**Department of Genetics
University of Seville**

carmenlimon@us.es

Carotenoid biosynthesis in *Fusarium*



CarS mutant



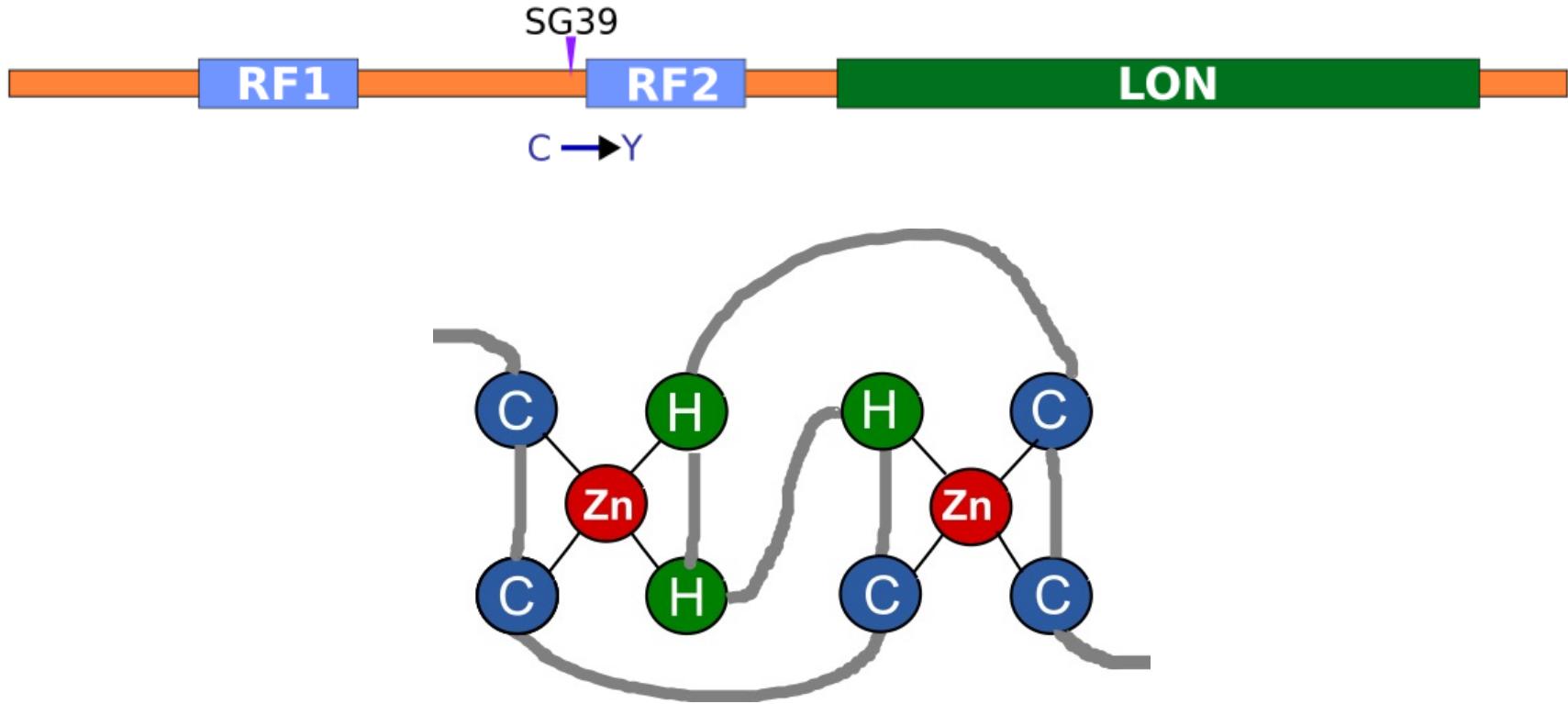
dark

light



dark

RING-Finger protein CarS

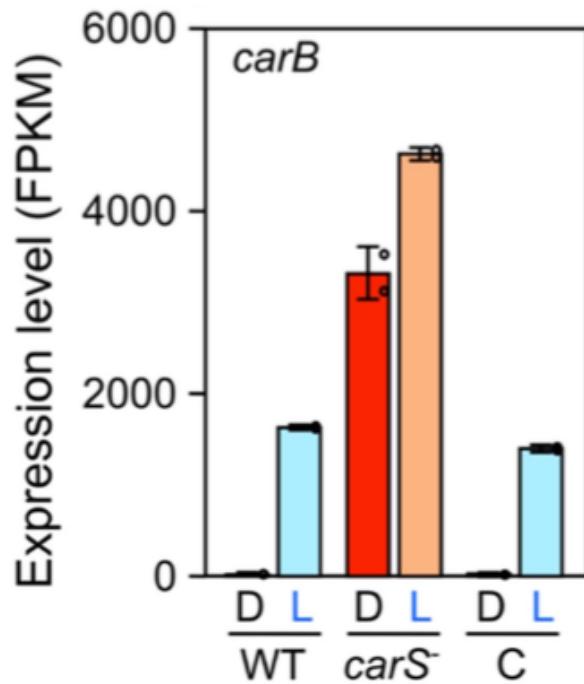


RING domains are found in E3-ubiquitin ligases

Transcription of *car* genes



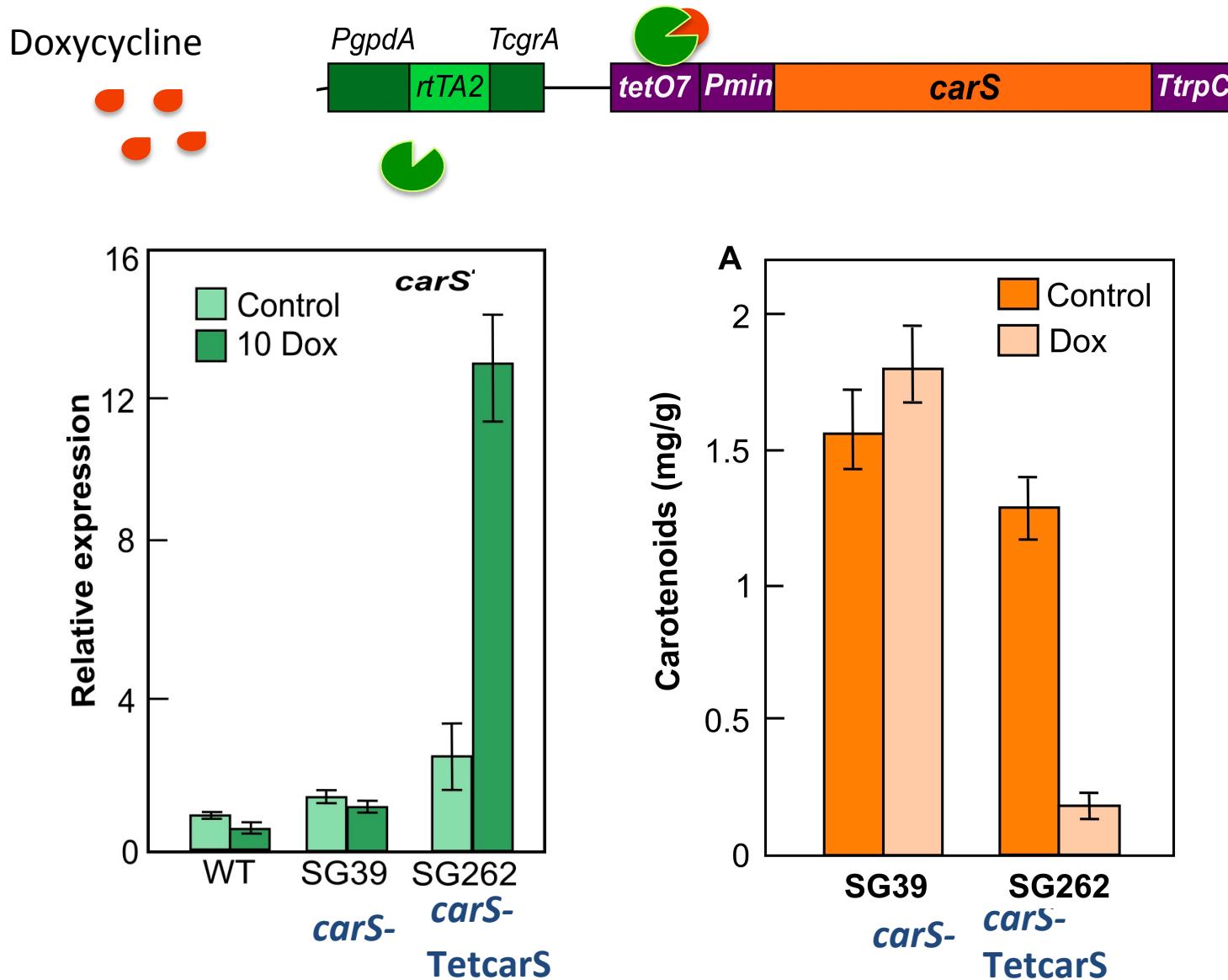
Example of gene involved in biosynthesis of carotenoids



Questions

- What is the effect of increasing *carS* transcription on the biosynthesis of carotenoids?
- Is *carS* involved in other processes?

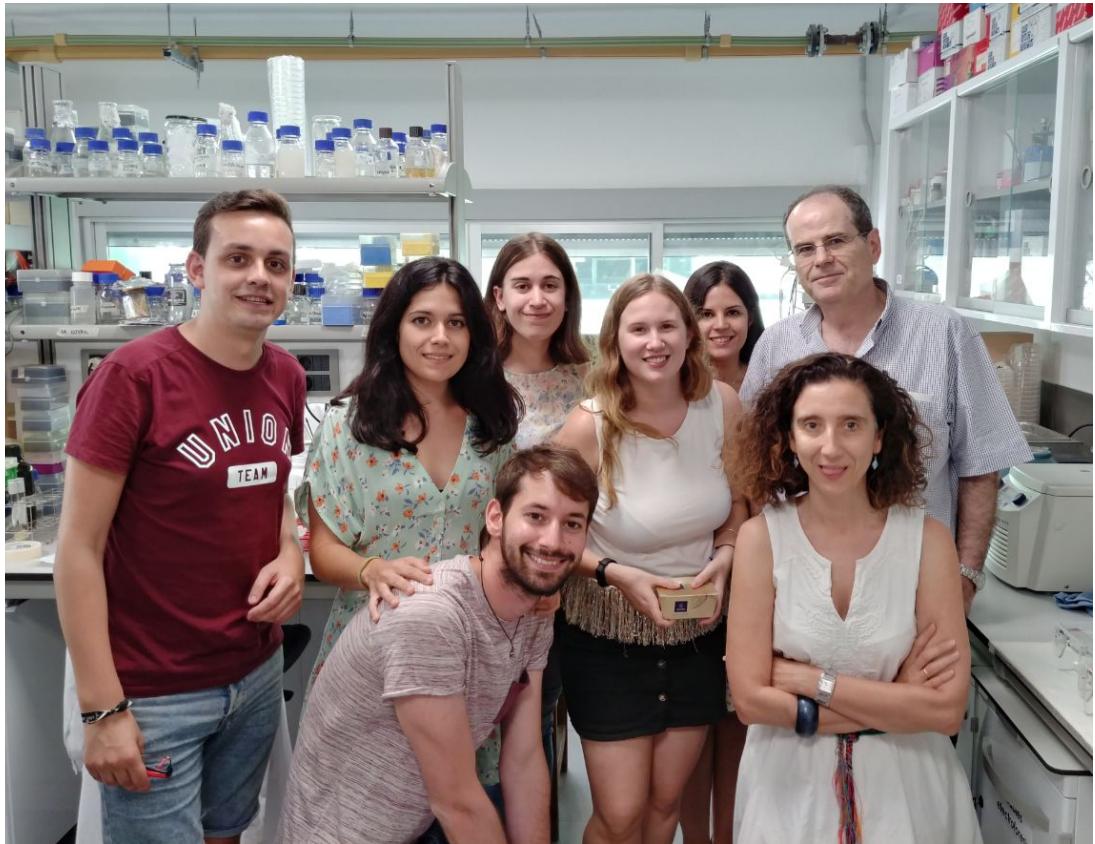
Inducible expression of *carS* in a carotenoid overproduction mutant



Conclusions

- CarS mediates the repression of the transcription of *car* genes
- *carS* mutation is pleotropic

Acknowledgements



Ulrich Terpitz
University of Wüzburg

Kees van den Hondel
University of Leiden

Gabriel Gutierrez Pozo
University of Seville

carmenlimon@us.es

Funding



CaRed