

Dr Elizabete Carmo-Silva

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Employment

2015-Present Lecturer, Plant Sciences for Food Security, LEC, Lancaster University, UK
2012-2015 Research Scientist, Rothamsted Research, Harpenden, UK
2008-2012 Post-Doctoral Plant Physiologist, United States Department of Agriculture (USDA),
Arid-Land Agricultural Research Center (ALARC), Maricopa, USA

Academic history

2008 Ph.D. (Physiology & Biochemistry), University of Lisbon, Portugal
2003 Licentiate Degree (Applied Plant Biology), University of Lisbon, Portugal

Current/recent grant support

2016-2020 Bilateral NSF/Bio-BBSRC (Col; BB/N016009/1-LU; £483K)
2016-2019 Newton Fund Rice Research (Col; £307K)
2016-2019 International Wheat Yield Partnership, IWYP (Col; BB/N020871/1, BB/N021061/1,
BB/N021045/1; £775K)
2015-2017 Rothamsted Research Fellowship (PI; £300K)
2015 BBSRC-Embrapa pump-priming award (Col; BB/N004485/1; £30K)
2014-2017 BBSRC/DBT (Col; BB/L011786/1; £148K)
2012-2017 Sub-contract to University of Illinois as part of a Bill & Melinda Gates Foundation
award (Col; RIPE; £873K)
2012-2013 CIMMYT (Col; W4031.11 Global Wheat Program; £153K)

Recent peer-reviewed publications

(>25 peer-reviewed manuscripts published; *h*-index: 15, Google Scholar, 28/07/2016)

Orr DJ, Alcântara AM, Kapralov MV, Andralojc PJ, **Carmo-Silva E**, Parry MAJ (2016) Surveying Rubisco diversity and temperature response to improve crop photosynthetic efficiency. *Plant Physiology* 172:707-717

Scafaro A, Gallé A, van Rie J, **Carmo-Silva E**, Salvucci ME, Atwell BJ (2016) Heat tolerance in a wild *Oryza* species is attributed to maintenance of Rubisco activation by a thermally stable Rubisco activase ortholog. *New Phytologist* 211:899-911

Hanson MR, Lin MT, **Carmo-Silva E**, Parry MAJ (2016) Towards engineering carboxysomes into C_3 plants. *The Plant Journal* 87:38-50

Pauli D, Andrade-Sanchez P, **Carmo-Silva E**, Gazave E, French A, Heun J, Hunsaker D, Lipka A, Setter T, Strand R, Thorp K, Wang S, White J, Gore M (2016) Field-based high-throughput plant phenotyping reveals the temporal patterns of quantitative trait loci associated with stress-responsive traits in cotton. *G3: Genes, Genomes, Genetics* 6:865-879

Prins A, Orr DJ, Andralojc PJ, Reynolds MP, **Carmo-Silva E**, Parry MAJ (2016) Rubisco catalytic properties of wild and domesticated relatives provide scope for improving wheat photosynthesis. *Journal of Experimental Botany* 67:1827-1838

Thorp KR, Gore MA, Andrade-Sanchez P, **Carmo-Silva E**, Welch SM, White JW, French AN (2015) Proximal hyperspectral sensing and data analysis approaches for field-based plant phenomics. *Computers and Electronics in Agriculture* 118:225-236

Carmo-Silva E, Scales JC, Madgwick PJ, Parry MAJ (2015) Optimising Rubisco and its regulation for greater resource use efficiency. *Plant Cell Environ* 38:1817-1832

Teaching duties

- 2016-present Coordinator of module *LEC.244: Research Design and Delivery*.
- 2015-present Contribution to delivery of: *LEC.101: Global Environmental Challenges*; *LEC.347: Environmental Plant Biology*; *LEC.421: Food Security, Agriculture and Climate Change*; *LEC.300: Dissertations*.

Commissions of trust

- 2016-present Associate Editor, *Frontiers in Plant Physiology*.
- 2014-present Review Panel member, Newton Fund Researcher & Institutional Links.
- 2013-2015 Review Panel member, British Council Researcher Links Initiative.
- 2011-2013 Audit Committee member, *Associação dos Bolseiros de Investigação Científica (ABIC, Portugal)*.

Institutional responsibilities

- 2016-present PhD Recruitment and Progression, Lancaster Environment Centre, UK.
- 2015-present PhD Monitoring Panel member, Lancaster Environment Centre, UK.
- 2014 Post-graduate Education Committee member, Rothamsted Research, UK.
- 2013-2015 Interview panel member and shortlisting of candidates for new posts, Rothamsted Research, UK.

Supervision of graduate students and post-doctoral fellows

- 2015-present Management of 7 post-doctoral research associates and 2 research assistants, Lancaster Environment Centre, UK.
- 2013-2015 Management of 3 post-doctoral scientists and 1 post-graduate research assistant, Rothamsted Research, UK.
- 2012-present (Co-)Supervision of 6 PhD (1 completed, 1 submitted) and 2 MsR (1 completed) students, Rothamsted Research, now Lancaster Environment Centre, UK.
- 2008-2012 Co-supervision of 3 PhD students (completed), Arid-Land Agricultural Research Center, US.