Professor Cristobal Uauy

Group Leader

<u>Building Robustness in Crops (BRiC), Delivering Sustainable Wheat (DSW)</u> at John Innes Center, Norwich



The Uauy lab is focused on using genetics and genomics to improve both yield and quality components in wheat. Their research comes under three main areas;

- Increasing yields
- Improving crop quality
- Genomic enabled technologies

The lab uses molecular genetic approaches to identify genes involved in wheat productivity traits and enhance the translation of this knowledge into improved varieties for industry and consumers.

They aim to understand the mechanisms by which these genes function in order to develop the most rational strategies to deploy these genes into commercial varieties.

Selected Publications

• Adamski N,Simmonds J,Brinton J,Backhaus A,Chen Y,Smedley M,Hayta S,Florio T,Crane P,Scott P,Pieri A,Hall O,Barclay J.,Clayton M,Doonan J,Nibai C,Uauy C (2021)

<u>Ectopic Expression of Triticum polonicum VRT-A2 Underlies Elongated Glumes and Grains in</u> Hexaploid Wheat in a Dosage-Dependent Manner

The Plant Cell

Publisher's version: 1532-298X

 Brinton J,Ramirez-Gonzalez RH,Simmonds J,Wingen L,Orford S,Griffiths S,Haberer G,Spannagl M,Walkowiak S,Pozniak C,Uauy C (2020)

A haplotype-led approach to increase the precision of wheat breeding.

Communications biology (3)

Publisher's version: 2399-3642

• Chen Y, Liu Y, Zhang J, Torrance A, Watanabe N, Adamski NM, Uauy (2022)

The Triticum ispahanicum elongated glume locus P2 maps to chromosome 6A and is associated with the ectopic expression of SVP-A1.

TAG. Theoretical and applied genetics. Theoretische und angewandte Genetik