SUMMARISED CURRICULUM VITAE

Gustavo Ariel SLAFER. Ing. Agr. (Univ. Nac. La Plata); M. Sc. (Univ. Buenos Aires) Ph. D. (Univ. Melbourne, Australia)

I.- Personal

II.- Position

Currently:

- **Research Professor of ICREA** (Catalonian Institution for Research and Advanced Studies, since 2004). *With permission of ICREA, I am also currently*
- Associate Professor, University of Lleida, Spain (since 2008).
- Senior Researcher, PI of the Crop Physiology Group and Head of the Agronomy and Environmental Sciences Area of AGROTECNIO (Centre for Food and Agriculture Research; since 2011; https://agrotecnio.org/about/#steeringCommite as accessed on Dec 2022)
- Honorary Professor, School of Biosciences, University of Nottingham, United Kingdom (since 2005).
- Honorary Professor, School of Agronomy, University of Buenos Aires, Argentina (since 2018)
- Editor/Associate Editor (with different denominations but always responsible for desk-rejections or for the review process of mss submitted, and making the final decision on acceptance/rejection) of Euphytica (The Netherlands), Food Energy Security (UK), Spanish Journal Agricultural Research (Spain), Scientific Reports (UK), International Journal of Molecular Sciences (Switzerland), Frontiers in Plant Science (Switzerland), and The Crop Journal (Crop Science Society of China and Elsevier, The Netherlands). In addition, I have been Gest Editor of few special issues in international journals. I was also one of the Editora of Crop Science (Crop Science Society of America) for 6 years.
- **Member of the Editorial Board** of Field Crops Research (Netherlands), and European Journal of Agronomy (EU and Elsevier, The Netherlands).
- Member of the Scientific Advisory Council of the GADEA for Science Foundation.

Until 2003:

- Professor of the University of Buenos Aires (Dept of Plant Production)

- Principal Researcher of CONICET (National Council of Scientific Research of Argentina) as a Senior Researcher of the Agricultural Plant Physiology and Ecology Research Institute (IFEVA).

III.- Research Grants

I was/am Principal Investigator (of either the whole project or the group of the UdL in multinational research consortia) of the following national and international competitive grants that were active over the last 10 years (i.e., ending in 2013 or later)

The list below does not include previous grants neither grants in which I was researcher but not PI. Funds indicated are those of the group, not to the overall project (in case of coordinated projects).



- FONTAGRO (Internacional Fund for Agricultural Technology of Spain, Latin-American and Caribbean countries). 2009-2013. Mitigar el Efecto de Altas Temperaturas en la Productividad de Maíz (FTG-0831), US\$ 500,000 (*Gustavo A. Slafer was also the Coordinator of the whole project*).
- CYTED (Ibero-American Program of Science and Technology for Development). 2010-2013. Mejorar la eficiencia en el uso de insumos y el ajuste fenológico en cultivos de trigo y cebada METRICE (Red 110RT0394), €116,000 (Gustavo A. Slafer was also the Coordinator of the whole network).
- European Commission, Jan 2011-Dec 2013. Programa Coordination and support action; FP7-KBBE-2010-4. Breeding to Optimise Chinese Agriculture (OPTICHINA, Grant agreement no: 266045) € 38,253
- European Commission, Jan 2012-Dec 2015. Programa Collaborative Project; FP7-KBBE-2011-5. Genetics and physiology of wheat development to flowering (ADAPTAWHEAT; Grant agreement no: 289842), € 309,960.
- Plan Nacional (Spain) de I+D, Ministerio de Economia y Competitividad de España, 2013-2015. Control genetico de atributos fisiologicos determinantes del numero de granos en trigo (AGL2012-35300), € 210,600.
- Generalitat de Catalunya, Convocatoria Competitiva de Support Als Grups De Recerca, 2014-2016. Grupo de Recerca Consolidat en Agronomía i Millora del Rendiment i Qualitat de Cultius Extensius (2014 SGR 1040), € 27,000.
- CYTED (Ibero-American Program of Science and Technology for Development). 2016-2019. Intensificación de la producción con manejo sostenible de los cultivos extensivos (Red 116RT0502), € 25,000/year.
- Plan Nacional (Spain) de I+D, Ministerio de Economia y Competitividad de España, 2016-2018. Variabilidad genotipica en atributos determinantes del numero de granos y posibles compensaciones con el peso y calidad nutricional de los granos en material elite de trigo (AGL2015-69595-R), € 180,000.
- INTERNATIONAL WHEAT YIELD PARTNERSHIP (International, headquarters in the US), 2016-2018. A diversity toolkit to maximize harvest index by controlling the duration of developmental phases (IWYP25FP), € 280,000.
- AGENCIA ESTATAL DE INVESTIGACIÓN (Programa REDES DE EXCELENCIA). 1/7/2017-31/12/2020. Fisiologia del Rendimiento y Calidad para la Mejora de Cereales (AGL2016-81855-REDT), €20,000 (Gustavo A. Slafer was also the Coordinator of the network).
- Generalitat de Catalunya, Convocatoria Competitiva de Support Als Grups De Recerca, 2017-2019. Grupo de Recerca Consolidat en Agronomía i Millora del Rendiment i Qualitat de Cultius Extensius. Codigo: 2017 SGR 890 € 37,840.
- FSOV, Fonds de Soutien à l'obtention Végétale [French funding supporting the development of valuable genetic materials]. Plasticité des composantes de rendement des céréales à pailles (PlastiX). March 2019 February 2022 (FSOV 2018 R), 80,845€ (GASlafer also responsible for the whole consortium for the "Ecophysiological determinism of plastic response")
- Plan Nacional (Spain) de I+D, Ministerio de Economia y Competitividad de España, 2019-2021. Plasticidad fenotipica del rendimiento y calidad de trigo en respuesta a 'golpes de calor' en fases reproductivas de genotipos contrastantes (RTI2018-096213-B-I00), € 153,670.
- PRIMA (Partnership for Research and Innovation in the Mediterranean Area; a partnership between 19
 Participating States and the EU Horizon 2020). 15 Sept 2019-14 Sept 2022. Utilization of local genetic diversity to understand and exploit barley adaptation to harsh environments and for pre-breeding GENDIBAR (2018-SECTION2-8), € 85,000.
- AGROTECNIO Joint Research Projects. Analysing the physiological effects, and developing simple protocols for high throughput automatic determination, of seedling and spike densities to provide support to selection in breeding programs. 01 Sept 2021 – 31 Ago 2023. 20000€
- Plan Nacional (España) de I+D, Ministerio de Ciencia e Innovación de España Agencia Estatal de Investigación, Dic 2022-Ago2025. Fertilidad de espigas en trigo: rol de genes promisorios, variabilidad en material elite, plasticidad y compensaciones. Código PID2021-127415OB-I00, € 157300 (Director/Investigador Principal).
- Plan Nacional (España) de I+D, Ministerio de Ciencia e Innovación de España Agencia Estatal de Investigación, Proyectos de Transición Ecológica y Digital, Sept 2022-Nov 2024. Proyecto Coordinado

"Adapting wheat to climate change: mitigating the penalties of heat waves on wheat yield and quality (HeWaWheat)" [2980980 €]. Sub-proyecto 1 UdL: Genetic adaptation of wheat yield to heat waves: physiological bases of variability in plasticity of floret development, grain set and grain growth. Código TED2021-130466B-C21, € 161000 (Co-Director/Co-Investigador Principal y Coordinador 2 del Proyecto coordinado).

IV.-Lecturing

1.- Undergraduate

Until 2003 I have lectured regular annual courses of Crop Production for the Agronomy degree in the University of Buenos Aires

In addition I was Responsible for the intensification courses: "Maize and Wheat Yield Physiology" and "Physiological Bases of Wheat and Barley Development"

At the University of Lleida I have been in charge of the module of crop development in the course "Biotecnological Applications for Improving Crop Productivity" in the Degree of Biotechnology"

2.- Postgraduate

Until 2003 I have lectured the following courses for the MSc or PhD degrees of the Univ of Buenos Aires (i) "Physiological bases of crop improvement", "Crop development and environmental controls", "Wheat Physiology", "Genetic and environmental controls of yield potential and actual yield", "Writing and publication of scientific papers"

After 2004, at the Uniniversity of Lleida I have lectured "Writing and publication of scientific papers", and "Crop physiology"

In 2021-2023 I delivered the course "Design and Writing of Competitive Research Projects" Organised by FONTAGRO

V.- Supervision of PhD students and postdoctoral researchers

I was the main supervisor of the PhD theses of (i) 6 students of the Univ. de Buenos Aires (and Co-supervisor of another 4); and of (ii) 11 students of the University of Lleida.

In addition, I have been a number of times supervisor of MSc theses both in Argentina and Spain.

The PhD students I was main supervisor (and their current positions) are

- Dr. Miralles is presently Associate Professor at the University of Buenos Aires and Research Scientist at CONICET (the Argentine Council for Scientific Research).
- Dr. Calderini is presently Professor at the Austral University of Chile, Valdivia, Chile.
- Dr. Abeledo is presently Adjunct Professor at the University of Buenos Aires and Research Scientist at CONICET (the Argentine Council for Scientific Research).
- Dr. Whitechurch is presently Reasearch Scientist at CONICET (the Argentine Council for Scientific Research).
- Dr. González is presently Research Scientist at CONICET (the Argentine Council for Scientific Research) and Researcher at INTA-Pergamino, Argentina.
- Dr. Kantolic is presently Adjunct Professor, developing research and teaching activities, at the University of Buenos Aires, Argentina
- Dr. Acreche is presently researcher at INTA-Salta and CONICET, Argentina.
- Dr. Pedro is presently at BASF, Spain.
- Dr. Cossani was postdoc at CIMMYT (International Center based in Mexico) firstly and is now a

postdoc at SARDI (South Australia Research and Development Institute, Australia).

- Dr. Ferrante was postdoctoral researcher at the University of Queensland, and now is postdoc at the University of Adelaide (both in Australia). [Dr. Ferrante obtained the award "Premio Extraordinario de Doctorado"]
- Dr. Antonio has been postdoctoral scholar firstly at Iowa State University (USA) and now at Pennsilvanya State University (USA).
- Dr. Cartelle is an independent consultant at Tarragona (Spain).
- Dr. Marti is researcher at CBC-Europe, a branch of CBC Group (International Company, with Headquarters in Japan).
- **Dr. Prieto is Responsible for Research Projects of AGIDEA at Pergamino, Aregentina** (AGIDEA is a company offering agricultural research services in Argentina and the USA).
- Dr. Ochagavía is a Juan de la Cierva postdoctoral researcher in the EEAD, CSIC (Spain). [Dr. Ochagavía obtained the award "Premio Extraordinario de Doctorado"]
- Dr. Priyanka A Basavaraddi was firstly Research Associate at the University of Agricultural Science, Bangalore-India and is now a Postdoctoral Fellow both in INRAE Clermont-Ferrand and the UdL.
- Dr. JinWook Kim was firstly a Postdoctoral Fellow at the University of Guelph, Ontario-Canada, and is now Postdoctoral Fellow at the University of Missouri (USA).

I was also the main supervisor of the following postdoctoral researchers

- Dr. L. Gabriela Abeledo. Juan de la Cierva contract for 2008-2010.
- Dr. Monica Elía. Contracted by a Project for 2012-2015.
- Dr. Addy L. García. Contracted by a Project for 2018-2019.
- Dr. Priyanka A Basavaraddi. 'Margarita Salas' Contract for 2022-2024 to work both in INRAE Clermont-Ferrand and the UdL.
- Dr. Constanza Carrera. 'Maria Zambrano' contract for 2022-2024
- Dr. Rocio Ploschuk. Juan de la Cierva contract for 2023-2024

VI.- Invited Talks

I have been invited to deliver talks in International conferences and in Prestigious Centers of Research in USA, Australia, Mexico, The Netherlands, Canada, Hungary, Brazil, UK, Chile, Finland, and China (as well as in Spain –when I was working at Argentina- and in Argentina -after I moved to Spain). Invited talks (NOT including seminars delivered in occasions of visiting centers) over the last 10 years include:

- Yield responsiveness to environmental and genetic factors through coarse- and fine-tuning yield components in wheat. Keynote Speaker at the Combined China-EU-Australia Workshop on Phenotyping for Abiotic Stress Tolerance and Water Use Efficiency in Crop Breeding. Northwest Agriculture and Forestry University, Yangling (Xi'an) China, 12 May 2013.
- Physiological traits to further improving barley yield. Invited Speaker at the IV Congreso Latinoamericano de Cebada, Bahía Blanca, Argentina. 30, 31 de Octubre y 1 de Noviembre de 2013.
- Fruiting efficiency an alternative trait to further rise wheat yield potential. Invited Speaker at Wheat Breeding 2014: Tools, targets & progress. Rothamsted Research, Harpenden, Herts, UK 29-30 January 2014.
- Dynamics of floret development determining differences in spike fertility. Invited Speaker. The 4th Workshop of the International Wheat Yield Consortium. CIMMYT and La Salle University Ciudad Obregon, Mexico. 24-25 March 2014.
- Wheat development and partitioning. Invited lecturer at the Crop Efficiency Academy. Bayer CropScience. Gatersleben, 7-9 July 2014.
- Improving and Stabilizing Harvest Index in Wheat Across Environments. Invited Speaker at Symposium on Future Directions for Crop Physiology. ASA-CSSA-SSSA joint annual meeting 'Grand Challenges – Great Solutions'. Long Beach Covention Center, CA-USA, 2-5 November 2014.
- Identifying physiological traits to improve crops for stressful environments. Invited Speaker at the Annals of

Applied Biology Centenary Conference on 'Challenges for Crop Production & Quality'. Rothamsted Research, Harpenden, Herts, UK 9-10 December 2014.

- Crop physiological bases of wheat yield. Invited Seminar at CRAG (Centre for Research in Agricultural Genomics), Campus of the Autonomous University of Barcelona, Bellaterra, Spain, 26 February 2016.
- Crop physiological bases of wheat yield. Invited Seminar at the School of Agriculture and Food Science, University College Dublin, Ireland, 25 January 2017.
- Can We Increase Fruiting Efficiency to Improve Wheat Yield? Max Planck Institute for Plant Breeding Research. Koln, Germany, 15 March 2017.
- Physiology of high yields: Critical traits determining grain number. AgMIP-Wheat & EWG WPCM Workshop. Jiangsu, China, 10 May 2017.
- Critical Components to Further Increase Yield Potential. International Symposium on Genetics and Breeding of Wheat. Lankao, Henan, China, 24 May 2017.
- Heat penalties on cereal yield may be altered by N management. LEPSE (Laboratoire d'Ecophysiologie des Plantes sous Stress Environnementaux) INRA (Institut National de la Recherche Agronomique) and Center for higher education in Agricultural Sciences, Montpellier SupAgro. 15 December 2017.
- Coarse and Fine Regulators of Wheat Yield. Role of Crop Management. Symposium-Exploring G x E x M Synergies in World-Wide Wheat Production and the Opportunities for International Collaboration. 2018 Annual meeting American Society of Agronomy, Baltimore, USA. 6 November 2018.
- Crop physiology in relation to breeding grain crops. EUROPE SCIENTISTS MEETING, Corteva-Pioneer. Cremona, Italy. 5-7 February 2019.
- Heat x Nitrogen penalties on yield of cereals. UK MonoGram Conference for Grass and Grain Research, Nottingham, UK. 1 May 2019.
- Effective Communication in R & D. Corteva Global Plant Breeding Leadership Team Meeting. Multilocations in US and EU, virtual meeting. 26 May 2020.
- Physiological bases for improving resilience to environmental stresses and resource use efficiency in wheat. XVI European Society for Agronomy Congress, Seville-Spain, 1 September 2020.
- Overview of "sink side" dynamics, important processes and traits using a Wiring Diagram. Workshop: Delivering High Impact Traits and Novel Genetic Variation, within the IWYP (International Wheat Yield Partnership) Conference 2021. Online Format, 21 September 2021.
- Avances en ecofisiología de cereales de invierno. Atributos fisiológicos de potencial valor en la futura mejora de trigo. IX Congreso Nacional de Trigo de Argentina y III Encuentro del Mercosur. Online Format, 29 September 2021.
- Traits determining sink strength for improving wheat yield. Resource allocation to juvenile spikes, efficiency in its use and floret development. Iberian Plant Biology 2023. Braga, Portugal, 12 July 2023
- Wheat yield physiology as affected by N-fertilization. 2nd Workshop Argentina UK Partnership Wheat. School of Agronomy-Univ Buenos Aires, Argentina, 27 November 2023.
- Wheat yield as affected by high temperature. Interference with mechanisms determining wheat yield. Rank Symposium on Net Zero Agriculture. Lake District, UK 15-18 April 2024.
- Further improving spike fertility traits in wheat to keep increasing yield potential. International Conference on Plant Biology and Biotechnology (ICPBB 2024). Almaty, Kazakhstan, 3-6 June 2024.
- Barley yield physiology. Effects of *PPD-H1* alleles beyond phenology and differences between 6- and 2-row barleys. Australian Barley Technical Symposium. Adelaide, Australia, 12-15 August 2024.

VII.- Publications

Along my scientific career (34 years, since my first paper published in 1989) I **published more than 200 papers** in JCR-indexed journals, the vast **majority** (more than 90%) in **Q1 journals**. Using the most restrictive database (Web of Science "*Core Collection*") at July 2023 I had an **h-index of 68**, with an annual growth in h-index (*m*) of more than 1.9 (www.webofscience.com/wos/author/record/384796; h-indexes of 71 and 91 in Scopus and Google Scholar, respectively: www.scopus.com/authid/detail.uri?authorId=7006772753; scholar.google.com/citations?user=DVuZR_cAAAAJ&hl=en].

Consequently, I have been ranked as the Spanish scientist with the highest h index in the field of "Agronomy", with an Fh of 1.57 (i.e. h-index 57 % higher than the average h-index of the 12 scientists in this field with highest h-index; h>33; see https://grupodih.info/agr.html#AGRONOMY, this had been updated on Sept 2023 when accessed in Jan. 2024).

In addition, I also published **more than 40 chapters** in scientific books of international publishers (e.g. Elsevier, CABI, Springer, Academic Press, Taylor & Francis, etc.); and have edited **7 scientific books** published by CABI (UK), The Haworth Press (USA), Springer Verlag (USA) and Marcel Dekker (USA). Complete list of papers available in Publons or in my Google Scholar profile.

Papers published in the last years (since 2018):

- .- Ochagavia, H., Prieto, P., Savin, R., Griffiths, S., Slafer, G.A. 2018. Dynamics of leaf and spikelet primordia initiation in wheat as affected by Ppd-1a alleles under field conditions. <u>Journal of Experimental Botany</u>, 69: 2621–2631.
- .- Prieto, P., Ochagavia, H., Savin, R., Griffiths, S., Slafer, G.A. 2018. Dynamics of floret initiation/death determining spike fertility in wheat as affected by Ppd genes under field conditions. Journal of Experimental Botany, 69: 2633–2645.
- .- Zhu, C., Farré, G., Zanga, D., Lloveras, J., Michelena, A., Ferrio, J.P., Voltas, J., Slafer, G., Savin, R., Albajes, R., Eizaguirre, M., Lopez, C., Cantero-Martínez, C., Díaz-Gómez, J., Nogareda, C., Moreno, J.A., Angulo, E., Estany, J., Pena, R.N., Tor, M., Portero-Otin, M., Eritja, N., Arjó, G., Serrano, J.C.E., Matias-Guiu, X., Twyman, R.M., Sandmann, G., Capell, T., Christou, P. 2018. High-carotenoid maize: development of plant biotechnology prototypes for human and animal health and nutrition. Phytochemistry Reviews, 17: 195-209.
- .- Pérez-Gianmarco, T.I., Slafer, G.A., González, F.G., 2018. Wheat pre-anthesis development as affected by photoperiod sensitivity genes (*Ppd-1*) under contrasting photoperiods. <u>Functional Plant Biology</u>, 45: 645-657.
- .- Elía, M., Slafer, G.A., Savin, R. 2018. Yield and grain weight responses to post-anthesis increases in maximum temperature under field grown wheat as modified by nitrogen supply. <u>Field Crops Research</u>, 221: 228-237.
- .- Ordóñez, R.A., Savin, R., Cossani, C.M., **Slafer, G.A.** 2018. Maize grain weight sensitivity to source-sink manipulations under a wide range of field conditions. <u>Crop Science</u>, in press.
- .- Slafer, G.A., Savin, R. 2018. Can N management affect the magnitude of yield loss due to heat waves in wheat and maize? <u>Current Opinion in Plant Biology</u>, in press.
- .- Prieto, P., Ochagavia, H., Savin, R., Griffiths, S., Slafer, G.A. 2018. Physiological determinants of fertile floret survival in wheat as affected by earliness per se genes under field conditions. <u>European Journal of</u> <u>Agronomy</u>, 99: 206–213.
- Ochagavia, H., Prieto, P., Savin, R., Griffiths, S., **Slafer, G.A.** 2018. Earliness per se effects on developmental traits in hexaploid wheat grown under field conditions. <u>European Journal of Agronomy</u>, 99: 214–223.
- Garcia, A.L., Savin, R., Slafer, G.A. 2019. Fruiting efficiency differences between cereal species. Field Crops Research, 231: 68–80.
- .- Pérez-Gianmarco, T.I., **Slafer, G.A.**, González, F.G., 2019. Photoperiod-sensitivity genes (Ppd-1) shape floret development in wheat. Journal of Experimental Botany, 70: 1339-1348.
- .- Ochagavia, H., Prieto, P., Zikhali, M., Griffiths, S., **Slafer, G.A.** 2019. Earliness per se by temperature interaction on wheat development. Scientific Reports, 9: 2584.
- .- Savin, R., Sadras, V.O., Slafer, G.A. 2019. Benchmarking nitrogen utilisation efficiency in wheat for Mediterranean and non-Mediterranean European regions. Field Crops Research, 241: 107573.
- .- de Oliveira Silva, A., **Slafer, G.A.**, Fritz, A.K., Lollato, R.P. 2020. Physiological basis of genotypic response to management in dryland wheat. <u>Frontiers in Plant Science</u> **10**:1644.
- .- Prieto, P., Ochagavia, H., Griffiths, S., Slafer, G.A. 2020. Earliness per se x temperature interaction consequences on leaf, spikelet and floret development in wheat. <u>Journal of Experimental Botany</u>, 71: 1956–1968.
- .- de Oliveira Silva, A., Ciampitti, I.A., **Slafer, G.A.**, Lollato, R.P. 2020. Nitrogen Utilization Efficiency in Wheat: A Global Perspective. <u>European Journal of Agronomy</u>, **114**: 126008

- .- Sanchez-Bragado, R., Kim, J.W., Rivera-Amado, C., Molero, G., Araus, J.L., Savin, R., Slafer, G.A. 2020. Are awns truly relevant for wheat yields? A study of performance of awned/awnless isogenic lines and their response to source-sink manipulations. <u>Field Crops Research</u>, 254: 107827.
- .- Ferrante, A., Savin, R., Slafer, G.A. 2020. Floret development and spike fertility in wheat: differences between cultivars of contrasting yield potential and their sensitivity to photoperiod and soil N. <u>Field Crops</u> <u>Research</u>, 256: 107908.
- Abeledo, L.G., Savin, R. & Slafer, G.A. 2020. Maize senescence under contrasting source-sink ratios during the grain filling period. <u>Environmental and Experimental Botany</u>, **180**: 104263.
- Slafer, G.A. & Savin, R. 2020. Should the impact factor of the year of publication or the last available one be used when evaluating scientists? <u>Spanish Journal of Agricultural Research</u>, **18**, eM01.
- .- Basavaraddi, P.A., Savin, R., Sukumaran, S., Reynolds, M.P., Griffiths, S. & Slafer, G.A. 2021. Genotypic differences in wheat yield determinants within a NAM population based on elite parents. <u>European</u> <u>Journal of Agronomy</u>, 123: 126223.
- .- Kim, J., Savin, R. & Slafer, G.A. 2021. Weight of individual wheat grains estimated from high-throughput digital images of grain area. European Journal of Agronomy, 124: 126237.
- .- Basavaraddi, P.A., Savin, R., Wingen, L.U., Bencivenga, S., Przewieslik-Allen, A.M., Griffiths, S. & Slafer, G.A. 2021. Interactions between two QTLs for time to anthesis on spike development and fertility in wheat. Scientific Reports, 11: 2451.
- .- Ochagavia, H., Prieto, P., Savin, R. & **Slafer, G.A.** 2021. Developmental patterns and rates of organogenesis across modern and well-adapted wheat cultivars. European Journal of Agronomy, **126**: 126280.
- Basavaraddi, P.A., Savin, R., Bencivenga, S., Griffiths, S. & **Slafer, G.A.** 2021. Wheat developmental traits as affected by the interaction between Eps-7D and temperature under contrasting photoperiods with insensitive Ppd-D1 background. Plants, **10**: 547.
- .- Basavaraddi, P.A., Savin, R., Bencivenga, S., Griffiths, S. & Slafer, G.A. 2021. Phenology and floret development as affected by the interaction between Eps-7D and Ppd-D1. Plants, 10: 533. https://doi.org/10.3390/plants10030533.
- .- Reynolds, M., Atkin, O.K., Bennett, M., Cooper, M., Dodd, I.C., Foulkes, M.J., Frohberg, C., Hammer, G., Henderson, I.R., Huang, B., Korzun, V., McCouch, S.R., Messina, C.D., Pogson, B.J., Slafer, G.A., Taylor, N.L., Wittich, P.E. Addressing research bottlenecks to crop productivity. Trends in Plant Science, 26: 607-630*.

*Order of authors was alphabetic (beyond the senior author coordinating the whole review). O.K. Atkin, M. Bennett, B. Huang, S.R. McCouch, C.D. Messina, **G.A. Slafer**, and P.E. Wittich led particular aspects of the review and for that reason appear as corresponding authors

- .- Kim, J., Slafer, G.A. & Savin, R. 2021. Are portable polyethylene tents reliable for imposing heat treatments in field-grown wheat? Field Crops Research, 271: 108206.
- .- Reynolds, M.P.*, Slafer, G.A.*, Foulkes, J.M., Griffiths, S., Murchie, E.H., Carmo-Silva, E., Asseng, S., Chapman, S.C., Sawkins, M., Gwyn, J., Flavell, R.B. 2022. A wiring-diagram to integrate physiological traits of wheat yield potential. <u>Nature Food</u>, 3, 318-324. https://doi.org/10.1038/s43016-022-00512-z *Co-lead autors (and both are corresponding autors).
- .- Savin, R., Cossani, C.M., Dahan, R., Ayad, J.Y., Albrizio, R., Todorovic, M., Karrou, M., Slafer, G.A. 2022. Intensifying cereal management in dryland mediterranean agriculture: rainfed wheat and barley responses to nitrogen fertilisation. <u>European Journal of Agronomy</u>, **137**, 126518.
- .- Slafer, G.A., García, G.A., Serrago, R.A., Miralles, D.J. 2022. Physiological drivers of responses of grains per m² to environmental and genetic factors in wheat. <u>Field Crops Research</u>, **285**, 108593.
- .- Beral, A., Girousse, C., Le Gouis, J., Allard, V., Slafer, G.A. 2022. Physiological bases of cultivar differences in average grain weight in wheat: scaling down from plot to individual grain in elite material. <u>Field Crops</u> <u>Research</u>, 289, 108713
- .- Guarin, J.R., Martre, P., Ewert, F., Webber, H., Dueri, S., Calderini, D., Reynolds, M., Molero, G., Miralles, D., Garcia, G., Slafer, G., Giunta, F., Pequeno, D.N.L., Stella, T., Ahmed, M., Alderman, P.D., Basso, B., Berger, A.G., Bindi, M., Bracho-Mujica, G., Cammarano, D., Chen, Y., Dumont, B., Rezaei, E.E., Fereres, E., Ferrise, R., Gaiser, T., Gao, Y., Garcia-Vila, M., Gayler, S., Hochman, Z., Hoogenboom, G.,

Hunt, L.A., Kersebaum, K.C., Nendel, C., Olesen, J.E., Palosuo, T., Priesack, E., Pullens, J.W.M., Rodríguez, A., Rötter, R.P., Ramos, M.R., Semenov, M.A., Senapati, N., Siebert, S., Srivastava, A.K., Stöckle, C., Supit, I., Tao, F., Thorburn, P., Wang, E., Weber, T.K.D., Xiao, L., Zhang, Z., Zhao, C., Zhao, J., Zhao, Z., Zhu, Y., Asseng, S., 2022. Evidence for increasing global wheat yield potential. <u>Environmental Research Letters</u>, **17**, 124045.

- .- Slafer, G.A., Foulkes, M.J., Reynolds, M., Murchie, E.H., Carmo-Silva, E., Flavell. R.B., Gwyn, J., Sawkins, M., Griffiths, S., 2023. A 'Wiring Diagram' for sink-strength traits impacting wheat yield potential. Journal of Experimental Botany, 74, 40–71.
- .- Murchie, E.H., Reynolds, M., Slafer, G.A., Foulkes, M.J., Acevedo-Siaca, L., McAusland, L., Sharwood, R., Griffiths, S., Flavell. R.B., Gwyn, J., Sawkins, M., Carmo-Silva, E., 2023. A 'Wiring Diagram' for source-strength traits impacting wheat yield potential. Journal of Experimental Botany, 74, 72–90.
- .- Slafer, G.A., Savin, R., 2023. Comparative performance of barley and wheat across a wide range of yielding conditions. Does barley outyield wheat consistently in low-yielding conditions? <u>European Journal of Agronomy</u>, 143, 126689.
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Books and book-chapters published in the last years:

- .- Savin, R., Slafer, G.A. (Eds). 2019. Crop Science, Springer Sustainability Science and Technology Series. Springer-Verlag New York, US, ISBN 978-1-4939-8620-0.
 - In this book we also wrote an introductory chapter, pp 1-5
- .- Bustos-Korts, D., Romagosa, I., Borràs-Gelonch, G., Casas, A.M., **Slafer, G.A.**, van Eeuwijk, F. 2019. Genotype by environment interaction and adaptation. In: "*Crop Science*" (R. Savin and G.A. Slafer, Eds), Springer Sustainability Science and Technology Series. Springer-Verlag, New York, pp. 29-71
- .- Slafer, G.A., Savin, R., Pinochet, D., Calderini, D.F. 2021. Wheat. In: "Crop Physiology Case Histories for Major Crops" (V. Sadras and D. Calderini, Eds), ISBN: 9780128191941, Academic Press – Elsevier, pp. 99-163

.- Foulkes, M.J., Molero, G., Griffths, S., Slafer, G.A., Reynolds, M.P. 2022. Yield portential. In: "Wheat Improvement. Food Security in a Changing Climate" (M.P. Reynolds and H.-J. Braun, Eds), ISBN: 978-3-030-90672-6, Springer (an imprint of Springer Nature), Switzerland, pp. 379-396

VII.- Other Merits

- * Coordinator of the *ad hoc* Committee of Agricultural Sciences for Projects of CONICET (Argentine Council for Scientific Research), 1999-2000.
- * Member of the Panel of Experts, INCO-DEV Program, European Union, Brusels, 2000.
- * Coordinator of the ad hoc Committee of Agricultiral Sciences for Scholarships of CONICET, 2000-2001.
- * Coordinator of the *ad hoc* Committee of Agricultiral Sciences for Reports and Promotions of Scientists of CONICET, 2001-2002.
- * Member of the Panel of Experts, INCO-MED Program, European Union, Bruselas, 2002.
- * Member of the Committee of Agricultural Sciences of CONICET, 2002-2003.
- * Member of the Panel of Experts, INCO-MED Program, European Union, Brusels, 2003.
- * Member of the Committee for Project in Agriculture and Forestry, Spanish Ministry of Science, Madrid. 2004.
- * Member of the Committee for Postdoctoral Fellows of INIA (Spanish Institute for Agricultural Research), 2007.
- * Adjunct Coordinator (in cgarge of the field of Crop Physiology) of the Committee for Agriculture of ANEP (Spanish Agency for Evaluation and Prospective), 2007-2011.
- * Member of the Committee for Experimental Sciences for the Acreditation of Research and Lecturing positions of the Basque Country University System, UNIQUAL, 2008 2013.
- * Member of the Committee for Agriculture Andalusian Agency for Knowledge. 2016 2018
- * President of the Committee for Evaluation of Research Groups of Agriculture Agricultura of CSIC (Spanish Coincil for Scientific Research). 2017- 2019
- * Member of the Expert Panel for the evaluation of Faculty of Agriculture University of Zagreb. Agency for Science and Higher Education, Croatia. 2018.
- * Bolsa de Cereales (Buenos Aires Cereals Board of Trade) 2017 Award, granted by the National Academy of Agronomy and Veterinary of Argentina.
- * Awarded the "Espiga de Oro" (Gold Spike). Tres Arroyos, Argentina. 2018.
- * CSSA (Crop Science Society of America) Fellow [highest recognition bestowed by the CSSA; only up to 0.3 percent of the Society's members may be elected Fellow]. 2019.
- * Member of the Committee for Evaluating project proposals for FONTAGRO (Fondo Regional de Tecnología Agropecuaria). 2021 2023
- * Awarded the "MensaLleida" 2023 price to scientific and technological knowledge, in recognition to the achievements over the career and contributions of the studies in crop physiology. Lleida, Spain. 2024.