

# Curriculum vitae



**Prof. Dr. Heribert Hirt**  
**Head of Darwin21 Desert Research Initiative**  
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## Education

67-75 Johannes Kepler Gymnasium Reutlingen, Germany  
76-78 Study of Biochemistry, Univ. of Cape Town, South Africa  
79-81 Study of Biochemistry, Univ. of Vienna, Austria  
1983 Mag. rer. nat. (Univ. of Vienna)  
84-87 PhD thesis, Inst. of Biochemistry, Vienna  
1987 Post-doctoral fellow, Inst. of Biochemistry, Vienna  
1988 Post-doctoral fellow, Dept. Microbiology, Oxford, GB  
1991 Assist. Prof. at Inst. of Microbiology and Genetics, Univ. of Vienna  
1994 Habilitation in Genetics, Faculty of Natural Sciences, Univ. of Vienna  
1995 Sabbatical, Dept. of Mol. Biol., Wageningen, NL  
1997 Associated Prof. at Inst. of Microbiology and Genetics, Univ. of Vienna  
99-01 Vice-chair of Inst. of Microbiology and Genetics  
00-03 Dean of graduate studies, International PhD program of the Vienna Biocenter  
00-02 Vice-Director of Gregor-Mendel-Institute, Austrian Academy of Sciences, Vienna  
06-07 Head of Department of Plant Mol. Biology, Univ. of Vienna, Austria  
08-13 Director of URGV Plant Genomics, Evry, France  
14-16 Director of Center of Desert Agriculture, KAUST, Jeddah, KSA

## Citations and h-index

298 publications in peer reviewed journals, 8 patents, 26 articles and books  
Total citations 51,713 (Google Scholar), h-index 103

## 10 most recent publications:

Shekhawat, K., Fröhlich, K., García-Ramírez, G. X., Trapp, M. A., & Hirt, H. (2022). Ethylene: A Master Regulator of Plant-Microbe Interactions under Abiotic Stresses. *Cells*, 12(1), 31.

Hirt H, Al-Babili S, Almeida-Trapp M, Martin A, Aranda M, Bartels D, Bennett M, Blilou I, Boer D, Boulouis A, Bowler C, Brunel-Muguet S, Chardon F, Colcombet J, Colot V, Daszkowska-Golec A, Dinneny JR, Field B, Froehlich K, Gardener CH, Gojon A, Gomès E, Gomez-Alvarez EM, Gutierrez C, Havaux M, Hayes S, Heard E, Hodges M, Alghamdi AK, Laplaze L, Lauersen KJ, Leonhardt N, Johnson X, Jones J, Kollist H, Kopriva S, Krapp A, Masson ML, McCabe MF, Merendino L, Molina A, Moreno Ramirez JL, Mueller-Roeber B, Nicolas M, Nir I, Orduna IO, Pardo JM, Reichheld JP, Rodriguez PL, Rouached H, Saad MM, Schlögelhofer P, Singh KA, De Smet I, Stanschewski C, Stra A, Tester M, Walsh C, Weber APM, Weigel D, Wigge P, Wrzaczek M, Wulff BBH, Young IM. (2023) PlantACT! - how to tackle the climate crisis. *Trends Plant Sci.* 28(5):537-543.

Sheikh AH, Nawaz K, Tabassum N, Almeida-Trapp M, Mariappan KG, Alhoraibi H, Rayapuram N, Aranda M, Groth M, Hirt H. (2023) Linker histone H1 modulates defense priming and immunity in plants. *Nucleic Acids Res.* 22;51(9):4252-4265.

Cui G, Konciute MK, Ling L, Esau L, Raina JB, Han B, Salazar OR, Presnell JS, Rädcker N, Zhong H, Menzies J, Cleves PA, Liew YJ, Krediet CJ, Sawiczy V, Cziesielski MJ, Guagliardo P, Bougoure J, Pernice M, Hirt H, Voolstra CR, Weis VM, Pringle JR, Aranda M. (2023) Molecular insights into the Darwin paradox of coral reefs from the sea anemone *Aiptasia*. *Sci Adv.* 17;9(11):eadf7108.

Blilou I, Hirt H. (2023) Desert plants to stop desertification: To succeed, reforestation projects to reclaim once fertile lands need to consider the local abiotic, biotic, and social factors: To succeed, reforestation projects to reclaim once fertile lands need to consider the local abiotic, biotic, and social factors. *EMBO Rep.* 6;24(2):e56687.

Yu G, Matny O, Gourdoupis S, Rayapuram N, Aljedaani FR, Wang YL, Nürnberger T, Johnson R, Crean EE, Saur IM, Gardener C, Yue Y, Kangara N, Steuernagel B, Hayta S, Smedley M, Harwood W, Patpour M, Wu S, Poland J, Jones JDG, Reuber TL, Ronen M, Sharon A, Rouse MN, Xu S, Holušová K, Bartoš J, Molnár I, Karafiátová M, Hirt H, Blilou I, Jaremko Ł, Doležel J, Steffenson BJ, Wulff BBH. (2023) The wheat stem rust resistance gene Sr43 encodes an unusual protein kinase. *Nat Genet.* 22. doi: 10.1038/s41588-023-01402-1. Epub ahead of print. PMID: 37217714.

Rawat AA, Hartmann M, Harzen A, Lugan R, Stolze SC, Forzani C, Abts L, Reißweber S, Rayapuram N, Nakagami H, Zeier J, Hirt H. (2023) OXIDATIVE SIGNAL-INDUCIBLE1 induces immunity by coordinating N-hydroxytyrosine, salicylic acid, and camalexin synthesis. *New Phytol.* 237(4):1285-1301.

Prall, W., Sheikh, A. H., Bazin, J., Bigeard, J., Almeida-Trapp, M., Crespi, M., Hirt, H., & Gregory, B. D. (2023). Pathogen-induced m6A dynamics affect plant immunity. *The Plant Cell*, koad224. Advance online publication.

Siodmak, A., Shahul Hameed, U. F., Rayapuram, N., Völz, R., Boudsocq, M., Alharbi, S., Alhoraibi, H., Lee, Y. H., Blilou, I., Arold, S. T., & Hirt, H. (2023). Essential role of the CD docking motif of MPK4 in plant immunity, growth, and development. *The New phytologist*, 239(3), 1112–1126.

Alghamdi, A. K., Parween, S., Hirt, H., & Saad, M. M. (2023). Complete genome sequence analysis of plant growth-promoting bacterium, *Isophtericola* sp. AK164 isolated from the rhizosphere of *Avicennia marina* growing at the Red Sea coast. *Archives of microbiology*, 205(9), 307.

## Distinctions

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| 1988 | EMBO fellowship  |
| 1993 | Award of the Austrian Society of Biochemistry                    |
| 2001 | Wittgenstein Prize   |
| 2006 | Member of Pauli Institute  |
| 2008 | Elected Member of EMBO (European Molecular Biology Organization) |
| 2009 | ISI Highly Cited Researcher (Plant & Animal Science)             |

- 2010 France's 100 most important researchers
- 2010-13 Elected President of EPSO (European Plant Science Organisation)
- 2011 King Saud Distinguished Fellow
- 2014 ISI Highly Cited Researcher (Plant & Animal Science)
- 2014 World's 3000 Most Influential Researchers (Thomson Reuters)
- 2024 ISI Highly Cited Researcher (Cross Plant & Animal Science)

### **Scientific activities**

- 97-11 Editorial board member of the Journal of Experimental Botany
- 00-03 Coeditor of Protoplasma
- 02-09 Coeditor of Topics in Current Genetics
- 03-08 Coeditor of Plant and Cell Physiology
- 05-08 Coeditor of Molecular Genetics and Genomics
- 07-17 Coeditor of Molecular Plant
- 2012- Coeditor of PeerJ
- 2013- Editorial board member of Frontiers of Plant Physiology
- 2015- Editorial board member of Cellular and Molecular Proteomics
- 2019- Editorial board member of MDPI Plants
- 2021- Editorial board member of EMBO Reports

### **Other scientific activities**

- 01-04 Coordinator, EU Program "Cross talk and integration of stress signal transduction"
- 2001 Organizer, Plant Protein Phosphorylation, 12-15 September 2001, Vienna, Austria
- 02-06 Member of Multi-National Arabidopsis Steering Committee
- 02-06 Executive board member of ÖGGT (Austrian Society of Genetics)
- 04-07 Member, Safety Committee for Genetically Modified Organisms, Austrian Government
- 2004 Organizer, Genomics of Arabidopsis as a Model Plant, 15-17 April 2004, Vienna
- 05- Scientific Advisory Board Member of Göttingen Centre of Molecular Biosciences
- 2005 Organizer of International Botanical Congress, 18-21 July 2005, Vienna
- 2005 Organizer "Advancing the Genomics Frontier", 24-27 August 2005, Neuchatel
- 06-07 President of Austrian Society of Genetics and Gene Technology
- 2006 Organizer, Keystone Conference "Abiotic stress in plants", 8-13 April 2006, USA
- 2007 Organizer, Gordon Conference "Temperature stress in plants", USA
- 2009 Organizer of "Plant Abiotic Stress Tolerance", 8-11 February 2009, Vienna
- 2009 Organizer of "Plant Genomics and beyond", 5-8 July 2009, Evry, France
- 2011 Organizer of "Proteomics" 21-22 March, Evry, France
- 2012 Organizer "Abiotic Stress in Plants, 21-25 February, Vienna, Austria
- 2012 Organizer, EPSO-FESPB Conference, 29 July-3 August, Freiburg, Germany
- 2015 Organiser, Abiotic Stress Meeting, 29-31 June, Vienna, Austria
- 2015 Organiser, Int. Arabidopsis Conference, 5-10 July, Paris, France
- 2015 Co-chair, Gordon Research Conference, PTM Networks, 6-10 July, Hongkong, China
- 2017 Chair, Gordon Conference, 13-18 August 2017, Hongkong, China
- 2018 Co-organizer, The Metaorganism Frontier, 18-22 February, Thuwal, KSA
- 2020 Member or ERC Research Panel
- 2022- Speaker, Global Think Tank PlantACT!
- 2022 Member of ERC Research Panel
- 2023 Co-organizer, UAE Microbiome, 20-22 November, Dubai
- 2024 Co-organizer of PlantACT! Conference, Duesseldorf, Germany
- 2025 Co-Organizer of PlantACT! Conference, Madrid, Spain