**Uri Hochberg March 2018**

**CURRICULUM VITAE**

1. **University Education and Additional Training**

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| **Dates** | **Description** |
| 2005 – 2008 | B.Sc. in Plant science, Plant Science Department, Agriculture Faculty of the Hebrew University of Jerusalem, Rehovot, Israel. Average: 90.86 cum laude |
| 2009 – 2011 | M.Sc. in Plant science at Ben Gurion University of the Negev. Average: 94.13 Title of thesis: “Differences in hydraulic behavior of Shiraz and Cabernet Sauvignon grapevines”. Supervision by: Shimon Rachmilevitch and Aaron Fait |
| 2011 – 2014 | Ph.D. in Plant science at Ben Gurion University of the Negev. Title of thesis: “Physiological and metabolical responses of Cabernet Sauvignon and Shiraz grapevine (Vitis vinifera) cultivars to water stress“ Supervision by: Shimon Rachmilevitch and Aaron Fait |
| 2014 – 2015 | Postdoctoral position at University of Udine and INRA, Clermont Ferrand with Enrico Peterlunger and Herve Cochard. Research subject: metabolic and hydraulic responses of Merlot vines to deficit irrigation |
| 2015 – 2017 | Postdoctoral position at Harvard University with Missy Holbrook. Research subject: the time scale of stomatal closure, xylem embolism, and xylem deformation.  |
| 2018 – present | Researcher in the department of soil, water and environmental Sciences, agricultural research organization, Israel |

# Uri Hochberg

1. **Articles in Reviewed Journals**

1.   **Hochberg U**, Degu A, Fait A, Rachmilevitch S (2013).

 Near isohydric grapevine cultivar displays higher photosynthetic efficiency and photorespiration rates under drought stress as compared with near anisohydric grapevine cultivar.

 Physiologia Plantarum, 147: 443-352

2.   **Hochberg U**, Degu A, Toubiana D, Gendler T, Nikoloski Z, Rachmilevitch S, Fait A (2013).

 Metabolite profiling and network analysis reveals coordinated changes in grapevine water stress response.

 BMC plant biology 13,184

3.   Rapaport T, **Hochberg U**, Rachmilevitch S, Karnieli A (2014).

 The effect of differential growth rates across plants on spectral Predictions of Physiological Parameters. Plos One DOI:10.1371/journal.pone.0088930

4.   Degu A, **Hochberg U**, Sikron N, Venturini L, Buson G, Ghan R, Plaschkes I, Batushansky A, Chalifa-Caspi V, Mattivi F, Delledonne M, Pezzotti M, Rachmilevitch S, Cramer GR Fait A (2014).

 Metabolite and transcript profiling of berry skin during fruit development elucidates differential regulation between Cabernet Sauvignon and Shiraz cultivars at branching points in the polyphenol pathway.

 BMC plant biology 14, 188

5. **Hochberg U**, Gendler T, Degau A, Fait A, Rachmilevitch S (2015).

The variability in the xylem architecture of grapevine petiole and its contribution to hydraulic differences.

Functional Plant Biology 42: 357-365

6. Degu A, Morcia C, Tumino G, **Hochberg U**, Toubiana D, Mattivi F, Schneider A, Boscad P, Cattivelli

 L, Terzi V, Fait A. (2015).

 Metabolite profiling elucidates communalities and differences in the polyphenol biosynthetic pathways

 of red and white Muscat genotypes.

 Plant Physiology and Biochemistry, 86:24-33.‏

7. **Hochberg U**, Degu A, Cramer G, Rachmilevitch S, Fait A (2015).

 Cultivar specific metabolic changes in grapevines berry skins in relation to deficit irrigation and hydraulic

 behavior.

 Plant Physiology and Biochemistry 88: 42-52

8. Rapaport T, **Hochberg U**, Rachmilevitch S, Shoshany M, Karnieli A (2015).

 Combining leaf physiology, hyperspectral imaging and partial least squares-regression (PLS-R) for

 grapevine water status assessment.

 ISPRS Journal of Photogrammetry and Remote Sensing, 109: 88-97

1. **Hochberg U**, Batushansky A, Degu A, Rachmilevitch S, Fait A (2015).

Metabolic and Physiological Responses of Shiraz and Cabernet Sauvignon (Vitis vinifera L.) to Near Optimal Temperatures of 25 and 35 °C.

International Journal of Molecular Science, 16: 24276-24294

1. Ghan R, Van Sluyter SC, **Hochberg U**, Degu A, Hopper DW, Tillet RL, ... & Cramer, G. R. (2015).

Five omic technologies are concordant in differentiating the biochemical characteristics of the berries of five grapevine (Vitis vinifera L.) cultivars.

BMC genomics, 16, 946

1. **Hochberg U**, Albuquerque C, Rachmilevitch S, Cochard H, David-Schwartz R, Brodersen C, McElrone A, Windt CW (2016).

Grapevine petioles are more sensitive to drought induced embolism than stems: evidence from in vivo MRI and microCT observations of hydraulic vulnerability segmentation.

 Plant Cell & Environment 39: 1886–1894

1. **Hochberg U**, Herrera JC, Cochard H, Badel E (2016).

Short-time xylem relaxation results in reliable quantification of embolism in grapevine petioles and sheds new light on their hydraulic strategy.

Tree Physiology 36: 748-755

1. **Hochberg U**, Herrera JC, Degu A, Castellarin SD, Peterlunger E, Alberti G, Lazarovitch N (2017).

Evaporative demand determines the relative transpirational sensitivity of deficit irrigated grapevines. Irrigation science 35,1

14.   **Hochberg U**, Bonel AG, David-Schwartz R, Degu A, Fait A, Cochard H, Peterlunger E, Herrera JC

 (2017). Grapevine acclimation to water deficit: the adjustment of stomatal and hydraulic conductance

 differ from petiole embolism vulnerability

 Planta 245: 1091-1104

15.  **Hochberg U**, Windt CW, Ponomarenko A, Zhang YJ, Gersony J, Rockwell FE, Holbrook NM (2017).

 Stomatal Closure, embolism and Shedding of Basal leaves protect the hydraulic integrity of grape stems.

 Plant physiology DOI:10.1104/pp.16.01816\

16. Herrera JC, **Hochberg U**, Degu A, Sabbatini P, Lazarovitch N, Castellarin SD, Fait A, Alberti G,

 Peterlunger E (2017).

 Grape Metabolic Response to Post-Veraison Water Deficit is Affected by Inter-Season Weather Variability.

 Journal of Agricultural and Food Chemistry. DOI: 10.1021/acs.jafc.7b01466

17. Rapaport T, **Hochberg U**, Rachmilevitch S, Shoshany M, Karnieli A (2015).

 The potential of the spectral ‘water balance index’ (WABI) for crop irrigation scheduling. New Phytologist

 216:741-757

18. **Hochberg U**, Rockwell FE, Holbrook NM, Cochard H. (2018). Iso/Anisohydry: A Plant–Environment Interaction Rather Than a Simple Hydraulic Trait. Trends in plant science 23:112-120

1. **Articles in Symposia Proceedings**

1. **Hochberg U**, Degu A, Rachmilevitch S, Cramer GR, Fait A (2013)

Grapevine in the face of climate change: the effects of water deficit on whole plant physiology, molecular

 processes and grape berry quality.

 Acta Horticultura. 9th international symposium on grapevine physiology and biotechnology, La Serena,

 Chile

2.  **Hochberg U**, Degu A, Fait A, Rachmilevitch S (2015)

 Grapevines hydraulic diversity- a critical considerations for irrigation management?

 Acta Horticultura. 8th International Symposium on Irrigation of Horticultural Crops, Lleyda, Spain.