

# **CURRICULUM VITAE**

## **RACHEL GREEN**

### **PERSONAL DETAILS**

Telephone (W): 02 6585319  
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Personal status: Married + 7 children

### **HIGHER EDUCATION**

1982 B.Sc. Department of Botany, Durham University, UK. Botany.  
1985 M.Sc. Department of Plant Genetics, Weizmann Institute of Science, Israel.  
Plant Genetics. Supervisor: Prof. E. Galun.  
1990. Ph.D. Department of Molecular Genetics, Plant Breeding Institute (John Innes Centre), U.K. Plant sciences. Supervisor: Dr. M. Bevan.  
1992-1995 Postdoctoral fellowship. Department of Plant Genetics, Weizmann Institute of Science, Israel. Plant Sciences. Host: Prof. R. Fluhr.  
1996-2000 Postdoctoral fellow. Department of Molecular Developmental and Cellular Biology, U.C.L.A., U.S.A. Plant Sciences. Host: Prof. E. Tobin.  
2001-2002 Research Associate. Plant Sciences. Department of Molecular Developmental and Cellular Biology, Research Associate U.C.L.A., U.S.A.

### **HEBREW UNIVERSITY APPOINTMENTS**

2003 Senior Lecturer, Institute of Life Sciences, Department of Plant and Environmental Sciences  
2007 Lionel Cohen Career Development Chair  
2009 Tenure as Senior Lecturer, Institute of Life Sciences, Department of Plant and Environmental Sciences  
2013-present Associate Professor, Institute of Life Sciences, Department of Plant and Environmental Sciences  
2012-2015 Head of Plant and Environmental Sciences teaching  
2013-2019 Appointments Committee for Life Sciences (Vaadat Sinun)  
2015-2019 Head of Plant and Environmental Sciences department  
2019-present Head Beit Belgia Faculty Committee  
2022-present Head of Plant and Environmental Sciences department  
2022-present Head of Plant and Environmental Sciences teaching

### **PRIZES**

Michael Milken prize for continued excellence in undergraduate teaching (2009)  
Ministry of Immigrant Absorption Award of Merit for Outstanding Immigrant Scientist (2012)

## TEACHING ACTIVITIES

Courses: Advanced botany, An insight into plant development, Biological clocks, Physiology and molecular biology of the cell

Rector's List for Outstanding Teachers (Academic Years: 2003, 2005, 2007, 2008, 2010, 2011, 2014, 2015, 2019)

## OTHER PROFESSIONAL ACTIVITIES

### External Examiner:

Weizmann Institute, Tel Aviv University, Faculty of Agriculture (Hebrew University), Ben Gurion University, York University UK

### Grant Reviewer:

ISF, Israel Ministry of Agriculture, NSF (USA), BARD, BSF (Binational Science Foundation), DFG (German Research Foundation, Deutsche Forschungsgemeinschaft), National Science Centre (Poland), Israel Ministry of Agriculture, DFG (German Research Foundation, Deutsche Forschungsgemeinschaft), ERC, BBRC

### Grant Committee Participation:

#### *Panel Member*

EU FP7 (KBBE-2011-5) expert evaluator in Brussels (2011), ISF Israel-China (2016), BSF (2018), ISF Israel-China (2018), ISF (2019)

#### *Panel Leader*

BSF Panel Leader in Plant Sciences (2019/20)

### Journal Reviewer for Journals:

PNAS, Journal of Biological Rhythms, Biologia Plantarum, Planta, Plant Cell Reports, Journal of Experimental Botany, Plant Physiology, Plant Cell, Current Biology, Chronobiology, Journal of Experimental Botany, Molecular Ecology, Plant Cell and Environment, Nature Plants, Molecular Ecology, Plant Methods.

### Book Reviewer:

"Photoperiodism" for the Quarterly Review of Books

### Media:

Profiled on Israel21C (2007), Interviewed by The Scientist (2009)

## PUBLISHED ARTICLES

1. **Green RM**, Vardi A and Galun E (1986). The plastome of Citrus: physical map, variation among Citrus cultivars and species and comparison with related genera. Theoretical and Applied Genetics 72: 170-7

2. Gray JC, Dunn PPJ, Eccles CJ, **Green RM**, Hird SM, Hogland AS, Webber AN, Willey DL and Dyer TA (1988). The chloroplast genome and the biosynthesis of the chloroplast membrane. *Biochemical Society Transactions* 16: 704-6
3. Boyd LA, Smith PM, **Green RM** and Brown JKM (1994). The relationship between the expression of defense-related genes and mildew development in barley. *Mol. Plant Microbe Int.* 7: 401-10
4. **Green RM** and Fluhr R (1995). UV-B-induced PR-1 accumulation is mediated by active oxygen species. *Plant Cell* 7: 203-12
5. Sugano S, Andronis C, **Green RM**, Wang Z-Y and Tobin EM (1998). Protein kinase CK2 interacts with and phosphorylates the *Arabidopsis* circadian clock-associated 1 protein. *Proc. Natl. Acad. Sci.* 95:11020-25
6. **Green RM** and Tobin EM (1999). Loss of the circadian clock-associated protein 1 in *Arabidopsis* results in altered clock-regulated gene expression. *Proc. Natl. Acad. Sci.* 96:4176-79
7. Sugano S, Andronis C, Ong, M.S, **Green RM** and Tobin EM (1999). The protein kinase CK2 is involved in regulation of circadian rhythms in *Arabidopsis*. *Proc. Natl. Acad. Sci.* 96:12362-66
8. Barak S, Tobin EM, Andronis C, Sugano S and **Green RM** (2000). All in good time: the *Arabidopsis* circadian clock. *Trends in Plant Science* 5:517-22. (Invited Review/Cover page)
9. Ong MS, **Green RM**, Tingay S, Brusslan J and Tobin EM (2001). *Shygr11* is a mutant affected in multiple aspects of photomorphogenesis. *Plant Physiology* 126:587-600
10. **Green RM**, Tingay S, Wang Z-Y and Tobin EM (2002). Circadian rhythms confer a higher level of fitness to *Arabidopsis* plants. *Plant Physiology* 129:576-84
11. **Green RM** and Tobin EM (2002). The role of CCA1 and LHY in the plant circadian clock. *Developmental Cell* 516-8
12. Yakir E, Hilman D, Harir Y, **Green RM** (2007). Regulation of output from the plant circadian clock. *FEBS J.* 274:335-45
13. Hassidim M, Yakir E, Fradkin D, Hilman D, Kron I, Keren N, Harir Y, Yerushalmi S and **Green RM** (2007). Mutations in CHLOROPLAST RNA BINDING (CRB) provide evidence for the involvement of the chloroplast in the regulation of the circadian clock in *Arabidopsis*. *Plant J.* 51:551-62
14. Yakir E, Hilman D, Hassidim M and **Green RM** (2007). *CIRCADIAN CLOCK ASSOCIATED1* transcript stability and the entrainment of the circadian clock in *Arabidopsis*. *Plant Physiology* 145:925-32
15. Yakir E, Hassidim M, Kron I, Melamed-Book N and **Green RM** (2009). Post-translational regulation of CIRCADIANT CLOCK ASSOCIATED 1 (CCA1) in the

circadian oscillator of *Arabidopsis thaliana*. Plant Physiology 150; 844-57

16. Hassidim M, Harir Y, Yakir E, Kron I and **Green RM** (2009). Over-expression of CONSTANS-LIKE 5 can induce flowering in short-day grown Arabidopsis. Planta 230:481-91

17. Yerushalmi S and **Green RM** (2009). Evidence for the adaptive significance of circadian rhythms. Ecology Letters 1:970-81

18. Yerushalmi S, Yakir E and **Green RM** (2011). Circadian clocks and adaptation in Arabidopsis. Ecology 20:1155-65

19. Staiger D and **Green RM** (2011). RNA-based regulation in the plant circadian clock. Trends in Plant Science 16:517-23 (Invited Review/Cover Page)

20. Yakir E, Hassidim M, Melamed-Book N, Hilman D, Kron I and **Green RM** (2011). Cell autonomous and cell-type specific circadian rhythms in Arabidopsis. Plant J. 68:520-31

21. Kangisser S, Yakir Y and **Green RM** (2013). Proteasomal regulation of CIRCADIAN CLOCK ASSOCIATED 1 (CCA1) stability is part of the complex control of CCA1. Plant Signalling and Behavior 8: 0.4161/psb.23206

22. Shor E, Hassidim M, **Green RM** (2014). The use of fluorescent proteins to analyze circadian rhythms. Methods Mol Biol. 1158:209-13.

24. Shor E and **Green RM** (2016). The impact of domestication on the circadian clock. Trends in Plant Science 21:281-83. (Invited Review)

25. Dakhiya Y, Hussien D, Fridman E, Kiflawi M and **Green RM** (2017). Correlations between circadian rhythms and growth in challenging environments. Plant Physiology 173:1724-1734. (Cover Page)

26. Bloch G, Bar-Shai N, Cytter Y and **Green RM** (2017). Time is honey: circadian clocks of bees and flowers and how their interactions may influence ecological communities. Phil. Trans. R. Soc. B 372: 20160256.

27. Shor E, Paik I, Kangisser S, **Green RM\*** and Huq E\* (2017). PHYTOCHROME INTERACTING FACTORS mediate metabolic control of the circadian system in Arabidopsis. New Phytol. 215:217-228 \* Joint Corresponding authors.

28. Hassidim M, Dakhiya Y, Turjeman A, Hussien D, Shor E, Anidjar A Goldberg, K and **Green RM** (2017). CIRCADIAN CLOCK ASSOCIATED 1 (CCA1) and the circadian control of stomatal aperture. Plant Physiology 175:1864-1877.

29. Shor E, Potavskaya R, Kurtz A, Paik I, Huq E and **Green RM** (2018). PIF-mediated sucrose regulation of the circadian oscillator is light quality and temperature dependent. Genes 628-639.

30. Dakhiya Y and **Green RM** (2019) Thermal imaging as a non-invasive technique for analyzing circadian rhythms in plants. New Phytol. 1685-1696.

Highlighted in Nature Plants. Lei Lei (2019) Imaging Plant Rhythms. Nature Plants 5 911

31. Dakhiya Y and **Green RM** (2022) Detection and Analysis of Circadian Rhythms Via prompt chlorophyll fluorescence. Methods in Molecular Biology 2398 33-45

32. Dakhiya Y and **Green RM** (2022). "The importance of the circadian system for adaptation to heat wave stress in wild barley (*Hordeum spontaneum*).\" Environmental and Experimental Botany (2022): 105152.

## SELECTED PRESENTATIONS AT INTERNATIONAL MEETINGS

- 1998 Biological Rhythms Conference, U.S.A.
- 2000 Complex Clocks Conference, Edinburgh, U.K.
- 2001 EMBO Workshop –The Molecular Basis of Flower Transition, Norwich, U.K.
- 2004 Gordon Conference, Ventura, U.S.A.
- 2005 16<sup>th</sup> International Conference on Arabidopsis Research. Madison, U.S.A.
- 2005 5th Symposium on Post-Transcriptional Regulation of Plant Gene Expression Austin, Texas. U.S.A.
- 2006 Regulation of the Arabidopsis circadian system. U.C.L.A. California, U.S.A.
- 2007 Gordon Research Conference. Aussois, France.
- 2008 Society for Research on Biological Rhythms Biennial meeting. Florida U.S.A.
- 2009 20<sup>th</sup> International Conference on Arabidopsis Research. Edinburgh U.K.
- 2010 Cell Autonomous and cell-type specific circadian rhythms in Arabidopsis. European Biological Rhythms Society meeting, Oxford, U.K.
- 2011 John Grey retirement symposium. Cambridge, U.K.
- 2012 The diversity, evolution and mechanisms controlling activity patterns: International workshop. Ein Gedi. Israel.
- 2013 Cell specific regulation of circadian rhythms in plants. University of Austin, Texas, USA.
- 2015 Correlations between circadian rhythms and growth in challenging conditions. Cologne, Germany
- 2019 Phytochrome interacting factors: regulation of photosynthetic entrainment of the plant circadian oscillator. Photobiology World Congress, Barcelona, Spain
- 2019 Circadian rhythms and adaptation. York University, UK.
- 2020 Circadian rhythms and growth in challenging conditions. 6th Darwin Day symposium “Biological Rhythms: Evolution and Mechanisms” Haifa