



Peer reviewed Publications (Veröffentlichungen):

1. Eisenmann B, Czermel S, Ziegler T, Buchholz G, Kortekamp A, Trapp O, Rausch T, Dry I & **Bogs J** (2019): Rpv3–1 mediated resistance to grapevine downy mildew is associated with specific host transcriptional responses and the accumulation of stilbenes. *BMC Plant Biology* 19: 343.
2. Robinson, S, Pezhmanmehr, M, Speirs, J, McDavid, D, Hooper, L, Rinaldo, A, **Bogs, J**, Ebadi, A and Walker, A (2019), Grape and wine flavonoid composition in transgenic grapevines with altered expression of flavonoid hydroxylase genes. *Australian Journal of Grape and Wine Research*. doi:10.1111/ajgw.12393
3. Höll J, Lindner S, Walter H, Drishti J, Poschet JG, Pflieger S, Ziegler T, Hell R, **Bogs J**, Rausch T (2018). Impact of pulsed UV-B stress exposure on plant performance: How recovery periods stimulate secondary metabolism while reducing adaptive growth attenuation. *Plant Cell Environ.* 1–14 doi.org/10.1111/pce.13409
4. Vannozzi A, Wong DCJ, Höll J, Hmam I, Matus JT, **Bogs J**, Ziegler T, Dry I, Barcaccia G, Lucchin M (2018) Combinatorial Regulation of Stilbene Synthase Genes by WRKY and MYB Transcription Factors in Grapevine (*Vitis vinifera* L.). *Plant Cell Physiol*. doi: 10.1093/pcp/pcy045.
5. Matus, J. T., Cavallini, E., Loyola, R., Höll, J., Finezzo, L., Dal Santo, S., Vialet, S., Comisso, M., Roman, F., Schubert, A., Alcalde, J. A., **Bogs, J.**, Ageorges, A., Torielli, G. B. and Arce-Johnson, P. (2017), A group of grapevine MYBA transcription factors located in chromosome 14 control anthocyanin synthesis in vegetative organs with different specificities compared with the berry color locus. *Plant J.* DOI: 10.1111/tbj.13558
6. Czermel S, Höll J, Loyola R, Arce-Johnson P, Alcalde JA, Matus JT and **Bogs J** (2017) Transcriptome-Wide Identification of Novel UV-B- and Light Modulated Flavonol Pathway Genes Controlled by VviMYB1. *Front. Plant Sci.* 8:1084. doi: 10.3389/fpls.2017.01084
7. Duan D, Fischer S, Merz P, **Bogs J**, Riemann M, and Nick P (2016) An ancestral allele of grapevine transcription factor MYB14 promotes plant defence. *J. Exp. Bot.* 67 (6): 1795-1804
8. Friedel, M., Frotscher, J., Nitsch, M., Hofmann, M., **Bogs, J.**, Stoll, M., and Dietrich, H. (2016) Light promotes expression of monoterpene and flavonol metabolic genes and enhances flavour of winegrape berries (*Vitis vinifera* L. cv. Riesling). *Australian Journal of Grape and Wine Research*, doi: 10.1111/ajgw.12229.
9. Loyola R, Herrera D, Mas A, Wong DC, Höll J, Cavallini E, Amato A, Azuma A, Ziegler T, Aquea F, Castellarin SD, **Bogs J**, Torielli GB, Peña-Neira A, Czermel S, Alcalde JA, Matus JT, Arce-Johnson P. (2016) The photomorphogenic factors UV-B RECEPTOR 1, ELONGATED HYPOCOTYL 5, and HY5 HOMOLOGUE are part of the UV-B signalling pathway in grapevine and mediate flavonol accumulation in response to the environment. *J Exp Bot* pii: erw307.
10. Wong D, Schlechter R, Vannozzi A, Höll J, Hmam I, **Bogs J**, Torielli GB, Castellarin SD and Matus JT (2016) A systems-oriented analysis of the grapevine R2R3-MYB transcription factor family uncovers new insights into the regulation of stilbene accumulation *DNA Research* 23(5): 451–466.
11. Malacarne G; Collier C; Czermel S; Vrhovsek U; Engelen K; Goremykin V; **Bogs J**; Moser C (2016) The grapevine VvibZIPC22 transcription factor is involved in the regulation of flavonoid biosynthesis *J. Exp.Bot.* doi: 10.1093/jxb/erw181
12. Tavares S, Wirtz M, Beier MP, Bogs J, Hell R and Amâncio S (2015). Characterization of the serine acetyltransferase gene family of *Vitis vinifera* uncovers differences in regulation of OAS synthesis in woody plants *Front. Plant Sci.* doi: 10.3389/fpls.2015.00074.
13. Merz P, Moser T, Höll J, Kortekamp A, Buchholz G, Zyprian E, **Bogs J** (2015) The transcription factor VvWRKY33 is involved in the regulation of grapevine (*Vitis vinifera*) defense against the oomycete pathogen *Plasmopara viticola*. *Physiol Plant.* 153(3):365-80.
14. Höll J, Vannozzi A, Czermel S, D'Onofrio C, Walker AR, Rausch T, Lucchin M, Boss PK, Dry IB, and **Bogs J** (2013) The R2R3-MYB Transcription Factors MYB14 and MYB15 Regulate Stilbene Biosynthesis in *Vitis vinifera*. *Plant Cell* 2013 25: 4135-4149.



15. Heppel SC, Jaffe FW, Takos A, Schellmann S, Rausch T, Walker A, **Bogs J** (2013) Identification of key amino acids for the evolution of promoter target specificity of anthocyanin and proanthocyanidin regulating MYB factors *Plant Mol. Biol.* DOI 10.1007/s11103-013-0074-8
16. Han M, Heppel S, Su T, **Bogs J**, Zu Y, An Z, Rausch T (2013) Enzyme Inhibitor Studies Reveal Complex Control of Methyl-D-Erythritol 4-Phosphate (MEP) Pathway Enzyme Expression in *Catharanthus roseus* *PLoS ONE* 8(5): e62467. doi:10.1371/journal.pone.0062467.
17. Czempl S, Heppel SC, **Bogs J** (2012) R2R3 MYB transcription factors: key regulators of the flavonoid biosynthetic pathway in grapevine. *Protoplasma* 249: 109-118.
18. Hichri I, Deluc L, Barrieu F, **Bogs J**, Mahjoub A, Regad F, Gallois B, Granier T, Trossat-Magnin C, Gomes E, Lauvergeat V (2011) A single amino acid change within the R2 domain of the VvMYB5b transcription factor modulates affinity for protein partners and target promoters selectivity. *BMC Plant Biol.*;11 (1): 117.
19. Hichri I, Barrieu F, **Bogs J**, Kappel C, Delrot S, Lauvergeat V (2011) Recent advances in the transcriptional regulation of the flavonoid biosynthetic pathway. *J. Exp. Bot.* 62(8):2465 -83.
20. Hsu FC, Wirtz M, Heppel SC, **Bogs J**, Krämer U, Khan MS, Bub A, Hell R and Rausch T (2010) Generation of Se-fortified broccoli as functional food: Impact of Se-fertilization on S-metabolism. *Plant, Cell and Environment.* 34/2: 192-207.
21. Hichri I, Heppel S, Pillet J, Léon C, Czempl S, Delrot S, Lauvergeat V, and **Bogs J** (2010) The Basic Helix-Loop-Helix Transcription Factor MYC1 regulates Flavonoid Biosynthesis in Grapevine. *Mol Plant.* 3(3): 509-523.
22. Czempl S, Stracke R, Weisshaar B, Cordon N, Harris NN, Walker AR, Robinson SP and **Bogs J** (2009) The Grapevine R2R3-MYB Transcription Factor VvMYBF1 Regulates Flavonol Synthesis in Developing Grape Berries. *Plant Physiol.* 151:1513-1530.
23. Deluc* L, **Bogs* J**, Walker AR, Ferrier T, Decendit A, Merillon JM, Robinson SP, Barrieu F (2008) The transcription factor VvMYB5b contributes to the regulation of anthocyanin and proanthocyanidin biosynthesis in developing grape berries. *Plant Physiol.* 147: 2041-2053. * authors contributed equally to the manuscript
24. **Bogs J**, Jaffé FW, Walker AR, Takos A and Robinson SP (2007) The Grapevine Transcription Factor MYBPA1 regulates Proanthocyanidin Synthesis during Fruit Development. *Plant Physiology.*143: 1347-61.
25. Walker AR, Lee E, **Bogs J**, McDavid D, Thomas M, Robinson SP (2007) White grapes arose through mutation of two similar and adjacent regulatory genes. *Plant Journal* 49: 772-785.
26. Rausch T, Gromes R, Liedschulte, V, Müller I, **Bogs J**, Galovic V, Wachter A (2007) Novel insight into the regulation of GSH biosynthesis in higher plants. *Plant Biol.* 9: 565-572.
27. **Bogs J**, Ebadi A, McDavid D, Robinson SP (2006) Identification of the Flavonoid Hydroxylases from Grapevine and their Regulation during Fruit Development. *Plant Physiology.* 140: 279-291.
28. Takos A, Jaffé F, Jacob SR, **Bogs J**, Robinson SP, and Walker AR (2006) Light induced expression of a MYB gene regulates anthocyanin biosynthesis in red apples. *Plant Physiology* 142: 1216-1232.
29. Tesniere C, Davies C, Sreekantan L, **Bogs J**, Thomas M, Torregrosa L (2006) Analysis of the transcript level of *VvAdh1*, *VvAdh2* and *VvGrip4*, three genes highly expressed during *Vitis vinifera* L. berry development. *Vitis.* 45: 75-79.
30. **Bogs J**, Downey M, Harvey JS, Ashton AR., Tanner GJ, Robinson SP (2005). Proanthocyanidin Synthesis and Expression of Genes Encoding Leucoanthocyanidin Reductase and Anthocyanidin Reductase in Developing Grape Berries and Grapevine Leaves. *Plant Physiology* 139: 652-663.
31. Jost R, Altschmied L, Bloem E, **Bogs J**, Gershenzon J, Haeh U, Haensch R, Hartmann T, Kopriva S, Kruse C, Mendel R, Reichelt M, Papenbrock J, Schnug E, Rennenberg H, Schmidt A, Textor S, Tokuhisa J, Wachter A, Wirtz M, Rausch T, Hell R (2005) Expression profiling of metabolic genes in response to methyl jasmonate reveals regulation of genes of primary and secondary sulfur-related pathways in *Arabidopsis thaliana*. *Photosynthesis Research.* 86: 491-508
32. Wachter A; Wolf S; Steininger H; **Bogs J**; Rausch T (2005). Differential targeting of GSH1 and GSH2 is achieved by multiple transcription initiation: implications for the compartmentation of glutathione biosynthesis in the Brassicaceae. *Plant Journal.* 41: 15-30.



33. **Bogs J**; Richter K; Kim W-S; Jock S; Geider, K. (2004). Alternative methods to describe virulence of *Erwinia amylovora* and host-plant resistance against fireblight. *Plant Pathology* 53: 80-89.
34. **Bogs J**, Bourbonloux A, Cagnac O, Wachter A, Rausch T, Delrot S (2003) Functional characterization and expression analysis of a glutathione transporter, BjGT1, from *Brassica juncea*: evidence for regulation by heavy metal exposure. *Plant Cell & Environment* 26 (10): 1703-1711.
35. Heiss S, Wachter A, **Bogs J**, Cobbett CH and Rausch T. (2003). Phytochelatin synthase (PCS) from *Brassica juncea*: Characterization of recombinant PCS protein and immunological analysis of PCS expression in control and Cd-treated plants. *Journal of Experimental Botany* 54: 1833-1839.
36. **Bogs J** & Geider K (2000). Molecular analysis of sucrose metabolism of *Erwinia amylovora* and influence on bacterial virulence. *Journal of Bacteriology* 182: 5351-5358.
37. **Bogs J** & Geider K (1999). Migration and gene regulation of *Erwinia amylovora* in host plants assayed with Green Fluorescent Protein. *Acta Horticulturae* 489: 365-367.
38. **Bogs J**, Bruchmueller I, Erbar C & Geider K (1998). Colonization of host plants by the fire blight pathogen *Erwinia amylovora* marked with genes for bioluminescence and fluorescence. *Phytopathology* 88: 416-421.

Patents:

Title: Novel gene encoding myb transcription factor involved in proanthocyanidin synthesis

Agent: Cooper & Dunham, LLP, New York, NY, US; Inventors: **Jochen Bogs**, Amanda Ruth Walker, Simon Piers Robinson, USPTO Applicator #: #20100064383; USPTO Class: 800278; USPTO Publishing Date: 03/11/10

Aktuelle Publikationen auch zum Download finden Sie hier:

www.researchgate.net/profile/Jochen_Bogs