

Melis Akman

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EDUCATION

- 2012 Ph.D. in Biology, University of Amsterdam
Advisors: M Eric Schranz, Peter van Tienderen and Eric Visser
- 2007 M.Sc. in Biology, Middle East Technical University (METU)
Advisor: Zeki Kaya
- 2004 B.Sc. Biology Major and Chemistry Minor Programs, METU

PROFESSIONAL EXPERIENCE

- 2016- Postdoctoral researcher, Department of Plant and Microbial Biology, UCB
- 2012-2016 Postdoctoral researcher, Department of Plant Sciences, UC Davis
- 2004-2007 Researcher in R&D Department at Metis Biotechnology, Turkey

PUBLICATIONS

- Prunier R, **Akman M**, Aitken NC, Chuah A, Borevitz JO, Holsinger KE, 2017. Detecting patterns of population differentiation and natural selection in the genome of *Protea repens* (Proteaceae L.) using GBS. *American Journal of Botany*, 104:674-684.
- Akman M**, Kleine R^ϕ, van Tienderen PH, Schranz ME, 2017. Identification of the submergence tolerance QTL, *Come Quick Drowning 1 (CQD1)* in *Arabidopsis thaliana*. *Journal of Heredity*, 308-317. ^ϕ**mentored M.Sc. student**
- Akman M**, Carlson JE, Holsinger KE, Latimer AM, 2016. Transcriptome sequencing reveals population differentiation in gene expression linked to functional traits and environmental gradients in South African shrub *Protea repens*. *New Phytologist*, 210: 295-309.
- van Veen H^{*}, Vashisht D^{*}, **Akman M**^{*}, Girke T, Mustroph A, Reinen E, Hartman S, Kooiker M, van Tienderen PH, Schranz ME, Bailey-Serres J, Voesenek LACJ, Sasidharan R, 2016. Transcriptomes of eight *Arabidopsis thaliana* accessions reveal core conserved, genotype- and organ-specific responses to flooding stress. *Plant Physiology*, <http://dx.doi.org/10.1104/pp.16.00472>. ^{*}**equal contribution**
- Vashisht D, van Veen H, **Akman M**, Sasidharan R, 2016. Variation in *Arabidopsis* flooding responses identifies numerous putative “tolerance genes”. *Plant Signaling and Behaviour*, 11: 668-89.
- van Veen H^{*}, **Akman M**^{*}, Jamar DCL, Vreugdenhil D, Kooiker M, van Tienderen PH, Voesenek LACJ, Schranz ME, Sasidharan R, 2014. Group VII ethylene response factor diversification and regulation in four species from flood-prone environments. *Plant Cell and Environment*, 37: 1365-3040. ^{*}**equal contribution**
- Akman M**, Bhikharie AV^ϕ, Mustroph A, Sasidharan R, 2014. Extreme flooding tolerance in *Rorippa*. *Plant Signaling and Behaviour* 9: e27847. ^ϕ**mentored M.Sc. student**

Sasidharan R, Mustroph A, Boonman A, **Akman M**, Ammerlaan AMH, Breit T, Schranz ME, Voesenek LACJ, van Tienderen PH, 2013. Root transcript profiling of two *Rorippa* species reveals gene clusters associated with extreme submergence tolerance. *Plant Physiology*, 16: 1277-1292.

Akman M, Bhikharie AV^φ, Mclean E, Boonman A, Visser EJW, Schranz ME, van Tienderen PH, 2012. Wait or Escape? Contrasting submergence tolerance strategies of *Rorippa amphibia*, *Rorippa sylvestris* and their hybrid. *Annals of Botany*, 109: 1263-1276. ^φ**mentored M.Sc. student**

Atalay F, Taner MZ, Taskiran C, Pak I, **Or M**, Tuncer S, 2007. Detection of human papillomavirus DNA and genotyping in patients with epithelial ovarian carcinoma. *International Journal of Obstetrics and Gynecology*, 33: 823-828.

PUBLICATIONS IN PREPARATION

Akman M, Latimer AM, Carlson JE. Links between climate and physiological and gene expression plasticity of a South African shrub, *Protea repens*.

Akman M, Zhao X^φ, Latimer AM. Evidence for gene expression differentiation linked to local adaptation in invasive *Carpobrotus edulis* along Northern California coast. ^φ**mentored M.Sc. student**

SELECTED TALKS AND SEMINARS

Akman M, JE Carlson, AM Latimer. Climatic gradients shape intraspecific divergence in plasticity for functional traits and gene expression in a South African Protea. Evolution Conference, Portland, OR

Akman M. Species persistence in the light of adaptation and plasticity. Turkish Evolution Conference, 2016, Ankara, Turkey

Akman M, JE Carlson, KE Holsinger, AM Latimer. Climate gradients drive local adaptation via gene expression in South African sugarbush. Plant Diversity in the GCFR: From Genomes to Biomes Symposium, 2015, Cape Town, South Africa

Akman M, A Latimer. Genetic basis of local adaptations in the South African shrub *Protea repens*. Ecological Society of America Conference, 2014, Sacramento, CA

Akman M, EJW Visser, PH van Tienderen, ME Schranz. Submergence Tolerance in *Arabidopsis* and the Related Genus *Rorippa* (Yellow cress), Annual Ecology Meeting, 2010, Lunteren, The Netherlands

Akman M, EJW Visser, PH van Tienderen, ME Schranz. Submergence tolerance and survival strategies in Brassicaceae, Center for Wetland Ecology Annual Meeting, 2009, The Netherlands

AWARDS

2015 Selected participant and speaker in Micromorph Workshop “Phenotypic Plasticity: Evolution at the Intersection of Ecology, Genetics and Development”, Boston, MA

2014 NESCent travel award for Quantitative Evolutionary Biology Workshop, Sirince, Turkey

- 2012 Presentation award at Molecular mapping and Marker assisted selection Conference, Vienna, Austria (2nd place)
- 2010 Young Scientist Award at 10th International Society for Plant Anaerobiosis Conference, Volterra, Italy

GRANTS AND FELLOWSHIPS

- 2015-2017 Evolutionary plant solutions to ecological challenges (collaborating scientist) Molecular mechanisms underlying adaptive traits in the Brassicaceae Program, German Research Foundation, PI: Prof. Dr. Angelika Mustroph, Bayreuth University, Germany
- 2012 Netherlands Organization of Scientific Research (NWO) Open Program Postdoctoral scholarship funding; proposal submitted with Dr. Rashmi Sasidharan (research budget and 3-year postdoctoral researcher financial support), declined
- 2007-2012 Center for Wetland Ecology, The Netherlands (PhD fellowship)
- 2007 Department of Biology PhD fellowship, University of Lausanne, Switzerland, declined

SERVICE/ OUTREACH/VOLUNTEERED ACTIVITIES

- 2015- Volunteer in Bay Area Scientists in Schools (BASIS) Program
- 2015 Founding committee member of Ecology and Evolution Society of Turkey
- 2014 Organizer of “Ecological genomics as an emerging field: Opportunities for non-model organisms” oral session at Ecological Society of America Conference
- 2009-2012 Executive member, Council of PhD students at Institute of Biodiversity and Ecosystem Dynamics, University of Amsterdam
- 2008- Member of a team translating Berkeley’s understanding evolution website (www.evolution.berkeley.edu) to Turkish(www.evrinianlamak.org)

TEACHING AND MENTORING EXPERIENCE

- 2016 Mentoring of a MSc student, UC Davis
- 2015 Workshop organizer “Sequencing of Transcriptomes: From Sample Collection to Data Analysis” in “Plant Diversity in the GCFR: From Genomes to Biomes Symposium”, Cape Town, South Africa
- 2014 Workshop organizer “Population level transcriptomics” in “Quantitative Evolutionary Biology Course”, Sirince, Turkey
- 2008-2012 Supervision of three MSc and a BSc thesis projects
- 2007-2011 Teaching Assistant for courses (a) Ecological Genomics, (b) Plant Biology and (c) Ecological Physiology of Plants Laboratory

LANGUAGES

Turkish (native language), English (proficient), Dutch (intermediate)

PROGRAMMING LANGUAGES

R, Python