

Curriculum vitae

Athanasios Dalakouras



Personal data

Date and place of birth	22 June 1980, Larissa
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Present state (2018)

01.09-2018 - 31.08.2020	Marie Curie Fellow (University of Thessaly), project RNASTIP
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Scientific expertise

RNA interference (RNAi) in plants

Education

2006 - 2010	PhD Plant Molecular Biology (Ruprecht Karls Universität Heidelberg)
2004 - 2006	MSc Plant Molecular Biology and Biotechnology (University of Crete)
1999 - 2004	BSc Agrobiotechnology (Agricultural University of Athens)

Publications (Peer-reviewed)

1	Dalakouras, A* , Lauter, A., Bassler, A., Krczal, G. and Wassenegger, M. (2018) Transient expression of intron-containing transgenes generates aberrant pre-mRNAs that are processed to siRNAs. <i>Planta</i> (accepted 21.09.2018) *corresponding author
2	Dalakouras, A* , Jaraus, W., Buchholz, G., Bassler, A., Braun, M., Manthey, T., Krczal, G. and Wassenegger, M. (2018) Delivery of exogenous RNA molecules to woody and herbaceous plants by trunk injection and petiole absorption. <i>Front Plant Sci.</i> 9:1253. *corresponding author
3	Dadami, E., Dalakouras, A. and Wassenegger, M. (2017) Viroids and RNA silencing. <i>Viroids and Satellites</i> , pp.115-124.

4	Dalakouras, A. , Wassenegger, M., McMillan, J., Cardoza, V., Maegele, I., Dadami, E., Runne, M., Krczal, G. and Wassenegger, M. (2016) Induction of silencing in plants by high-pressure spraying of in vitro-synthesized small RNAs. <i>Frontiers in Plant Science</i> , 7.
5	Dalakouras, A. , Dadami, E., Wassenegger, M., Krczal, G. and Wassenegger, M. (2016) RNA-directed DNA methylation efficiency depends on trigger and target sequence identity. <i>Plant J</i> , 87(2), 202-214.
6	Dalakouras, A. , Dadami, E. and Wassenegger, M. (2015) Engineering viroid resistance. <i>Viruses</i> , 7, 634-646.
7	Dalakouras, A. , Dadami, E., Bassler, A., Zwiebel, M., Krczal, G. and Wassenegger, M. (2015) Replicating Potato spindle tuber viroid mediates de novo methylation of an intronic viroid sequence but no cleavage of the corresponding pre-mRNA. <i>RNA biology</i> , 12, 268-275.
8	Saeed, M., Briddon, R.W., Dalakouras, A. , Krczal, G. and Wassenegger, M. (2015) Functional Analysis of Cotton Leaf Curl Kokhran Virus/Cotton Leaf Curl Multan Betasatellite RNA Silencing Suppressors. <i>Biology (Basel)</i> , 4, 697-714
9	Dadami, E., Dalakouras, A* , Zwiebel, M., Krczal, G. and Wassenegger, M. (2014) An endogene-resembling transgene is resistant to DNA methylation and systemic silencing. <i>RNA Biol</i> , 11, 934-941. * equal contribution
10	Dadami, E., Moser, M., Zwiebel, M., Krczal, G., Wassenegger, M. and Dalakouras, A.* (2013) An endogene-resembling transgene delays the onset of silencing and limits siRNA accumulation. <i>FEBS Lett</i> , 18, 706-710. * corresponding author
11	Dalakouras, A. and Wassenegger, M. (2013) Revisiting RNA-directed DNA methylation. <i>RNA biology</i> , 10, 453-455.
12	Dalakouras, A* , Dadami, E. and Wassenegger, M. (2013) Viroid-induced DNA methylation in plants. <i>BioMol Concepts</i> , 4, 557-565. * corresponding author
13	Dalakouras, A. , Dadami, E., Zwiebel, M., Krczal, G. and Wassenegger, M. (2012) Transgenerational maintenance of transgene body CG but not CHG and CHH methylation. <i>Epigenetics</i> , 7, 1071-1078.
14	Dalakouras, A. , Moser, M., Boonrod, K., Krczal, G. and Wassenegger, M. (2011) Diverse spontaneous silencing of a transgene among two Nicotiana species. <i>Planta</i> , 234, 699-707.
15	Dalakouras, A. , Tzanopoulou, M., Tsagris, M., Wassenegger, M. and Kalantidis, K. (2011) Hairpin transcription does not necessarily lead to efficient triggering of the RNAi pathway. <i>Transgenic Res</i> , 20, 293-304.
16	Dalakouras, A. , Moser, M., Krczal, G. and Wassenegger, M. (2010) A chimeric satellite transgene sequence is inefficiently targeted by viroid-induced DNA methylation in tobacco. <i>Plant Mol Biol</i> , 73, 439-447.

17	Dalakouras, A. , Moser, M., Zwiebel, M., Krczal, G., Hell, R. and Wassenegger, M. (2009) A hairpin RNA construct residing in an intron efficiently triggered RNA-directed DNA methylation in tobacco. <i>Plant J</i> , 60, 840-851.
18	Dalakouras, T. , Smith, B.J., Platis, D., Cox, M.M. and Labrou, N.E. (2006) Development of recombinant protein-based influenza vaccine. Expression and affinity purification of H1N1 influenza virus neuraminidase. <i>J Chromatogr A</i> , 1136, 48-56.

Scholarship

2018	Marie Curie Individual Fellowship for postdoctoral research on the topic <i>RNA sprays as a tool for crop improvement and protection (RNASTIP)</i> .
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European Patent

Wassenegger, M., Krczal, G. and **Dalakouras, A.** (2010) Method for the production of a transgene-free plant with altered methylation pattern (WO 2010/066343, PCT/EP2009/008437).

Funding

2018-2020	Marie Curie	<i>RNA sprays as a tool for crop improvement and protection (RNASTIP, 164.653 €)</i> Recipient: A. Dalakouras (Πανεπιστήμιο Θεσσαλίας).
2018-2020	BMBF	<i>DNA-free and tissue culture-free genome editing (FreeEdit, 244.211 €)</i> . Recipient: A. Dalakouras (AIPlanta Institute)
2015-2018	DFG	Investigation of systemic and transitive RNA silencing in plants. (Wa1018/14-1). Recipient: M. Wassenegger and A. Dalakouras
2011-2014	DFG	Use of intron-based RNA systems to study nuclear and cytoplasmic RNA interference processes in plants (Wa1018/8-1). Recipient: M. Wassenegger and A. Dalakouras

Teaching experience

Aug. 2016	'RNA silencing in plants' in AlPlanta Institute for Plant Research (Neustadt, Germany).
Aug. 2015	'RNA silencing in plants' in AlPlanta Institute for Plant Research (Neustadt, Germany).
Aug. 2014	'RNA silencing in plants' in AlPlanta Institute for Plant Research (Neustadt, Germany).
Aug. 2013	'RNA silencing in plants' in AlPlanta Institute for Plant Research (Neustadt, Germany).
Aug. 2012	'RNA silencing in plants' in AlPlanta Institute for Plant Research (Neustadt, Germany).
Dec. 2012	'RNA-mediated gene regulation: micro RNAs and small interfering RNAs' in Heidelberg University.
15.10.2018	'Basic and advanced techniques of biomolecule analysis' in University of Thessaly, Department of Biochemistry and Biotechnology.
30.10.2018	'Molecular and developmental plant biology' in University of Thessaly, Department of Biochemistry and Biotechnology.
06.11.2018	'Molecular and developmental plant biology' in University of Thessaly, Department of Biochemistry and Biotechnology.

Conferences

23-25.11.2018	Larissa	69 th Panhellenic congress of Biochemistry and Molecular Biology
14-16.02.2018	Poznan	<i>iPlanta Cost Action CA15223: RNAi, the future of crosstalk</i>
13-16.09.2017	Heidelberg	EMBO/EMBL congress: The non-coding genome
02-04.05.2016	Gatersleben	New Breeding technologies in times of politically enforced research prohibition.
18-21.10.2015	Heidelberg	EMBO/EMBL congress: The non-coding genome
24-29.08.2014	Bischoffsheim	EMBO Courses & Workshops: Intercellular communication in plant development and disease.
09-12.10.2013	Heidelberg	EMBO/EMBL congress: The non-coding genome
10-12.07.2013	Wittenberg	Non-coding RNA in plants
07.2005	Heraclion	Onnasis Foundation Science Lecture Series 'Programmed cell death'
01-03.07.2005	Athens	2nd international Biotechnology congress
25-27.11.2004	Athens	56 th Panhellenic congress of Biochemistry and Molecular Biology
10-12.06.2004	Athens	1st international Biotechnology congress