

Israel

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Arabidopsis projects in Israel are funded via national and bi-national grants. Currently there are no national funding initiatives specifically targeting *Arabidopsis* functional genomics. A major German-Israel binational consortium studying chemical-genetic platforms for the study of plant biology was funded by the German-Israel Cooperation Foundation (DIP). This consortium includes groups at The Hebrew University Faculty of Agriculture, Hebrew University, Tel Aviv University, and the Max Planck Institute für Züchtungsforschung.

The major centers of *Arabidopsis* research are in Tel Aviv University (8 groups with funded research), The Hebrew University of Jerusalem (primarily at the Faculty of Agriculture, 6 groups with funded research) and the Weizmann Institute of Science (4 groups with funded research). These three centers have recently upgraded, or are in the process of upgrading, *Arabidopsis* growth facilities. For example, the Manna Center for Plant Biosciences at Tel Aviv University received a \$1,000,000 donation this past year for renovating and developing the *Arabidopsis* growth facility infrastructure.

Funded research programs, 2006

	PI	Institute	Research title	Main Collaborator
1	Abed Azzem	TAU	Function of chloroplast chaperones in <i>Arabidopsis</i>	
2	Adi Avni	TAU	A protease-like protein involved in ethylene biosynthesis	
3	Alon Samach	HUJI	Chemical-genetic platforms for the study of plant biology	George Coupland, MPI-Developmental Biology, Cologne
4	Alon Samach	HUJI	Analysis of the effects of light on the stability and activity of constants, a protein that mediates the photoperiodic control of flowering	George Coupland, MPI-Developmental Biology, Cologne
5	Amnon Lers	VI	Dark-induced Reactive Oxygen Species Accumulation and Inhibition by Gibberellins: Towards Inhibition of Postharvest Senescence	Sucheng Gan, Cornell
6	Avi Levy	WIS	Enhancing the Rate of Meiotic Crossing-Over for Plant Breeding	Clifford Weil, Purdue
7	Bernard Epel	TAU	Molecular and functional analysis of plasmodesmatal proteins	
8	Daniel Chamovitz	TAU	Structure-function analysis of COP9 signalosome subunit 7	
9	Daniel Chamovitz	TAU	eif3 Complexes and the eif3e Subunit in <i>Arabidopsis</i> Development and Translation Initiation	Albrecht von Arnim, Univ. Tennessee
10	David Weiss	HUJI	Mechanisms of interaction between the gibberellin and cytokinin signaling pathways	
11	David Weiss	HUJI	The Role of Serine/Threonine O-glcnac Modifications in Signaling Networks	Neil Olszewski, Univ. Minnesota
12	Gadi Galilil	WIS	Genomic approaches to revealing networks of amino acid metabolism	
13	Gadi Gallili	WIS	Genetic, Genomic and Biochemical Analysis of <i>Arabidopsis</i> Threonine Aldolase and Associated Molecular and Metabolic Networks	Georg Jander, BTI: Boyce Thompson Institute for Plant Research
14	Gadi Schuster	WIS	Integration of phosphorus and chloroplast m RNA metabolism through regulated ribonucleases	David Stern, BTI
15	Hillel Fromm	TAU	Targets and regulation of a novel family of plant transcription factors	
16	Naomi Ori	HUJI	Genetic dissection of dissected leaves	Detlef Weigel, MPI-Developmental Biology, Cologne

17	Nir Ohad	TAU	Elucidation of the roles of the atyyl-like polycomb proteins in plant development	
18	Nir Ohad	TAU	Evolution of composition and function of the polycomb protein group (pcg) complexes, regulators of developmental programs from <i>Physcomitrella</i> to <i>Arabidopsis</i>	Prof. Dr. Ralf Reski, - Universitaet Freiburg, Freiburg
19	Nir Ohad	TAU	Regulation of plant development by polycomb group proteins	Robert Fisher, UC Berkeley
20	Orit Shaul	BIU	The molecular basis of resistance and storage of heavy metals in plants	
21	Orna Elroy-Stein	TAU	Mechanism of Internal Initiation of Translation in Plants	Dimitry Belostotsky, SUNY Albany
22	Rachel Green	HUJI	Identification of Novel Circadian and Flowering Regulators in	Robert McClung Dartmouth
23	Robert Fluhr	WIS	The Biological function of the serpin family of proteins in plants	
24	Shaul Yalovsky	TAU	Functional analysis of small ROP-II GTP-binding proteins in <i>Arabidopsis</i>	
25	Simon Barak	BGU	Functional genomics to isolate novel clock genes in <i>Arabidopsis</i>	
26	Yuval Eshed	WIS	Design of plant organs - growth regulation in space and time	
27	Yuval Eshed	WIS	Harnessing Fine Scale Tuning of Endogenous Plant Regulatory Processes for Manipulation of Organ Growth	John Bowman, UC Davis
28	Zach Adam	HUJI	Proteomic Analysis of Thylakoid ftsH and degP Protease	Klaas van Wijk, Cornell
29	Zach Adam	HUJI	Degradation of integral thylakoid proteins by Rhomboid proteases	

TAU – Tel Aviv University, HUJI – Hebrew university of Jerusalem, WIS – Weizmann Institute of Science, BGU – Ben Gurion University of the Negev, VI – Volcani Institute

Arabidopsis tools and resources

- Vectors for using bimolecular fluorescence complementation (BiFC) for determining protein–protein interactions in plants were constructed by the Yalovsky and Ohad labs at Tel Aviv university, and have been deposited with TAIR.

Major funding sources

- Israel Science Foundation (ISF), Jerusalem, israkeren@isf.org.il, www.isf.org.il/ Total *Arabidopsis* funding 2006 - \$842,750
- The United States - Israel Binational Agricultural Research and Development Fund (BARD), Bet Dagon, bard@bard-isus.com, www.bard-isus.com/ Total *Arabidopsis* funding 2006 - \$910,666
- German – Israeli Foundation for Scientific Research and Development (GIF), Jerusalem, gif-info@gif.org.il, www.gifres.org.il/ Total *Arabidopsis* funding 2006 - \$257,833
- U.S.-Israel Binational Science Foundation (BSF), Jerusalem, bsf@bsf.org.il, <http://www.bsf.org.il> Total *Arabidopsis* funding 2006 - \$74,000
- Deutsch-Israelische Projektkooperation (DIP), Bonn, nadia.meyer@dlr.de, www.internationales-buero.de/de/819.php