ELLIO T MEYEROW ITZ began his career with groundbreaking studies cloning some of the first genes involved in transcriptional regulation in Drosophila, but is perhaps best known for dissecting the genetics of flower development in Arabidopsis. His studies have had a far-reaching impact on the plant community; they not only provide an elegant example of the power of genetic approaches, but the genes that Meyerowitz characterized have been shown to be critical for flower development in every species of flowering plant examined to date. By carefully analyzing floral homeotic mutants, Meyerowitz proposed a simple model of overlapping and antagonistic gene function (the ABC model) that has been able to predict, with remarkable accuracy, the phenotype of double and triple mutants, the patterns of homeotic gene expression, and even the biochemical interactions between the proteins encoded by the homeotic genes. His research continues to progress at an extremely rapid pace, and recent advances include discoveries of genes that regulate the number of flower organs, as well as genes that can be manipulated to control the initiation of flowering—an achievement with profound agronomic implications.

In addition to running an outstanding research program, Elliot Meyerowitz is one of the few individuals fittingly attributed with bringing Arabidopsis research into the main stream. He has invested significant effort into developing the tools necessary for making the system workable—including developing the first RFLP map and characterizing the size of the genome and its molecular properties. Meyerowitz recognized, before many others, that Arabidopsis is an excellent model system, and authored several hallmark reviews that served to recruit many young biologists into the field. His recognition as a lead among plant biologists is well-deserved.

DAPHNE PREUSS