

MCB PLANT BIOLOGY SEMINAR SERIES W2010

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"Two decades of GABA research on plants"

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ABSTRACT: Gamma-aminobutyrate (GABA) is a non-protein amino acid that is found in virtually all prokaryotic and eukaryotic organisms, and is known to function as a neurotransmitter in animals. Evidence indicates that GABA readily accumulates in plants in response to stress by a combination of biochemical and transcriptional processes, and extracellular GABA functions in communication between plants and animals, fungi, bacteria or other plants. The speaker will discuss key findings associated with the metabolism of GABA in plants, including the discovery of relevant genes and enzyme activities, the potential interaction of this pathway with others, and the importance of mutants and serendipity in elucidating the physiological function(s) of GABA in plants.