

detectable only after developmental induction. We propose that *acoD* activity is primarily controlled at the posttranscriptional level and that it is required to direct developmentally specific changes that bring about growth inhibition and activation of *brlA* expression to result in conidiophore development.

4: *Biotechnology* 1992;23:19-41

Early developmental events during asexual and sexual sporulation in *Aspergillus nidulans*.

Yager LN.

5: *Genetics* 1990 Dec;126(4):869-74

Genetic analysis of suppressors of the *veA1* mutation in *Aspergillus nidulans*.

Mooney JL, Hassett DE, Yager LN.

Department of Biology, Temple University, Philadelphia, Pennsylvania 19122.

Light-dependent conidiation in the filamentous ascomycete, *Aspergillus nidulans*, is contingent on the allelic state of the velvet (*veA*) gene. Light dependence is abolished by a mutation in this gene (*veA1*), which allows conidiation to occur in the absence of light. We have isolated and characterized six extragenic suppressors of *veA1* that restore the light-dependent conidiation phenotype. Alleles of four genes, defined by complementation tests, were subjected to extensive genetic and phenotypic analysis. The results of light-dark shifting experiments and the phenotypes of double mutant combinations are consistent with the possibility that the expression of the light-dependent phenotype is regulated by specific interactions of the suppressor gene products with the velvet gene product and with each other.

6: *Genes Dev* 1990 Sep;4(9):1473-82

Light is required for conidiation in *Aspergillus nidulans*.

Mooney JL, Yager LN.

Department of Biology, Temple University, Philadelphia, Pennsylvania 19122.

Light is necessary for asexual sporulation in *Aspergillus nidulans* but will elicit conidiation only if irradiation occurs during a critical period of development. We show that conidiation is induced by red light and suppressed by an immediate shift to far red light. Conidiation-specific gene functions switch from light-independent to light-dependent activities coincident with the expression of *brlA*, a regulator of conidiophore development. We also show that light dependence is abolished by a mutation in the velvet gene, which allows conidiation to occur in the absence of light. We propose that the initiation of late gene expression is regulated by velvet and controlled by a red light photoreceptor, whose properties are reminiscent of phytochrome-mediated responses observed in higher plants.

7: *J Bacteriol* 1984 Nov;160(2):533-40

Mutants of *Aspergillus nidulans* blocked at an early stage of sporulation secrete an unusual metabolite.

Butnick NZ, Yager LN, Hermann TE, Kurtz MB, Champe SP.

Mutants of *Aspergillus nidulans* defective in conidiation (asexual sporulation) can be classified according to whether they are blocked before or after induction of conidiation. Mutants blocked before induction (preinduction mutants) appear to be unable to respond to the inducing stimulus and thus are