ON THE COVER

Spermidine is a polyamine involved in a broad range of cellular processes in plants, fungi, and animals. Deeb et al. (pages 3678–3691) show that spermidine is involved in cell fate specification in the male gametophyte of the water fern Marsilea vestita. The work reveals how changes in spermidine abundance and distribution in the gametophyte affect gametophyte development and spermatid maturation through the release of stored Spermidine synthase (SPDS) transcripts and through interactions with cytoskeletal and nuclear components in the developing spermatids. The cover shows a section of the male gametophyte of M. vestita labeled with anticeratin antibody, which localizes to basal bodies (red dots) in the developing spermatids. SPDS silencing was shown to affect the formation and distribution of basal bodies, along with other key features of spermatid development.

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