Phase contrast photomicrograph of a *Schizosaccharomyces octosporus* ascus, a sac-like cell that typically contains eight spores (each ~2 micrometers across). *S. octosporus* and other fission yeasts are important models of eukaryote biology and have evolved a single-celled lifestyle independently from their budding yeast cousins. On page 930, Rhind et al. present a comparative genomic analysis of fission yeasts that sheds light on their genome structure and gene regulation.

*Image: Dr. George Wilder/Visuals Unlimited, Inc.*

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