

SPOTLIGHT

Articles of Significant Interest Selected from This Issue by the Editors

Themes and Variations at the Ends

Telomeres are specialized nucleoprotein complexes located at chromosomal termini that are essential for genome stability. Rap1, a conserved component of this complex, appears to be structurally malleable and to mediate multiple nontelomeric functions in *Saccharomyces cerevisiae*. Yu et al. (p. 1254–1268) report that *Candida albicans* Rap1, which lacks a conserved C-terminal domain, nevertheless mediates critical functions in suppressing aberrant telomere recombination in cooperation with other factors. Moreover, in contrast to the *S. cerevisiae* protein, *C. albicans* Rap1 has a very limited role, if any, in transcriptional regulation. These results provide insights on the mechanisms and evolutionary plasticity of telomeres.

H19 Imprinting Control Region Methylation Revisited

Imprinted genes are located in large chromosomal domains, but their imprinting is determined by fairly small *cis*-acting regulatory elements called imprinting control regions (ICRs). The mouse *Igf2/H19* ICR becomes methylated during spermatogenesis, and this paternal chromosome specific methylation is crucial for imprinting the locus. Gebert et al. (p. 1108–1115) transferred the ICR to the nonimprinted CD3 locus and provide evidence for its autonomous function. Its behavior mirrors that of the endogenous ICR with one exception: methylation in the germ line is anomalous. However, even with little or no ICR methylation in sperm, fathers successfully transmit their paternal chromosome-specific DNA methylation to their offspring.