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Cover  Long-range DNA-bridging activity allows the Bacillus subtilis ParB protein Spo0J to interact with DNA over thousands of base pairs. Shown here is a fluorescent micrograph of B. subtilis cells expressing a GFP-Spo0J fusion protein (green) as well as an mCherry fusion to the nucleoid-associated protein HBsu (red). GFP-Spo0J associates with the bacterial chromosome to form centromere-like complexes (bright foci). Shown at the bottom is a montage of a single-molecule movie of compaction of an individual flow-stretched DNA molecule by purified Spo0J protein. The DNA was labeled site-specifically with five quantum dots and imaged on a TIRF microscope, demonstrating a novel DNA-bridging activity of Spo0J that is required for complex formation in vivo. [Note: For artistic purposes, a quantum dot nonspecifically bound to the coverslip surface was cropped out of images in the montage.] [For details, see Graham et al., p. 1228.]