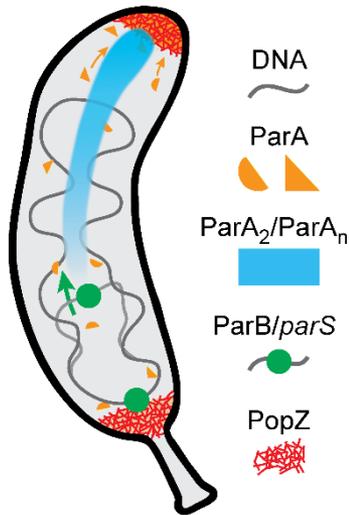


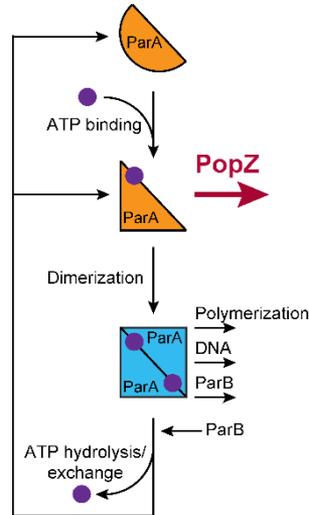
3D super-resolution imaging of protein-protein interactions in bacteria

Jerod Ptacin, Andreas Gahlmann, Alex Diezmann, W. E. Moerner, and Lucy Shapiro

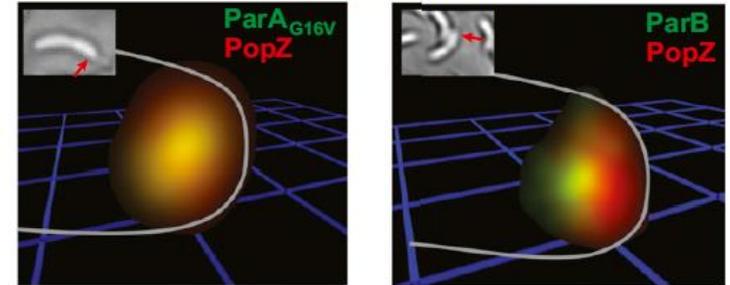
Spatial regulation of ParAB



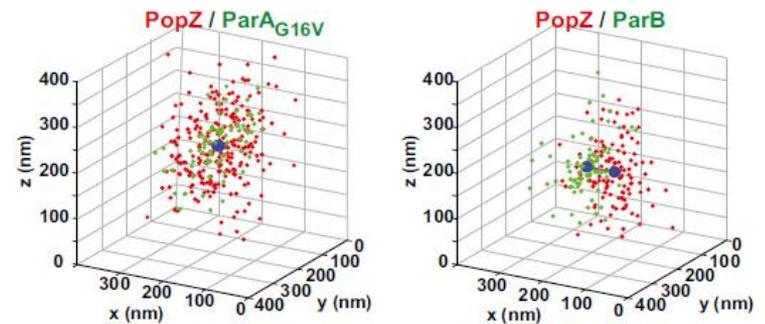
ParA reaction cycle



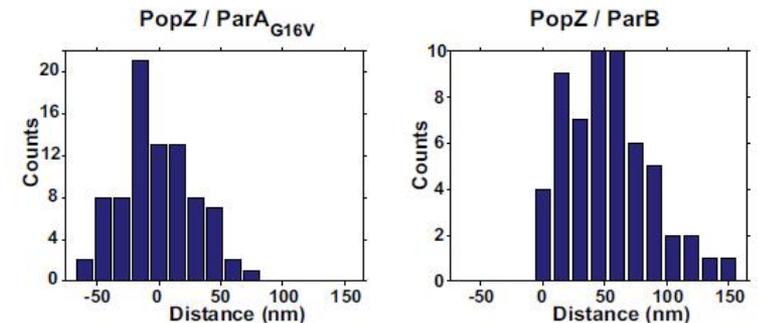
3D single-molecule reconstruction



3D single-molecule localizations



separation of distributions along cell axis



Chromosome partitioning in *Caulobacter crescentus* is governed by the segregation of the ParB kinetochore, with force generated by the ParA partitioning protein

Two-color super-resolution measurements resolve a difference of 50 nm between ParA_{G16V} (obligate monomer) and ParB position relative to the PopZ polar scaffold, demonstrating different means of localization to the pole and supporting a model for how polarity is maintained

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