Final Report
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Grant Title: **Dynamic spatial organization of multi-protein complexes controlling microbial polar organization, chromosome replication, and cytokinesis**

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This project was a program of collaborative research by an interdisciplinary team of investigators from six institutions to develop high-throughput methods to identify and characterize spatially localized multiprotein complexes in bacterial cells. We applied a multidisciplinary “systems engineering” approach to the detailed characterization of localized multi-protein structures *in vivo* – a problem that has previously been approached on a fragmented, piecemeal basis. This report cites below 45 publications that ensued from this grant (1-45). As usual in complex scientific endeavors, some of these publications were supported both by this grant and by other funding sources.

Details on the work encompassed within the published reports were given in annual reports over the course of the grant. There were multiple disciplines represented on the project team, so that the reports covered progress in a range of areas, including development of multi-protein polar complexes (7-9, 11, 25, 26, 45), organization and assembly of the cell division machinery (16-19, 24, 44), advances in imaging technology (2-6, 19, 33), the organization of cell regulation (10-13, 27, 31, 34, 35, 39, 40), chromosome organization (14, 20, 21, 37, 38, 41), and computational biology (1). There were also five reviews (15, 28-30, 36) that provide a broader perspective.

PUBLICATIONS

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