electrostatic forces that would probably orientate the molecule with the strongly acidic side facing away from the polymerase. Accordingly, the neutral face, with its hydrophobic patch suggestive of a protein-binding surface, would be in a position to interact with the polymerase. This would presumably position the basic patch to contact the negatively charged transcript. Our crosslinking results established that a region including the basic patch, near the end of the coiled-coil, interacts directly with the 3′-end of the transcript during the cleavage reaction, as if the coiled-coil were a 'finger' poking into the RNA polymerase catalytic site. It is not possible at this point to propose a more detailed model of how GreA induces transcript cleavage, but the structure now allows testing of specific elements by biochemical and genetic means. □

Received 31 October; accepted 20 December 1994.

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ACKNOWLEDGEMENTS. We thank J. Kuriyan and S. K. Burley and the members of their laboratories for help and encouragement, and in particular K. L. Clark, J. L. Kim and J. Goldberg for help with data analysis and general advice. We thank W. A. Hendrickson and C. Ogata for time and assistance on synchrotron beamline X4A, which is funded by the Howard Hughes Medical Institute at the Brookhaven National Laboratory. S.A.D. is a Lucille P. Markey Scholar. This work was supported in part by a grant from the Lucille P. Markey Charitable Trust and from the Irma T. Hirschl Trust to S.A.D., and an NIH grant to A.G.

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