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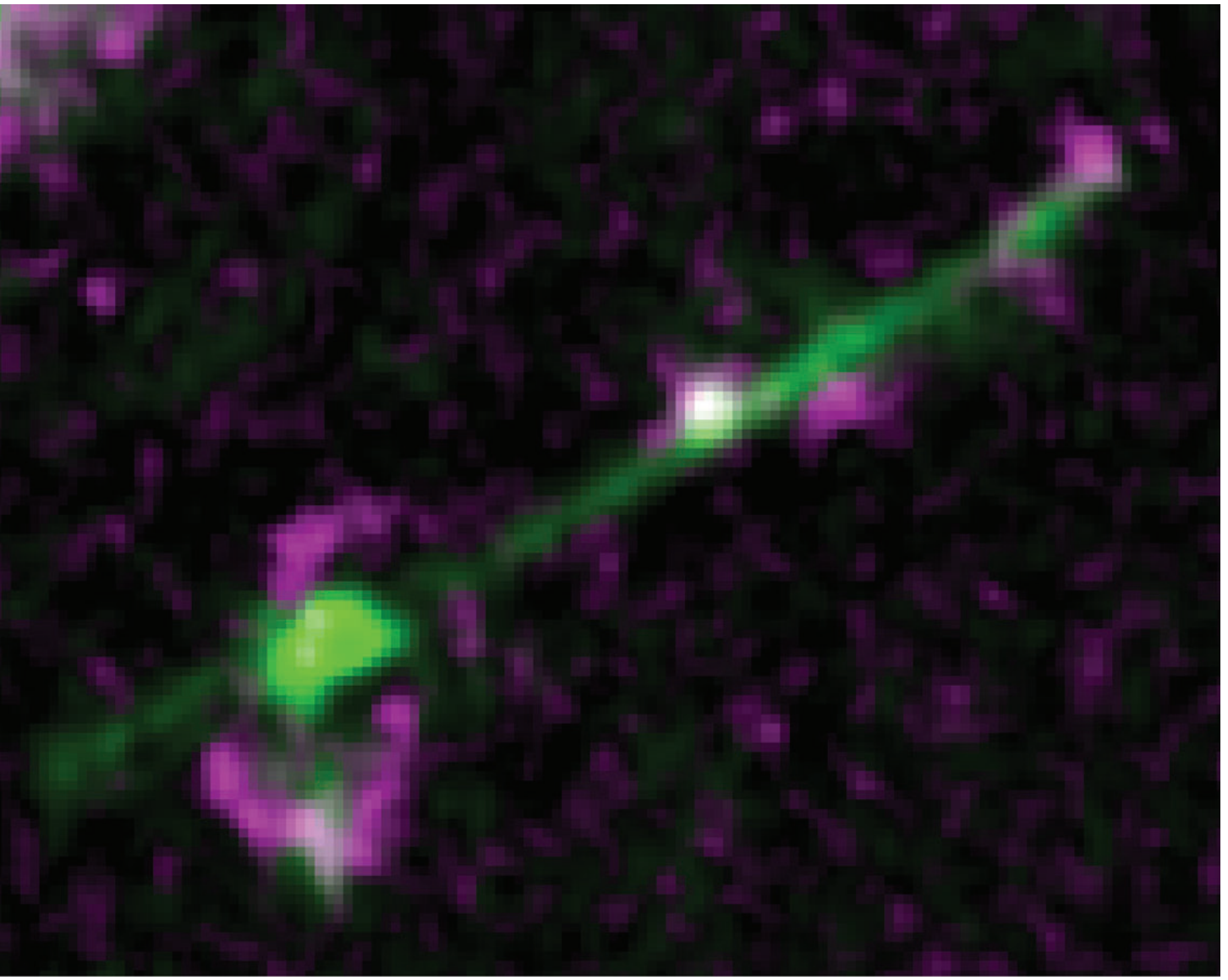
MOLECULAR BIOLOGY OF THE CELL



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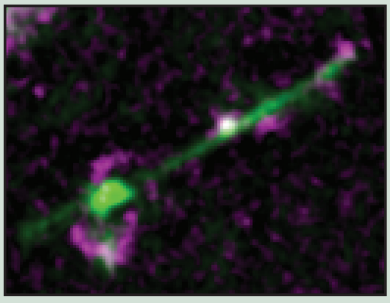

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The spindle checkpoint is a conserved signaling pathway in eukaryotic cells that delays segregation of the replicated chromosomes until proper attachments are made between kinetochores and microtubules (both shown in green). Mad1 (magenta) is a key spindle checkpoint protein that monitors kinetochore–microtubule attachments. Mad1's colocalization with kinetochores (white) is a marker of checkpoint activity. In this budding yeast cell, one pair of sister kinetochores, which appear as a single diffraction-limited spot, has formed a lateral attachment to one microtubule. In the article on p. 2620 of this issue of *MBoC*, Krefman *et al.* show that such laterally attached sister kinetochores colocalize with half as much Mad1 as completely unattached kinetochores. This finding suggests that the spindle checkpoint monitors attachment of sister kinetochores individually and that lateral attachment of a kinetochore to a microtubule licenses the removal of Mad1 from that kinetochore. (Image: Nathaniel Krefman, University of California, Berkeley)

The Philosophy of *Molecular Biology of the Cell*

Molecular Biology of the Cell (*MBoC*) is published by the nonprofit American Society for Cell Biology (ASCB) and is free from commercial oversight and influence. We believe that the reporting of science is an integral part of research itself and that scientific journals should be instruments in which scientists are at the controls. Hence, *MBoC* serves as an instrument of the ASCB membership and as such advocates the interests of both contributors and readers through fair, prompt, and thorough review coupled with responsible editorial adjudication and thoughtful suggestions for revision and clarification. Our most essential review criterion is that the work significantly advances our knowledge and/or provides new concepts or approaches that extend our understanding. At *MBoC*, active working scientists—true peers of the contributors—render every editorial decision.

The Society and *MBoC* are committed to promoting the concept of open access to the scientific literature. *MBoC* seeks to facilitate communication among scientists by

- publishing original papers that include full documentation of Methods and Results, with Introductions and Discussions that frame questions and interpret findings clearly (even for those outside an immediate circle of experts);
- exploiting technical advances to enable rapid dissemination of articles prior to print publication and transmission and archiving of videos, large datasets, and other materials that enhance understanding; and
- making all content freely accessible via the Internet only 2 months after publication.

Statement of Scope

MBoC publishes studies presenting conceptual advances of broad interest and significance within all areas of cell biology, genetics, and developmental biology. Studies whose scope bridges several areas of cell and developmental biology are particularly encouraged. *MBoC* aims to publish papers describing substantial research progress in full: Papers should include all previously unpublished data and methods essential to support the conclusions drawn. *MBoC* will not, in general, publish papers that are narrow in scope and therefore better suited to more specialized journals, merely confirmatory, preliminary reports of partially completed or incompletely documented research, findings of as yet uncertain significance, or reports simply documenting well-known processes in organisms or cell types not previously studied. Submissions that report novel methodologies are encouraged, particularly when the technology will be widely useful, when it will significantly accelerate progress within the field, or when it reveals a new result of biological significance. Given the scope of *MBoC*, relevant methodologies include (but are not limited to) those based on imaging, biochemistry, computational biology, and recombinant DNA technology.

Note that *MBoC* places a premium on research articles that present conceptual advances of wide interest or deep mechanistic understanding of important *cellular* processes. As such, articles dealing principally with describing behavior or modification of specific transcription factors, or analysis of the promoter elements through which they interact, will not generally be considered unless accompanied by information supporting in vivo relevance or broad significance.