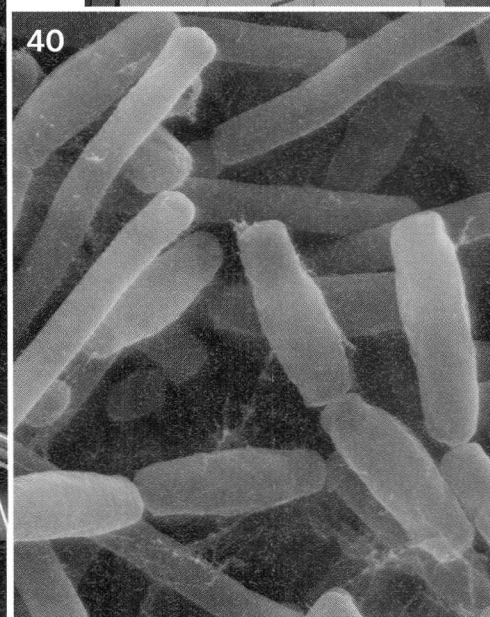


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Plenty has been said about the problems of the pharmaceutical industry and the need to reinvigorate the model. But how do you go about it? GlaxoSmithKline is overhauling the drug discovery and development process, one more time. The crucial difference: empowering its scientists. Newly appointed chief strategist of research and development YVONNE GREENSTREET lays out the company's radical approach.

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Now Showing: RNA Activation

RNA is supposed to silence genes by cutting up mRNA, not act on transcription—and definitely not boost gene expression. So why, as ELIE DOLGIN reports, are scientists seeing just that?

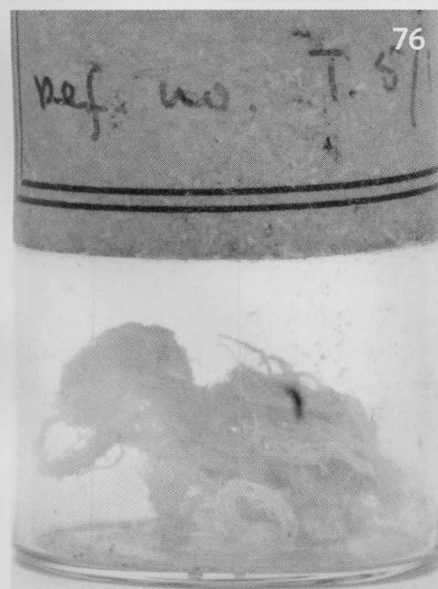
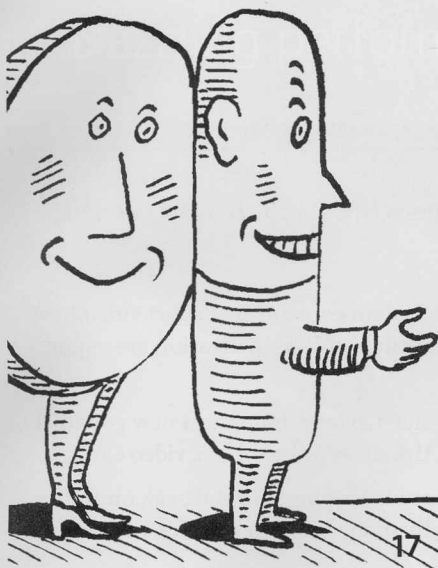
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Even bacteria that don't get their energy from sunlight appear to respond to light in curious ways. ALLA KATSNELSON asks: What on earth is the role of light-sensing proteins in bacteria, if not for photosynthesis? Have scientists stumbled upon a new ubiquitous signaling mechanism?

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Illustration by Tomasz Walenta.



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