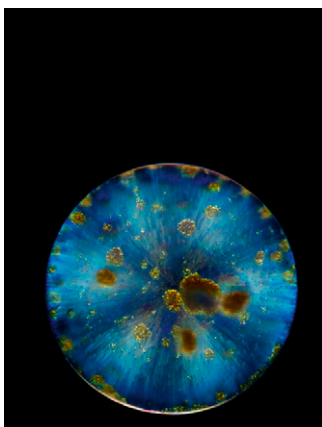


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**ON THE COVER**



Diatoms are unicellular eukaryotic photoautotrophs that account for about one fifth of global carbon fixation. As they drift passively on ocean currents, they must be able to proliferate and photosynthesize over a wide range of different light intensities and wavelengths. Huysman et al. (pages 215–228) identified a signalling cascade linking blue light perception with cell cycle onset. The cover shows a centric diatom collected from the North Pacific Ocean during the Tara Oceans expedition in 2011 (photo by Luis Gutiérrez-Heredia, UCD).

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