

# The Light FANTASTIC

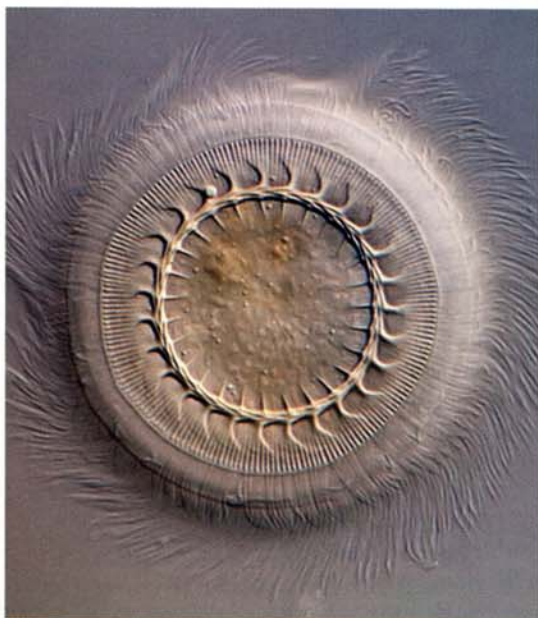
Biological specimens yield extraordinary images in the hands of talented light microscopists

FROM THE EDITORS

Beauty may be in the eye of the beholder, but it is also in the eye of a honeybee, the eggs of a lobster and the surface of petrified wood—as is evident from a selection of images entered in the 2008 Olympus BioScapes Digital Imaging Competition. In its fifth year, the competition honors superior images of living organisms or their components attained with the help of light microscopy.

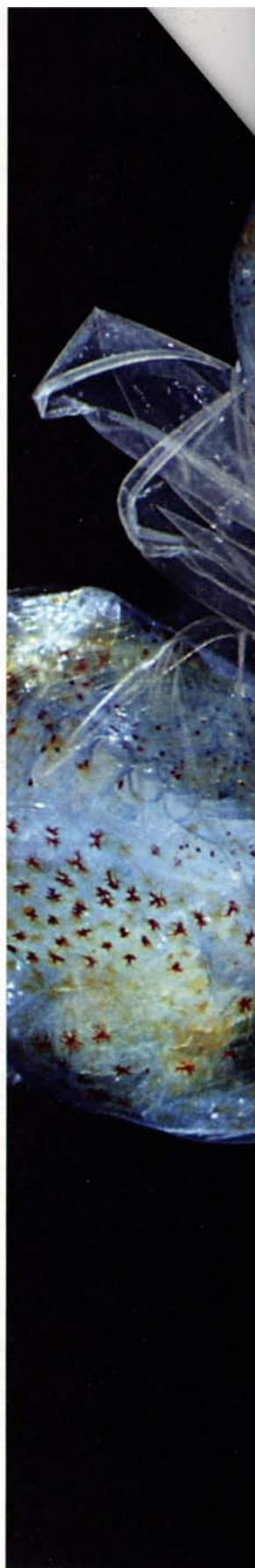
The judges chose 10 winners and awarded honorable mention to many others, evaluating entries based on the scientific value of the images, aesthetics and the difficulty of capturing the information displayed. This year, as in the past, competitors were free to bring out specific features through pseudo-coloring and other computer enhancements.

Here we share our own favorites among the winners and honorable mentions. To see more, visit our Web site at [www.SciAm.com/bioscapes2008](http://www.SciAm.com/bioscapes2008), where we welcome your comments.



▶ **LOBSTER EGGS**, two to three millimeters in diameter, sit in goo that keeps them together in water. Tora Bardal of the Norwegian University of Science and Technology (NTNU) in Trondheim enhanced the natural colors with dark-field illumination. The round, bluish regions are eyes. Jan Ove Evjemo of NTNU examined the eggs as part of an effort to optimize breeding techniques for a shrinking lobster population.

◀ **AQUATIC PARASITE *Trichodina pediculus***, imaged by Gerd A. Günther of Düsseldorf, Germany, is roughly 0.09 millimeter in diameter, not counting the cilia; it often colonizes hydra. The surface visible here latches onto a host through a central ring of toothlike "denticles."



DNA IN WATER can do interesting tricks. Giuliano Zanchetta of the University of Milan in Italy put short single strands of DNA in solution. The sequences joined to form helices; they also stacked end to end with other nano helices and assembled into the liquid-crystalline aggregates captured here. The region shown measures 0.5 millimeter across.

