restoration algorithm with confocal optics or two-photon excitation would be expected to overcome this limitation. It will be interesting to see this advance in image reconstruction being put to use, advancing our knowledge of what happens inside cells. ■

1 The author gratefully acknowledges Walter A. Carrington for reviewing this article.
2 Carrington, W.A., R.M. Lynch, E.D.W. Moore, G. Isenberg, K.E. Forarty, and F.S. Fay, Superresolution three-dimensional images of fluorescence in cells with minimal light exposure, *Science* 268:1483-1487, 1995

My Microscope, Snoopy

I have a friend able to see
Objects much too small for me
And through his eyes, he lets me peek
At tiny wonders which I seek
To see as if I could go
Into that tiny world below

He is my own light microscope
And you my friend I dearly hope
Will come to meet that friend of mine
And spend the pleasant hours of time
To see the wonders I have seen
Of pond and flower and insect wing

Sterling Newberry
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Why Is That Evaporated Gold Film Clumpy?

Ronald Vane, XEI Scientific

Many of us are familiar with the evaporated gold on carbon samples used as resolution standards on SEMs. But why isn't the gold a uniform film? Why is it a set of clumpy little islands on the surface?

The answer lies in the relative stickiness of a gold atom on carbon versus gold on gold. When gold is evaporated onto carbon only a few atoms will stay for long on the carbon after they impact. However, if a gold atom hits another gold atom it encounters a strong attraction and stays put. Thus little islands of gold atoms begin to grow on the carbon surface. The bigger the island the more likely it is to capture additional gold. The growth of the film is stopped, before coverage is complete, producing a gold-on-the-carbon resolution standard - with its many islands of gold. ■