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TRICKS OF THE TRADE

Quick Coloring for SEM Images Method 2: Photoshop Brush

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In the last issue of *The Microscope*, I explained the Hue/Saturation method in Adobe Photoshop (PS) as one way to quickly color gray SEM images. In this issue, I'll show you how to achieve the same quality results by coloring images with Photoshop's Brush tool (also known as the paintbrush). I used PS 6.0, but the same steps apply to newer versions of the program. Photoshop Elements may also be used but with a slightly different series of steps.

First, open the image in PS, then select a New Layer by clicking on the icon shown in the Layers palette (Figure 1). You can create a new layer for each color or use a single layer for all the colors. Next, in the toolbar, select a color by clicking the Color Picker and then click on the Brush tool (Figure 2).

The diameter of the brush and its hardness (how defined the edges are) can be changed in the brush dropdown menu (Figure 3). I usually set the hardness at 0% and adjust the brush size with the] and [bracket keys. Once a color is chosen and a brush is selected, you can begin painting.

Initially you will notice that the color covers the entire image. This can be corrected by simply changing the Blend Mode from the dropdown menu shown

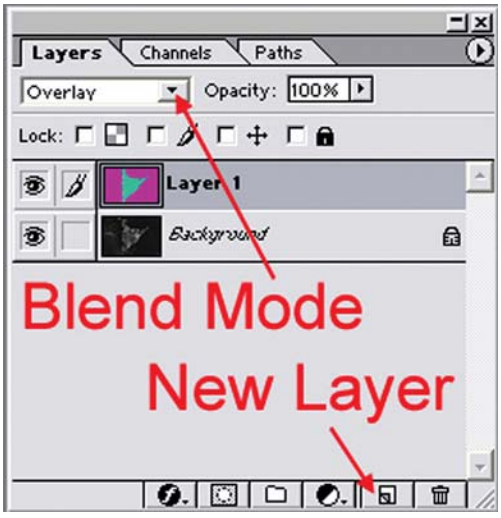

Figure 1. Layers palette showing New Layer icon and Blend Mode drop down menu.

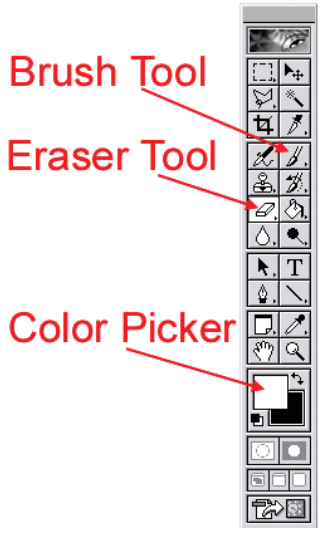

Figure 2. Toolbar showing Brush, Eraser and Color Picker tools.

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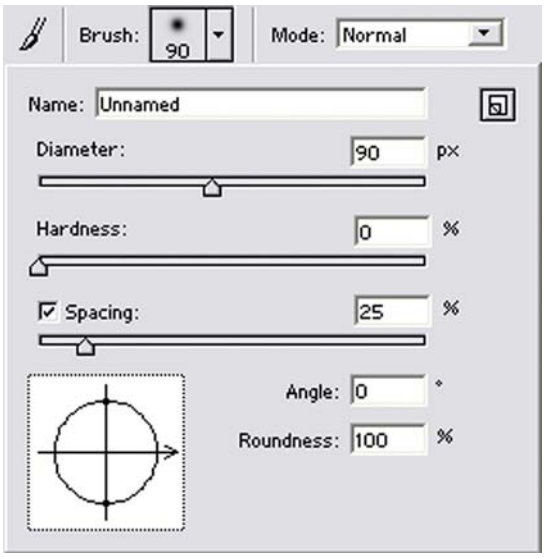

Figure 3. Access the Brush menu by double clicking the brush diameter-size icon (the dropdown box with the "90" in it).

in Figure 1. I prefer Color, Overlay or Soft Light blend modes; each of these blend modes will give a slightly different effect.

One of the benefits of using a new layer for each color is that it offers the ability to quickly change the look of the color by selecting different modes. Also, erasing errors is easier when the colors are on separate layers. If you make a mistake, click on the Eraser Tool (Figure 2) and remove the unwanted color.

Have fun experimenting with different colors, blend modes and layers. I painted four radiolarians (ocean-dwelling protozoa) of different shapes to show how attractive colored SEM images can be (Figures 4-7).

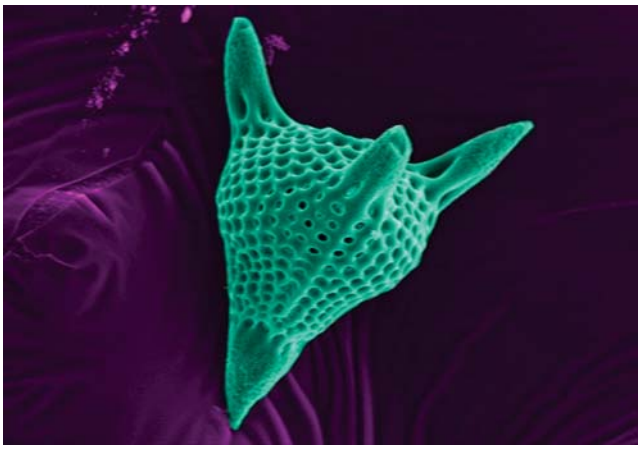

Figure 4. Radiolarian painted with two colors using the Overlay blend mode.

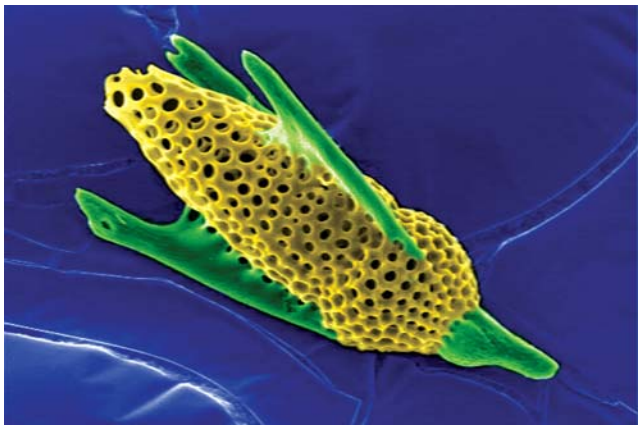

Figure 5. Radiolarian painted with three colors using the Color blend mode.

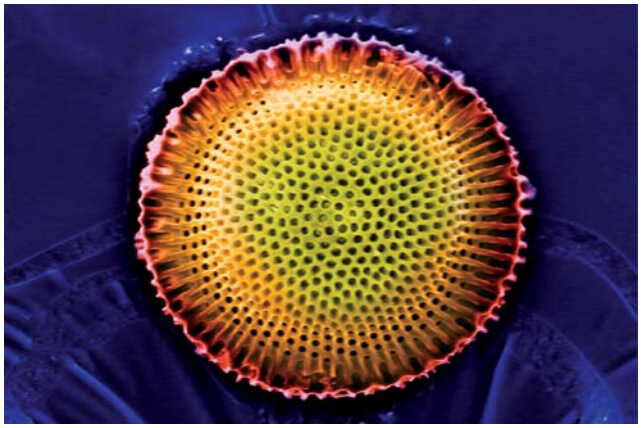

Figure 6. Radiolarian painted with three colors. Yellow and blue were used with the Overlay blend mode, and orange was used with the Color blend mode. The red color comes from the blue overlapping with the orange.

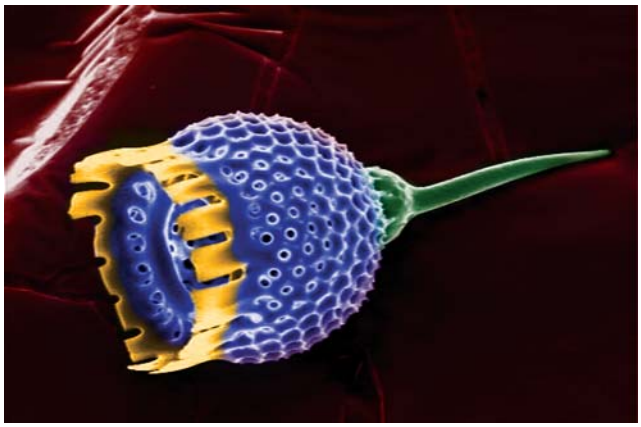

Figure 7. Radiolarian painted with four colors. Red, blue and green were used with the Overlay blend mode, while orange was used with Color blend mode.