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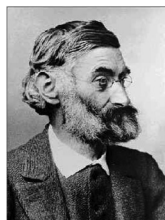
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## Dear Abbe

### Dear Abbe,

Help! We have a peculiar problem. About six years ago, there was a sudden, brief increase in instrument funding, so we bought new electron microscopes. But what to do with the old EMs? No one wants to buy our old (but good) instruments unless we price them ridiculously cheap. What to do?

### Buried in Columns

### Dear Buried,

Many people have come to me with this very problem. The solution is sitting under your very nose! Let us remember that an electron microscope column is really just a fancy triode vacuum tube: a cathode filament, control grid, and anode plate (where the electrons end up). What still uses vacuum tubes? Amplifiers! Who pays \$100,000 and more for an amplifier to play records? Audiophiles! (Read the magazines...) I advise taking your electron microscope columns, put them in an attractively arranged group, and surround their consoles with a case. Put a wire mesh (window screen works nicely—call it a “sonic rete”) above the viewing screen of each column, wire them together in the correct manner, and *viola!* A custom-made amplifier ready to be sold to audiophiles. In your marketing you can point out the joys of adjustable apertures and using the shadow of the wire mesh on the fluorescent viewing screens to adjust the electron beam and control the audio output. Throw in some audiobabble about “presence” and “soundstage” and “detailness” and you’ll get rid of your leftover EMs in short order. Anyone who uses sentences like “The amplifier creates large phantom images: dense and saturated—you could even call them... mature” to describe pop music, they deserve to contribute their money to your lab funds!

### Dear Abbe,

I could have sworn I recently saw a protocol for very fast freeze substitution, but now I can't find it. Does this really exist? Do you do any cryo? I still have a mostly functional slammer/plunger, and freeze-sub is about as far as I'm willing to go. Plus I don't have a minus-80-degree freezer.

### Harried in Hawaii

### Dear Harried,

I can sympathize with you. I had a -80 freezer at one time, but she left me. However let's not dwell on unfortunate relationships and instead focus on your particular problem. “Slammers” and “plungers” sounds awfully violent unless you're talking about certain small American sandwiches that are so greasy that one is produced and the other is needed! I hate to think what this means if one is only partially functional. People are always asking me if I do cryo. If you mean soaking in Bad Staffelstein's Obermain Therme, drinking Schnapps and hot cider after jumping in the snow, then yes! Don't you? This is much more enjoyable if you have a camera and *much* better than slamming and plunging!

*Have you had trouble with instrumentation or relationships? So has Herr Abbe! Send your proposals or queries to his able-bodied assistant at [jpsshield@uga.edu](mailto:jpsshield@uga.edu).*

MT