GUNTHER
ROLAND:

There's a couple of new elements that we've introduced in the last few years, one is that the
students write a proposal for an experiment that they want to do and develop themselves. And
for that experiment, they can use any material that we have in the lab or anything that they
can find at MIT and other labs of former UROP advisors, or people that they know. And
sometimes we even buy some equipment for them if it's a particularly interesting proposal and
we think that the equipment can be used in future experiments.

So that proposal, develop your own experiment and really see through the whole process, not
starting from a prefabricated experiment, but coming up with your own, that's a really unique
experience in 8.14. I think something that is very difficult to find outside of the lab.

And then we also have included in the last two years a poster session at the end where the
students present the results of their own experiment to the other students in the lab, to the
staff, and then to any member of the physics department that happens to walk past. So we
tried to time that with the physics faculty lunch, so that the big professors walk past the
posters, and then the students can explain to them their own experiment, what they found in
that part of the course. So I think that's really different than that and what do you do in 8.13
when you start with experiments that have been done by generations and generations of
students before. And I think students really like that.