

0:0:0.0 --> 0:0:27.10

Jackie Bastyr Cooper

OK so we have 4 panelists today, they will introduce themselves when they comes time for them to speak, but I will. Just go through them quickly here, so we have Kathy Krentz for who will be speaking about freezer works. Mary Murphy will be talking about lab archives. Monica Vanden Langenberg will be talking about freezer pro and I'm Jackie Cooper and I will just be showing what I've done with Google Sheets or freezer inventory.

0:0:31.80 --> 0:0:34.40

Jackie Bastyr Cooper

Alright Kathy if you wanna get us started here with freezer works.

0:0:43.990 --> 0:0:51.480

Kathy Krentz

Unmute might help so for those of you that don't know me. My name is Kathy Krentz I run the animal models core.

0:0:52.270 --> 0:1:4.380

Kathy Krentz

And we are located in the Biotechnology Center on campus. We are a fee for service facility that is offered for all campus users.

0:1:5.100 --> 0:1:6.890

Kathy Krentz

And we have.

0:1:8.160 --> 0:1:36.920

Kathy Krentz

The ability to generate and rederive new animal models. Our main goal is to work with mice and rats generate new models through various DNA techniques like CRISPR and then we hand those valuable animals back to researchers on campus and they can do their studies. But then we're freezing comes back in is downstream to creating these animals.

0:1:37.440 --> 0:1:44.410

Kathy Krentz

We can freeze back sperm and embryos and store them in liquid nitrogen tanks indefinitely.

0:1:45.580 --> 0:1:58.230

Kathy Krentz

So I'm going to talk to you about a program that we started a couple years ago and it is very centered or geared toward my core and we worked with a a?

0:1:58.830 --> 0:2:5.270

Kathy Krentz

First, a company called freezer works to to implement this program in my core.

0:2:7.430 --> 0:2:8.20

Kathy Krentz

So.

0:2:7.560 --> 0:2:15.480

Jackie Bastyr Cooper

Kathy I'm just going to enter interrupt you just for one second. If anybody has their microphones on if you could please mute yourself or getting some background noise.

0:2:17.120 --> 0:2:18.950

Jackie Bastyr Cooper

Or Christy if you're able to mute someone thank you.

0:2:20.520 --> 0:2:50.870

Kathy Krentz

Thank you. I didn't know if it was me. I didn't think it was me, but thanks so to kind of give you before, I can jump in the freezer works. I need to kind of tell you about our samples. So our samples are not frozen in vials anymore. We freeze and these plastic straws if you can look on the left panel here. These these plastic straws are hold about 1/4 CC of liquid and then we can heat seal the ends once we have the liquid.

0:2:50.960 --> 0:2:52.410

Kathy Krentz

Loaded into the Straws.

0:2:53.60 --> 0:2:55.400

Kathy Krentz

Those straws are then put into goblets.

0:2:56.50 --> 0:3:9.440

Kathy Krentz

Those goblets are then put on a metal cane and then those Canes are stored in canisters in a smaller liquid nitrogen tank. So it's a It's a slightly different.

0:3:9.520 --> 0:3:9.870

Kathy Krentz

Com.

0:3:11.550 --> 0:3:23.420

Kathy Krentz

It is a very different procedure than freezing in vials, and storing them in a box. So we had to work with freezer works to design a program for our system.

0:3:24.650 --> 0:3:37.680

Kathy Krentz

So we freeze as I said sperm and embryos from different strains and we need to be able to identify them and inventory them and we

0:3:38.940 --> 0:4:8.50

Kathy Krentz

develop this program so we can enter in the client name. The sample type. The date and then we can physically put in as many notes or details as we want within this program and we can have all of this information stored on a web-based program and the best part is that each of our clients can log into this program and they can see their samples in terms of.

0:4:8.220 --> 0:4:30.920

Kathy Krentz

All of this information are clients can see by a login system so we share this license with another core called show. The survey for health of Wisconsin and so our our data is actually serve saved on the server in the Department of Medicine.

0:4:32.90 --> 0:4:32.820

Kathy Krentz

So.

0:4:35.300 --> 0:4:39.90

Kathy Krentz

To touch base kind of on the details of the system itself.

0:4:40.420 --> 0:5:8.620

Kathy Krentz

Each of the tanks we have over 20 tanks and so we able. We need to be able to identify each of the canisters within each tank and then whether what's on the top goblet and what's on the bottom goblet and so in the program. It's either in A or it's in B in each of these represents a canister within each canister and then down in the right corner here there's a blow up about.

0:5:9.410 --> 0:5:39.630

Kathy Krentz

Cane 40 and Goblet B, it is it has eight aliquots or 8 Straws That's the maximum that fits in a goblet. So it's represented as 100% filled and so we can do a search of the program to figure out where we have open spaces and all of our different tanks. We can figure out where we need to add more samples within a given genetic mutation we can search from a wide variety of.

0:5:40.120 --> 0:5:43.460

Kathy Krentz

Search engines, we can search by π we can search by date.

0:5:44.120 --> 0:5:46.330

Kathy Krentz

Um we are able to.

0:5:48.80 --> 0:6:11.590

Kathy Krentz

Pull information out of this system, I had an undergrad work. This recently and we pulled out information. Everything that we frozen in the last 10 years on a year to year basis and kind of at to see

how our freezing program has increased over time, we can print labels off of this program, we can like I said export.

0:6:12.710 --> 0:6:13.780

Kathy Krentz

We can.

0:6:15.260 --> 0:6:43.430

Kathy Krentz

We also can keep track of samples that we send we often send samples on internationally. We can keep track of what we send what day we sent them and took them out of there. I know the show. Core also is able, they use it for samples that they go into and they take small aliquots out so let's say you have a vial that had 100 microliters.

0:6:43.870 --> 0:6:46.450

Kathy Krentz

What you went in on a given day and you took out 10?

0:6:47.610 --> 0:6:55.40

Kathy Krentz

Their system using freezer works keeps track of the the balance volume and that's a nice.

0:6:56.360 --> 0:7:14.570

Kathy Krentz

A nice feature that a lot of labs like to have so that you know how much of a sample. You have left that doesn't necessarily apply to us because when we freeze of sperm. There's no refreezing it again? So it's either there or it's not there.

0:7:15.340 --> 0:7:22.510

Kathy Krentz

OK. Can I have the next slide so the pros and cons. We were asked to come up with some pros and cons of this system.

0:7:23.770 --> 0:7:30.500

Kathy Krentz

So, like I said, we have remote access, we can infer we can go on this system from anywhere.

0:7:31.670 --> 0:7:56.460

Kathy Krentz

Clients have read only access as I already said. We can import data export data. We can create the graphs. It can also track volume. One of the cons is that there is a yearly fee. We pay a licensing fee. And that's to upgrade the system. That's for all of the support we get from their tech support, which I will add their tech support is very, very good.

0:7:57.520 --> 0:8:4.870

Kathy Krentz

Umm and the other com would be that there's training involved. It's it's a fairly straightforward.

0:8:4.940 --> 0:8:32.560

Kathy Krentz

Current program but the first, the person doing the data entry does have to have some background information and not. I don't mean by a computer programming. They just need to figure out and know how to different manipulate. The different fields. But my staff have been able to learn that again through training from freezer works and we like this program and I just wanna do campus to know about it.

0:8:33.340 --> 0:8:33.690

Kathy Krentz

OK.

0:8:34.880 --> 0:8:43.630

Jackie Bastyr Cooper

Awesome thank you. Kathy I'm gonna just let everybody know we're just gonna hold questions to the end, so that we can see all the presentations and then we'll have questions. Thank you Kathy.

0:8:44.80 --> 0:8:44.890

Kathy Krentz

You're welcome.

0:8:46.50 --> 0:8:53.500

Jackie Bastyr Cooper

Alright the next system is going to be Um Lab Archives and we have Mary Murphy, here to talk about this freezer inventory system.

0:8:55.730 --> 0:9:2.560

MARY ELIZABETH MURPHY

Hello my name is Mary Murphy. I'm a research separate infrastructure consultant in the Department of IT.

0:9:3.660 --> 0:9:9.830

MARY ELIZABETH MURPHY

So lab archives is electronic lab notebook service on campus that I help lead.

0:9:11.590 --> 0:9:12.960

MARY ELIZABETH MURPHY

And it helps.

0:9:13.880 --> 0:9:16.930

MARY ELIZABETH MURPHY

Uh with your research because you can access it online.

0:9:17.10 --> 0:9:22.360

MARY ELIZABETH MURPHY

Umm and it's through an AWS server.

0:9:23.130 --> 0:9:24.960

MARY ELIZABETH MURPHY

And it's very common on campus.

0:9:26.80 --> 0:9:38.80

MARY ELIZABETH MURPHY

And there's a couple of ways to do your freezer box inventory in lab archives and one of them here is called the freezer packs freezer box widget, which is a free option.

0:9:39.920 --> 0:9:42.940

MARY ELIZABETH MURPHY

As you can see here there's a couple of different screens.

0:9:44.700 --> 0:9:58.430

MARY ELIZABETH MURPHY

You can you can name your box identify? How many cells you like to see in that grid here on the right side you gonna identify your location and do a brief description as to what's in it.

0:9:59.100 --> 0:9:59.730

MARY ELIZABETH MURPHY

Umm.

0:10:0.760 --> 0:10:20.110

MARY ELIZABETH MURPHY

You can see when you can so you can edit each box in this in this table and in like say A1, you can see the cell A1 on the very bottom left side of the screen. Here provides you some different options that you can you can add your information to this box?

0:10:20.850 --> 0:10:21.520

MARY ELIZABETH MURPHY

Umm.

0:10:22.960 --> 0:10:29.780

MARY ELIZABETH MURPHY

Some other options in lab archives is a you can use a?

0:10:30.690 --> 0:10:32.720

MARY ELIZABETH MURPHY

An excel in integration.

0:10:33.540 --> 0:10:45.160

MARY ELIZABETH MURPHY

And you can create your own table. That's what that way. You can also do what they call a database system, which looks very much like this freezer box widget, but with a little bit different.

0:10:46.920 --> 0:10:51.240

MARY ELIZABETH MURPHY

Customization so instead of doing the primer name you can identify.

0:10:51.800 --> 0:10:57.730

MARY ELIZABETH MURPHY

Um your own information for what's going in each cell in that table.

0:10:59.100 --> 0:11:1.180

MARY ELIZABETH MURPHY

Umm can you go to the next slide please?

0:11:2.200 --> 0:11:2.810

MARY ELIZABETH MURPHY

Thank you.

0:11:3.450 --> 0:11:16.750

MARY ELIZABETH MURPHY

So just a few pros and cons of this widget. It is free in lab archives is free with the UW Madison. You just need to have a net ID and you can request access to one if you don't have one yet.

0:11:17.370 --> 0:11:18.10

MARY ELIZABETH MURPHY

Umm.

0:11:19.290 --> 0:11:31.230

MARY ELIZABETH MURPHY

As it as seen here it's also the integration within the notebook so you can identify within your documentation within your research? What you may be using and.

0:11:32.20 --> 0:11:37.680

MARY ELIZABETH MURPHY

And make sure it's specified within the time frame of your research rather than a separate entity.

0:11:38.960 --> 0:12:7.710

MARY ELIZABETH MURPHY

You can customize the table and you can also do a CSV imports into that widget so if you have something outside of Lab Archives. You can you can import it in the cons to this is that it's very limited it's capability and lab archives is trying to promote a new product that they've just created called inventory, which costs money per user, but provides I think a higher capability.

0:12:9.120 --> 0:12:11.350

MARY ELIZABETH MURPHY

And a little bit more customization involved.

0:12:13.710 --> 0:12:15.990

MARY ELIZABETH MURPHY

I can provide some information.

0:12:16.70 --> 0:12:23.180

MARY ELIZABETH MURPHY

Umm some different resources as well to help you look into the resource if if you're interested.

0:12:25.560 --> 0:12:32.360

MARY ELIZABETH MURPHY

I I personally don't do research Umm, so I don't have much to go off of providing examples my apologies.

0:12:35.40 --> 0:12:35.820

Jackie Bastyr Cooper

Thank you Mary.

0:12:35.100 --> 0:12:37.50

MARY ELIZABETH MURPHY

But I think that's it for me, Yep thanks.

0:12:36.630 --> 0:12:39.470

Jackie Bastyr Cooper

Yep, perfect thank you. It's a nice overview for that.

0:12:40.870 --> 0:12:49.140

Jackie Bastyr Cooper

OK, our next one is freezer pro and we have Monica Vanden Langenberg, Here to give us an overview of this system.

0:12:50.110 --> 0:13:20.920

Monica VandenLangenberg

Hi thanks, so she said. I'm Monica Van and Langeberg. I'm a biospecimen coordinator with the Alzheimer's disease. Research Center and the wrap study Wisconsin registry on Aging and I don't quite remember what the P stands for lots of Acronyms, but these are two really large longitudinal studies enrolling human subjects and so both studies have over 1000 participants and then our center also has a bunch of Sub Studies.

0:13:22.140 --> 0:13:37.30

Monica VandenLangenberg

That often enroll people from our two these two parent studies ARS and wrap who are also collecting samples. So we have thousands of samples that we have to store and track and ship and we've chosen freezer pro to help us do that.

0:13:38.670 --> 0:13:46.230

Monica VandenLangenberg

So it is a web-based program and we use it for just mainly our human subjects samples.

0:13:47.360 --> 0:14:1.100

Monica VandenLangenberg

Blood serum plasma whole blood and cerebral spinal fluid, but it can also be used for a whole different variety of sample types and users can add sample types if they if there's something not already available in the software.

0:14:2.430 --> 0:14:24.360

Monica VandenLangenberg

It provides a really nice visualization of the location of your samples within the boxes within freezers. So, unlike the the nitrogen and cane system that's explained before we have a more standard small vials in 9. By 9 or 10 by 10 boxes that get stored in racks that get stored on shelves of really large freezers and our program has.

0:14:25.290 --> 0:14:31.40

Monica VandenLangenberg

Probably more than 15 freezers so there's a whole lot to keep track of and freezer pros very good for visualizing.

0:14:31.480 --> 0:14:40.490

Monica VandenLangenberg

Umm the samples location within the freezer. It can let you see the shelf level. It can let you see the rack level. It can like see the total freezer level.

0:14:41.850 --> 0:14:44.780

Monica VandenLangenberg

Or down to the box level, which you can see on the screen here.

0:14:45.540 --> 0:15:4.630

Monica VandenLangenberg

It's showing you more of a data view where you can see participant ID numbers. You can also have it in a view that has icons if you have a bunch of different sample types within one box different sample types have different icons. It makes it really nice to visualize where different samples are at the.

0:15:5.810 --> 0:15:36.270

Monica VandenLangenberg

Upper right box on this screen. You can see that it's really easy to attach a lot of metadata to our samples so things like tube type are important to us or the date. The visit occurred or what study actually owns the sample. That's what the parents study field means and these are referred to as user defined fields. So they're things that we, as a program created and so we can always be adding more user defined fields as we find more data that we wanna attach to our samples.

0:15:37.600 --> 0:16:6.660

Monica VandenLangenberg

The nice thing about this is we can also use sorting and filtering within the program to sort for certain user defined fields. So if we want to find all the samples collected in 2018. We can use that to organize and visualize their samples different ways, the left graphic here shows the manual import for importing samples so you can type in all of this information per sample, it also.

0:16:8.600 --> 0:16:20.570

Monica VandenLangenberg

The program will batch different aliquots of the single sample together, which helps you track volume really nicely or you can ship 1 aliquot and it it will automatically subtract that volume from your system?

0:16:22.200 --> 0:16:28.270

Monica VandenLangenberg

You can also use a CSV file to upload so the graphic here is for the manual version, but

0:16:28.990 --> 0:16:59.440

Monica VandenLangenberg

you can import all your information into a CSV file if you're doing really large batches of samples and then we can also export information into CSV files so that makes it really useful for sharing data with other researchers if they wanna be able to see easily. All this metadata attached to their samples. It's also really user friendly. In doing large updates or edits because you can download your data into CSV file make the changes. You need and import that file as like.

0:16:59.510 --> 0:17:2.310

Monica VandenLangenberg

Update and it will change all of the data at once.

0:17:3.220 --> 0:17:4.220

Monica VandenLangenberg

Could you go to the next slide?

0:17:6.80 --> 0:17:13.990

Monica VandenLangenberg

So prose, I'd say it's pretty user friendly easy to use they have a really thorough user guide available.

0:17:14.900 --> 0:17:31.980

Monica VandenLangenberg

That can walk you through how to do all of the different procedures. It can be used by multiple groups so like I said, we have these two big parent studies each with over 1000 participants. But then our center has many smaller subsidies and they all have their own participants with their own ID numbers and so.

0:17:32.680 --> 0:17:49.800

Monica VandenLangenberg

All of those different studies can be using this one software and it really helps us track if a participant has been involved in more than one study. We can easily get all those samples collected together, even though they've been imported by different researchers at different times and different labs.

0:17:51.520 --> 0:17:52.760

Monica VandenLangenberg

We also really like the?

0:17:52.840 --> 0:18:2.370

Monica VandenLangenberg

But the visual presentation since we do so much taking samples in and out of our freezers. It's really good to be able to.

0:18:3.100 --> 0:18:20.480

Monica VandenLangenberg

Visualize how the organization works in terms of cons. We we do have a limited amount of users and that was just based on how much we wanted to pay they let we can have an unlimited number of accounts so people who can access but only 10 can be using it at a time.

0:18:22.700 --> 0:18:48.250

Monica VandenLangenberg

The program does give you a lot of freedom of how you want to structure your data and so it can be hard to keep consistency amongst users so we have had to implement our own departmental sops to give users structure of how we want them importing their samples to make sure that the data in the system is understandable to everyone who's using it and not and that all labs use it the same way.

0:18:49.700 --> 0:18:56.530

Monica VandenLangenberg

Um another con I think it's a pro anicon Here actually the audit trail is.

0:18:57.540 --> 0:19:21.220

Monica VandenLangenberg

Not the easiest thing to find or to track because every little movement of the vials and every copy and paste is shows up the audit trail so it's hard to search through for the information. You want, but there is an audit trail available for every vile and every sample to know if you forgot whether you shipped one out or not you can check the audit trail and it'll let you know that on a certain day.

0:19:21.940 --> 0:19:24.270

Monica VandenLangenberg

One aliquot of that sample was shipped out or.

0:19:25.460 --> 0:19:35.360

Monica VandenLangenberg

That samples aren't where you thought they were so you check the audit trail and you can notice that another user might have moved them so that that's helpful, but it takes knowing the program and being able to dig into it.

0:19:36.890 --> 0:19:38.120

Monica VandenLangenberg

And I think that's all I got.

0:19:39.210 --> 0:19:45.170

Jackie Bastyr Cooper

Awesome thank you. Monica one quick question for me is freezer pro free or is that something that we that you pay for.

0:19:47.570 --> 0:19:47.900

Jackie Bastyr Cooper

OK.

0:19:45.220 --> 0:19:49.460

Monica VandenLangenberg

No, we have to pay for it. Unfortunately, I think it is a little pricey but.

0:19:50.550 --> 0:19:51.450

Jackie Bastyr Cooper

OK, that's good to know.

0:19:50.830 --> 0:19:52.360

Monica VandenLangenberg
With that comes usability.

0:19:52.530 --> 0:20:5.540

Jackie Bastyr Cooper

Right OK. Thank you OK and then I'm going to show what I have done for my lab, so this is Jackie Cooper. I'm the lab manager for the environmental engineering lab core facility.

0:20:6.560 --> 0:20:37.280

Jackie Bastyr Cooper

And we don't have any freezer program. We never had anything so I just started something with Google Sheets. So if you look at the very center of the screen where the number one is located. I came up with a protocol and mine was looking at basically the numbering system set up a numbering system based on the types of samples that we have so we do. Lots of things with probes DNA extractions. Clones cultures sample. We have lots and lots and lots of samples that are from.

0:20:37.330 --> 0:21:7.760

Jackie Bastyr Cooper

Bioreactors and then primers and so I was giving those each sort of an identifier and then a code starting code and then the labels for the caps are different colors, so you can kind of see as the arrows go down shows you what a cap label close up. Looks like and then I just took a picture of a box that had some of these labeled so you can kind of see the whole system on the left hand side where the number 2? Is this is my folder for freezer inventory so it kind of has a couple howtos and then.

0:21:8.200 --> 0:21:37.0

Jackie Bastyr Cooper

Each type of each category, has a different Google sheet as well as a Google form so on. The far right where the three is that's the form where the students can enter in manually following the protocol in each. The reason I had so many different sheets is because there's different things that we need for the various categories of items that are going to be in the freezer so each form was slightly different with what we were going to include.

0:21:38.60 --> 0:22:5.110

Jackie Bastyr Cooper

If I do that again. Now, maybe I would change that up, but each one has a form and then if you look at the bottom. There's sort of justice. The quick view of the Google sheet kind of what it looks like when we fill in the form. So a lot of times students will fill in the form for one, but then they can go to the Google Sheet and do a copy paste from their excel sheet or just copy paste or just type right into the Google sheet. If that's faster for them if they have a lot of samples going through that.

0:22:6.270 --> 0:22:36.320

Jackie Bastyr Cooper

I'll Click to the next screen here, so the pros is obviously it's very easy to share because it's just through the UW Madison Google Drive so it's easy for me to give students access to view and to edit they can do it through their computer or their phone. It's free that's kind of what we were looking for the cons are

obviously it's not a true inventory system and you have to customize. Everything that goes with that Google sheet so you can customize it. It's good you can make it.

0:22:36.520 --> 0:22:54.880

Jackie Bastyr Cooper

Specific to your lab or your facility, but the hard part is is you do have someone has to customize it all, and then just getting as we all know students to use these things is probably another con for everything but that's kind of been for the presentations. I'm just gonna stop sharing my screen here.

0:22:56.0 --> 0:22:56.670

Jackie Bastyr Cooper

Hopefully.

0:22:59.720 --> 0:23:1.860

Jackie Bastyr Cooper

Like going I don't know did I stop sharing.

0:23:3.670 --> 0:23:4.820

Jackie Bastyr Cooper

If someone can let me know.

0:23:5.690 --> 0:23:21.400

Jackie Bastyr Cooper

Yep, OK and now we'll just open it up to questions so if anybody has questions you can drop them in the chat or if you just wanted to come off, mute and you can ask for any of the four folks or specifically anything in general, please.

0:23:22.340 --> 0:23:25.750

Jackie Bastyr Cooper

Uh screen I don't know how to do the I think I shared it.

0:23:28.800 --> 0:23:29.760

Jackie Bastyr Cooper

Stop sharing there, we go.

0:23:30.380 --> 0:23:31.700

Jackie Bastyr Cooper

I'm good is that better.

0:23:33.270 --> 0:23:35.560

Jackie Bastyr Cooper

I don't do a lot of meetings so.

0:23:36.350 --> 0:23:39.520

Jackie Bastyr Cooper

If anybody has any questions, please go ahead and ask away.

0:23:47.460 --> 0:23:51.30

Jackie Bastyr Cooper

If anybody has experience with any of these programs that they would like to add.

0:23:51.110 --> 0:23:55.110

Jackie Bastyr Cooper

Umm their comments comments that would be great, too.

0:24:3.580 --> 0:24:8.730

Jackie Bastyr Cooper

I would like to thank Kathy Mary and Monica for presenting today that was really, really helpful.

0:24:10.60 --> 0:24:15.500

Jackie Bastyr Cooper

OK, we have one question here is lab archives searchable without exporting it to a CSV.

0:24:20.650 --> 0:24:21.880

Jackie Bastyr Cooper

Hopefully Mary can answer that.

0:24:23.280 --> 0:24:35.70

MARY ELIZABETH MURPHY

Yes. Sorry I was trying to get my mic so lab archives itself is searchable so I believe that also fits in with the widget so.

0:24:36.450 --> 0:24:47.610

MARY ELIZABETH MURPHY

There is an advanced search option that can identify specifically what you're looking for on a given day or type of activity type of entry so I believe so.

0:24:47.690 --> 0:24:48.40

MARY ELIZABETH MURPHY

Well.

0:24:51.130 --> 0:24:53.520

MARY ELIZABETH MURPHY

Let me see if I can find you a resource as well.

0:24:58.770 --> 0:24:59.680

Jackie Bastyr Cooper

Awesome thanks Mary.

0:25:8.450 --> 0:25:11.480

Jackie Bastyr Cooper

Alright Thanks Eric for confirming that it is uh searchable.

0:25:28.590 --> 0:25:29.200

MARY ELIZABETH MURPHY

Yes.

0:25:16.670 --> 0:25:29.840

Jackie Bastyr Cooper

For Mary Umm can you can multiple people access the same widget with lab archives with their net ID or are they? Can you I? I'm pretty sure you can share your notebook but I yeah?

0:25:30.140 --> 0:25:33.830

MARY ELIZABETH MURPHY

Yep, so if there's a shared notebook within users.

0:25:35.870 --> 0:25:38.500

MARY ELIZABETH MURPHY

Anyone can go in there and look at it and edit it.

0:25:40.440 --> 0:25:42.710

MARY ELIZABETH MURPHY

It's usually 1 user at a time.

0:25:43.460 --> 0:25:52.230

MARY ELIZABETH MURPHY

So each time an individual edits an entry and saves it. It does a date time and user stamp?

0:25:54.570 --> 0:25:57.680

MARY ELIZABETH MURPHY

And so you just have to be careful as to who is editing it when.

0:26:0.800 --> 0:26:11.260

Jackie Bastyr Cooper

OK, that's good information so it's one at a time, but you can have it shared does it have to be in you?

Can you share the widget itself within your notebook or do you have to share the whole notebook?

0:26:12.230 --> 0:26:17.600

MARY ELIZABETH MURPHY

You can share a page within a notebook so if you just have.

0:26:23.600 --> 0:26:24.10

Jackie Bastyr Cooper

Awesome.

0:26:18.460 --> 0:26:25.80

MARY ELIZABETH MURPHY

The widget on one page. Then Yes, you can you can do just the widget if that makes sense Yep?

0:26:24.670 --> 0:26:25.330

Jackie Bastyr Cooper

Thank you Yep.

0:26:32.810 --> 0:26:47.350

Jackie Bastyr Cooper

Is anybody else using a different system for their freezer inventory or using one of the systems that was

presented today in a different way that you'd like to mention or talk about or any other questions in the chat or just pull yourself off mic.

0:27:2.830 --> 0:27:25.480

Jackie Bastyr Cooper

OK, well, we don't want to keep people here longer than they have to so if we don't have any additional questions. I just want to say thank you again to Kathy Mary and Monica for presenting give us an overview of the three different types of freezer systems. If anybody has any questions. Feel free to reach out to one of them if or myself if you really wanna tackle Google Sheets.

0:27:26.860 --> 0:27:30.460

Jackie Bastyr Cooper

But we will share this recording through our website.

0:27:31.550 --> 0:27:32.510

Jackie Bastyr Cooper

And thank you everybody.