

WEBVTT

NOTE duration:"02:03:02.2290000"

NOTE language:en-us

NOTE Confidence: 0.869721233844757

00:00:00.000 --> 00:00:02.600 So let's get going one.

NOTE Confidence: 0.869721233844757

00:00:02.600 --> 00:00:04.680 Adjust to I'll introduce

NOTE Confidence: 0.869721233844757

00:00:04.680 --> 00:00:07.855 Doctor Block who will help us

NOTE Confidence: 0.869721233844757

00:00:07.855 --> 00:00:10.410 moderate this this session but.

NOTE Confidence: 0.869721233844757

00:00:10.410 --> 00:00:13.356 Thanks everyone for coming to the

NOTE Confidence: 0.869721233844757

00:00:13.356 --> 00:00:16.670 4th of our Associates week ventures.

NOTE Confidence: 0.869721233844757

00:00:16.670 --> 00:00:18.760 And for this first hour,

NOTE Confidence: 0.869721233844757

00:00:18.760 --> 00:00:22.513 we're going to do what we call a datablitz,

NOTE Confidence: 0.869721233844757

00:00:22.520 --> 00:00:25.446 where you'll get to hear very succinct,

NOTE Confidence: 0.869721233844757

00:00:25.450 --> 00:00:26.737 very well presented.

NOTE Confidence: 0.869721233844757

00:00:26.737 --> 00:00:29.740 Tidbits of research and this is a

NOTE Confidence: 0.869721233844757

00:00:29.829 --> 00:00:33.077 format that we've used in a number of

NOTE Confidence: 0.869721233844757

00:00:33.077 --> 00:00:35.640 settings that Michael and Tom have,

NOTE Confidence: 0.869721233844757

00:00:35.640 --> 00:00:37.330 especially refined that was just

NOTE Confidence: 0.869721233844757

00:00:37.330 --> 00:00:39.782 gives you a sense of the excitement

NOTE Confidence: 0.869721233844757

00:00:39.782 --> 00:00:41.852 of the work and the succinctness

NOTE Confidence: 0.869721233844757

00:00:41.852 --> 00:00:43.950 of our communication skills.

NOTE Confidence: 0.869721233844757

00:00:43.950 --> 00:00:46.302 So I would love to turn this

NOTE Confidence: 0.869721233844757

00:00:46.302 --> 00:00:48.490 over to Doctor Michael Bloch,

NOTE Confidence: 0.869721233844757

00:00:48.490 --> 00:00:50.752 who will moderate this data blitz

NOTE Confidence: 0.869721233844757

00:00:50.752 --> 00:00:53.491 session and then we'll get back together

NOTE Confidence: 0.869721233844757

00:00:53.491 --> 00:00:56.718 shortly after 3:45 will begin our panel.

NOTE Confidence: 0.869721233844757

00:00:56.720 --> 00:00:58.520 Just one housekeeping please.

NOTE Confidence: 0.869721233844757

00:00:58.520 --> 00:01:01.766 If you're not speaking to mute.

NOTE Confidence: 0.869721233844757

00:01:01.770 --> 00:01:03.450 And if you have questions,

NOTE Confidence: 0.869721233844757

00:01:03.450 --> 00:01:03.785 Michael,

NOTE Confidence: 0.869721233844757

00:01:03.785 --> 00:01:06.465 you're going to take those at the end.

NOTE Confidence: 0.871466100215912

00:01:06.470 --> 00:01:09.166 Is that correct? Or I'll talk about in

NOTE Confidence: 0.871466100215912

00:01:09.166 --> 00:01:11.845 a second so it will have people take

NOTE Confidence: 0.871466100215912

00:01:11.850 --> 00:01:14.618 questions in the chat, so I'll let me.  
NOTE Confidence: 0.871466100215912

00:01:14.620 --> 00:01:17.000 Let Michael do the pragmatics of questions,  
NOTE Confidence: 0.871466100215912

00:01:17.000 --> 00:01:19.112 but again welcome and thanks to  
NOTE Confidence: 0.871466100215912

00:01:19.112 --> 00:01:21.224 all of our associates for all  
NOTE Confidence: 0.871466100215912

00:01:21.224 --> 00:01:23.120 of your support in joining us.  
NOTE Confidence: 0.837992191314697

00:01:23.120 --> 00:01:24.480 So Doctor Michael block.  
NOTE Confidence: 0.837992191314697

00:01:24.480 --> 00:01:26.180 Well, thank you for having  
NOTE Confidence: 0.837992191314697

00:01:26.180 --> 00:01:28.220 us and thank you for joining.  
NOTE Confidence: 0.837992191314697

00:01:28.220 --> 00:01:30.260 I'm gonna share my screen quickly.  
NOTE Confidence: 0.837992191314697

00:01:30.260 --> 00:01:31.990 I'm greetings from the colon.  
NOTE Confidence: 0.837992191314697

00:01:31.990 --> 00:01:36.580 Yeah, we all people can see my screen now.  
NOTE Confidence: 0.837992191314697

00:01:36.580 --> 00:01:40.948 OK, right everyone can see my screen.  
NOTE Confidence: 0.837992191314697

00:01:40.950 --> 00:01:43.718 Yep, OK, I said the big thing of  
NOTE Confidence: 0.837992191314697

00:01:43.718 --> 00:01:47.291 the data blitz is really in a time  
NOTE Confidence: 0.837992191314697

00:01:47.291 --> 00:01:49.151 efficient manner to highlight  
NOTE Confidence: 0.837992191314697

00:01:49.235 --> 00:01:51.600 research and really the research

NOTE Confidence: 0.837992191314697

00:01:51.600 --> 00:01:54.443 coming up from the next generation

NOTE Confidence: 0.837992191314697

00:01:54.443 --> 00:01:57.281 of investigators and we were lucky

NOTE Confidence: 0.837992191314697

00:01:57.281 --> 00:02:00.328 enough to have a really talented group

NOTE Confidence: 0.837992191314697

00:02:00.328 --> 00:02:03.519 of up and coming stars in the field.

NOTE Confidence: 0.837992191314697

00:02:03.520 --> 00:02:05.690 Amanda Detmer, Cardic, Pipipi, Airmon,

NOTE Confidence: 0.837992191314697

00:02:05.690 --> 00:02:08.552 Emily Olson and Yongsun show and

NOTE Confidence: 0.837992191314697

00:02:08.552 --> 00:02:11.660 and really the data blitz looks.

NOTE Confidence: 0.837992191314697

00:02:11.660 --> 00:02:14.360 Uh, is really supposed to be in a time

NOTE Confidence: 0.837992191314697

00:02:14.360 --> 00:02:16.536 efficient way to really highlight this.

NOTE Confidence: 0.837992191314697

00:02:16.540 --> 00:02:18.520 Their science and their grades skills

NOTE Confidence: 0.837992191314697

00:02:18.520 --> 00:02:21.081 so that talks are going to that we're

NOTE Confidence: 0.837992191314697

00:02:21.081 --> 00:02:23.689 going to spend 10 minutes for each speaker.

NOTE Confidence: 0.837992191314697

00:02:23.690 --> 00:02:24.966 Essentially, they already produced

NOTE Confidence: 0.837992191314697

00:02:24.966 --> 00:02:27.260 a 7 minute video of their signs,

NOTE Confidence: 0.837992191314697

00:02:27.260 --> 00:02:28.890 which we're going to share.

NOTE Confidence: 0.837992191314697

00:02:28.890 --> 00:02:31.081 And then we're going to spend about  
NOTE Confidence: 0.837992191314697

00:02:31.081 --> 00:02:32.460 3 minutes worth there.  
NOTE Confidence: 0.837992191314697

00:02:32.460 --> 00:02:34.410 Actually be here to answer questions.  
NOTE Confidence: 0.837992191314697

00:02:34.410 --> 00:02:36.994 So the idea is that people place questions  
NOTE Confidence: 0.837992191314697

00:02:36.994 --> 00:02:39.249 in the chat box, function of zoom,  
NOTE Confidence: 0.837992191314697

00:02:39.249 --> 00:02:41.440 and then the then will pick out  
NOTE Confidence: 0.837992191314697

00:02:41.505 --> 00:02:43.545 a couple of questions to answer.  
NOTE Confidence: 0.837992191314697

00:02:43.550 --> 00:02:45.462 And then if the panel is don't have  
NOTE Confidence: 0.837992191314697

00:02:45.462 --> 00:02:47.397 time to answer all the questions,  
NOTE Confidence: 0.837992191314697

00:02:47.400 --> 00:02:49.836 so keep answering them in the chat  
NOTE Confidence: 0.837992191314697

00:02:49.836 --> 00:02:50.184 afterwards.  
NOTE Confidence: 0.837992191314697

00:02:50.190 --> 00:02:51.156 Anan I guess.  
NOTE Confidence: 0.837992191314697

00:02:51.156 --> 00:02:52.766 I just really wanted to.  
NOTE Confidence: 0.837992191314697

00:02:52.770 --> 00:02:55.866 I guess I was thinking about how to introduce  
NOTE Confidence: 0.837992191314697

00:02:55.866 --> 00:02:58.745 the speakers and I'm not much for like.  
NOTE Confidence: 0.837992191314697

00:02:58.750 --> 00:02:59.438 Uh.

NOTE Confidence: 0.837992191314697  
00:02:59.438 --> 00:03:02.190 Sort of generic introductions,  
NOTE Confidence: 0.837992191314697  
00:03:02.190 --> 00:03:04.465 and while I was watching  
NOTE Confidence: 0.837992191314697  
00:03:04.465 --> 00:03:06.740 the NBA draft last night,  
NOTE Confidence: 0.837992191314697  
00:03:06.740 --> 00:03:10.835 I was kind of thinking about what to say,  
NOTE Confidence: 0.837992191314697  
00:03:10.840 --> 00:03:13.773 and I guess and think about our  
NOTE Confidence: 0.837992191314697  
00:03:13.773 --> 00:03:16.115 training programs and an R&R  
NOTE Confidence: 0.837992191314697  
00:03:16.115 --> 00:03:18.119 up incoming investigators here.  
NOTE Confidence: 0.837992191314697  
00:03:18.120 --> 00:03:20.652 I really like to think about  
NOTE Confidence: 0.837992191314697  
00:03:20.652 --> 00:03:23.120 our trainees is like Unicorn,  
NOTE Confidence: 0.837992191314697  
00:03:23.120 --> 00:03:25.730 so unicorns are not probably everyone's  
NOTE Confidence: 0.837992191314697  
00:03:25.730 --> 00:03:28.130 thinking about the mythical creature,  
NOTE Confidence: 0.837992191314697  
00:03:28.130 --> 00:03:30.460 but in the NBA draft.  
NOTE Confidence: 0.837992191314697  
00:03:30.460 --> 00:03:33.190 Their basketball players that are 7  
NOTE Confidence: 0.837992191314697  
00:03:33.190 --> 00:03:36.920 feet tall are able to handle the ball  
NOTE Confidence: 0.837992191314697  
00:03:36.920 --> 00:03:39.650 defendant block shots and then also  
NOTE Confidence: 0.837992191314697

00:03:39.740 --> 00:03:43.028 have the shooting range to shoot out 2,

NOTE Confidence: 0.837992191314697

00:03:43.030 --> 00:03:45.280 three to three point line.

NOTE Confidence: 0.837992191314697

00:03:45.280 --> 00:03:47.470 So it's essentially a very rare

NOTE Confidence: 0.837992191314697

00:03:47.470 --> 00:03:50.129 skill set and I really consider

NOTE Confidence: 0.837992191314697

00:03:50.129 --> 00:03:52.909 each of these presenters unicorns,

NOTE Confidence: 0.837992191314697

00:03:52.910 --> 00:03:55.155 that they're not only great

NOTE Confidence: 0.837992191314697

00:03:55.155 --> 00:03:57.400 researchers that you'll hear about,

NOTE Confidence: 0.837992191314697

00:03:57.400 --> 00:04:00.190 but there are also outstanding clinicians

NOTE Confidence: 0.837992191314697

00:04:00.190 --> 00:04:02.390 and advocates and activists for.

NOTE Confidence: 0.837992191314697

00:04:02.390 --> 00:04:04.670 Children and families in the community

NOTE Confidence: 0.837992191314697

00:04:04.670 --> 00:04:07.011 and that I really think they're

NOTE Confidence: 0.837992191314697

00:04:07.011 --> 00:04:09.650 special talents or just in the soul.

NOTE Confidence: 0.837992191314697

00:04:09.650 --> 00:04:10.372 Net program,

NOTE Confidence: 0.837992191314697

00:04:10.372 --> 00:04:12.899 which is one of our various training

NOTE Confidence: 0.837992191314697

00:04:12.899 --> 00:04:15.380 programs for child and adult psychiatrist.

NOTE Confidence: 0.837992191314697

00:04:15.380 --> 00:04:17.185 We typically have 500 applicants

NOTE Confidence: 0.837992191314697  
00:04:17.185 --> 00:04:19.647 and we take two people at every  
NOTE Confidence: 0.837992191314697  
00:04:19.647 --> 00:04:21.712 year and we interview 20 and I  
NOTE Confidence: 0.837992191314697  
00:04:21.712 --> 00:04:24.142 think the people presenting here  
NOTE Confidence: 0.837992191314697  
00:04:24.142 --> 00:04:25.690 are exceptional individuals,  
NOTE Confidence: 0.837992191314697  
00:04:25.690 --> 00:04:27.398 not just exceptional researchers.  
NOTE Confidence: 0.837992191314697  
00:04:27.398 --> 00:04:29.960 So I guess instead of introducing  
NOTE Confidence: 0.837992191314697  
00:04:30.029 --> 00:04:32.207 people with their title and everything  
NOTE Confidence: 0.837992191314697  
00:04:32.207 --> 00:04:34.558 else which you can read on line.  
NOTE Confidence: 0.837992191314697  
00:04:34.560 --> 00:04:37.215 I was really going to talk about why I  
NOTE Confidence: 0.837992191314697  
00:04:37.215 --> 00:04:39.700 thought all these people were unicorns  
NOTE Confidence: 0.837992191314697  
00:04:39.700 --> 00:04:41.820 before we share their presentation.  
NOTE Confidence: 0.837992191314697  
00:04:41.820 --> 00:04:42.924 So first up,  
NOTE Confidence: 0.837992191314697  
00:04:42.924 --> 00:04:44.396 we have Amanda Detmer,  
NOTE Confidence: 0.851810455322266  
00:04:44.400 --> 00:04:47.088 and I guess she's gonna talk really  
NOTE Confidence: 0.851810455322266  
00:04:47.088 --> 00:04:49.000 better out outstanding research that  
NOTE Confidence: 0.851810455322266



00:04:49.000 --> 00:04:51.752 she's going to talk about in a second,  
NOTE Confidence: 0.851810455322266

00:04:51.760 --> 00:04:54.460 but I I really think of her as a great  
NOTE Confidence: 0.851810455322266

00:04:54.534 --> 00:04:57.006 communicator of science and also a  
NOTE Confidence: 0.851810455322266

00:04:57.006 --> 00:04:59.553 fierce advocate for the community and  
NOTE Confidence: 0.851810455322266

00:04:59.553 --> 00:05:02.430 the care of children in the community.  
NOTE Confidence: 0.851810455322266

00:05:02.430 --> 00:05:04.265 I think that's something that  
NOTE Confidence: 0.851810455322266

00:05:04.265 --> 00:05:05.733 makes her a Unicorn.  
NOTE Confidence: 0.851810455322266

00:05:05.740 --> 00:05:07.364 Besides the outstanding research  
NOTE Confidence: 0.851810455322266

00:05:07.364 --> 00:05:09.800 that Angie is going to play  
NOTE Confidence: 0.851810455322266

00:05:09.870 --> 00:05:11.628 the video for in a second.  
NOTE Confidence: 0.838102579116821

00:05:14.050 --> 00:05:16.966 Hi I'm doctor Amanda Detmer  
NOTE Confidence: 0.838102579116821

00:05:16.966 --> 00:05:20.460 and I'm very excited to share  
NOTE Confidence: 0.838102579116821

00:05:20.460 --> 00:05:21.918 with you today.  
NOTE Confidence: 0.838102579116821

00:05:21.918 --> 00:05:25.320 A recent study from my lab examining  
NOTE Confidence: 0.838102579116821

00:05:25.420 --> 00:05:28.740 how early secure attachments shape  
NOTE Confidence: 0.838102579116821

00:05:28.740 --> 00:05:31.396 second generation health outcomes

NOTE Confidence: 0.838102579116821  
00:05:31.396 --> 00:05:35.620 in rhesus monkey models of child health.  
NOTE Confidence: 0.838102579116821  
00:05:35.620 --> 00:05:39.530 So here at the Child study center,  
NOTE Confidence: 0.838102579116821  
00:05:39.530 --> 00:05:42.230 my lab's research focuses on  
NOTE Confidence: 0.838102579116821  
00:05:42.230 --> 00:05:44.380 identifying causal mechanisms.  
NOTE Confidence: 0.838102579116821  
00:05:44.380 --> 00:05:46.576 Linking early life adversity,  
NOTE Confidence: 0.838102579116821  
00:05:46.576 --> 00:05:49.870 or Conversely early secure attachments with  
NOTE Confidence: 0.838102579116821  
00:05:49.946 --> 00:05:53.327 later health outcomes across the life course.  
NOTE Confidence: 0.838102579116821  
00:05:53.330 --> 00:05:55.898 And when we say health outcomes,  
NOTE Confidence: 0.838102579116821  
00:05:55.900 --> 00:05:58.889 we are very interested in holistic health.  
NOTE Confidence: 0.838102579116821  
00:05:58.890 --> 00:06:00.806 We examine behavioral, cognitive,  
NOTE Confidence: 0.838102579116821  
00:06:00.806 --> 00:06:03.201 mental and physical health outcomes  
NOTE Confidence: 0.838102579116821  
00:06:03.201 --> 00:06:05.568 and one reason we primarily study  
NOTE Confidence: 0.838102579116821  
00:06:05.568 --> 00:06:07.880 MCAT models of child development is  
NOTE Confidence: 0.838102579116821  
00:06:07.880 --> 00:06:09.925 because although human studies have  
NOTE Confidence: 0.838102579116821  
00:06:09.925 --> 00:06:12.590 done a phenomenal job at linking,  
NOTE Confidence: 0.838102579116821

00:06:12.590 --> 00:06:15.746 early life experiences was later health.  
NOTE Confidence: 0.838102579116821

00:06:15.750 --> 00:06:18.468 For various reasons they have not  
NOTE Confidence: 0.838102579116821

00:06:18.468 --> 00:06:21.180 been able to establish causality.  
NOTE Confidence: 0.838102579116821

00:06:21.180 --> 00:06:23.000 Anne with rhesus monkeys.  
NOTE Confidence: 0.838102579116821

00:06:23.000 --> 00:06:24.820 We can do that.  
NOTE Confidence: 0.838102579116821

00:06:24.820 --> 00:06:25.560 One way  
NOTE Confidence: 0.845028519630432

00:06:25.560 --> 00:06:26.670 major way that  
NOTE Confidence: 0.845028519630432

00:06:26.670 --> 00:06:27.768 we conduct these  
NOTE Confidence: 0.845028519630432

00:06:27.770 --> 00:06:29.610 studies is by relying on  
NOTE Confidence: 0.845028519630432

00:06:29.610 --> 00:06:31.082 a longitudinal data set,  
NOTE Confidence: 0.845028519630432

00:06:31.090 --> 00:06:33.514 which I have transferred from the  
NOTE Confidence: 0.845028519630432

00:06:33.514 --> 00:06:35.538 National Institute of Child Health  
NOTE Confidence: 0.845028519630432

00:06:35.538 --> 00:06:37.566 and Human Development to yell I  
NOTE Confidence: 0.845028519630432

00:06:37.566 --> 00:06:40.051 was a senior postdoc in the Lamb  
NOTE Confidence: 0.845028519630432

00:06:40.051 --> 00:06:42.157 of Doctor Steven Sumi until 2017,  
NOTE Confidence: 0.845028519630432

00:06:42.160 --> 00:06:44.380 and when he retired in 2018,

NOTE Confidence: 0.845028519630432  
00:06:44.380 --> 00:06:47.324 which is when I started here at Yale,  
NOTE Confidence: 0.845028519630432  
00:06:47.330 --> 00:06:49.495 I successfully transferred an archive  
NOTE Confidence: 0.845028519630432  
00:06:49.495 --> 00:06:51.660 of biospecimens and behavioral and  
NOTE Confidence: 0.845028519630432  
00:06:51.730 --> 00:06:53.963 health data spanning the 35 years of  
NOTE Confidence: 0.845028519630432  
00:06:53.963 --> 00:06:56.248 the labs history and across that time.  
NOTE Confidence: 0.845028519630432  
00:06:56.250 --> 00:06:59.652 The labs focus was on identifying genetic  
NOTE Confidence: 0.845028519630432  
00:06:59.652 --> 00:07:02.614 and environmental factors that shape  
NOTE Confidence: 0.845028519630432  
00:07:02.614 --> 00:07:04.750 individual developmental trajectories.  
NOTE Confidence: 0.845028519630432  
00:07:04.750 --> 00:07:06.860 As well as examining continuity  
NOTE Confidence: 0.845028519630432  
00:07:06.860 --> 00:07:08.548 and change across development,  
NOTE Confidence: 0.845028519630432  
00:07:08.550 --> 00:07:11.203 and that is what is the relative  
NOTE Confidence: 0.845028519630432  
00:07:11.203 --> 00:07:12.340 stability of individual  
NOTE Confidence: 0.845028519630432  
00:07:12.416 --> 00:07:14.789 differences throughout development.  
NOTE Confidence: 0.845028519630432  
00:07:14.790 --> 00:07:15.924 And of course,  
NOTE Confidence: 0.845028519630432  
00:07:15.924 --> 00:07:18.570 the degree of generalizability of our labs.  
NOTE Confidence: 0.845028519630432

00:07:18.570 --> 00:07:20.460 Findings to both wild monkeys  
NOTE Confidence: 0.845028519630432

00:07:20.460 --> 00:07:22.350 and in particular to humans,  
NOTE Confidence: 0.845028519630432

00:07:22.350 --> 00:07:24.420 and so we're now leveraging this  
NOTE Confidence: 0.845028519630432

00:07:24.420 --> 00:07:27.099 archival data set to begin to answer  
NOTE Confidence: 0.845028519630432

00:07:27.099 --> 00:07:29.149 these causal questions of early  
NOTE Confidence: 0.845028519630432

00:07:29.149 --> 00:07:31.500 life experience and later health and  
NOTE Confidence: 0.845028519630432

00:07:31.500 --> 00:07:33.690 the way we can determine causality,  
NOTE Confidence: 0.845028519630432

00:07:33.690 --> 00:07:35.450 is by randomly assigning infant  
NOTE Confidence: 0.845028519630432

00:07:35.450 --> 00:07:36.858 monkeys to experience different  
NOTE Confidence: 0.845028519630432

00:07:36.858 --> 00:07:38.229 early social experiences.  
NOTE Confidence: 0.845028519630432

00:07:38.230 --> 00:07:40.758 So for the first 8 to 10 months  
NOTE Confidence: 0.845028519630432

00:07:40.758 --> 00:07:43.300 of life each year that rhesus  
NOTE Confidence: 0.845028519630432

00:07:43.300 --> 00:07:46.030 monkeys were born into our colony.  
NOTE Confidence: 0.845028519630432

00:07:46.030 --> 00:07:48.515 Half of them were randomly assigned to  
NOTE Confidence: 0.845028519630432

00:07:48.515 --> 00:07:50.889 the control condition to be mother Period,   
NOTE Confidence: 0.845028519630432

00:07:50.890 --> 00:07:52.972 meaning they are reared in large

NOTE Confidence: 0.845028519630432  
00:07:52.972 --> 00:07:54.360 social groups with mothers,  
NOTE Confidence: 0.845028519630432  
00:07:54.360 --> 00:07:55.392 other adult animals,  
NOTE Confidence: 0.845028519630432  
00:07:55.392 --> 00:07:57.456 and other infants and the other  
NOTE Confidence: 0.845028519630432  
00:07:57.456 --> 00:07:59.557 half were assigned to be nursery.  
NOTE Confidence: 0.845028519630432  
00:07:59.560 --> 00:08:01.396 Weird reared for the first month  
NOTE Confidence: 0.845028519630432  
00:08:01.396 --> 00:08:03.380 of life by human caregivers,  
NOTE Confidence: 0.845028519630432  
00:08:03.380 --> 00:08:05.618 and then given daily pier exposure  
NOTE Confidence: 0.845028519630432  
00:08:05.618 --> 00:08:07.810 in one of two formats.  
NOTE Confidence: 0.845028519630432  
00:08:07.810 --> 00:08:09.592 After the first month of life  
NOTE Confidence: 0.845028519630432  
00:08:09.592 --> 00:08:11.420 being reared by human caregiver.  
NOTE Confidence: 0.845028519630432  
00:08:11.420 --> 00:08:12.545 With bottle feeding,  
NOTE Confidence: 0.845028519630432  
00:08:12.545 --> 00:08:14.795 an incubator monkeys were either exposed,  
NOTE Confidence: 0.845028519630432  
00:08:14.800 --> 00:08:17.648 appears 24 hours a day in the pure  
NOTE Confidence: 0.845028519630432  
00:08:17.648 --> 00:08:20.441 in condition or rear with a cloth  
NOTE Confidence: 0.845028519630432  
00:08:20.441 --> 00:08:22.446 covered surrogate and given pure  
NOTE Confidence: 0.845028519630432

00:08:22.527 --> 00:08:25.327 exposure for a couple of hours a day.  
NOTE Confidence: 0.845028519630432

00:08:25.330 --> 00:08:25.706 Importantly,  
NOTE Confidence: 0.845028519630432

00:08:25.706 --> 00:08:27.962 both of these types of varying  
NOTE Confidence: 0.845028519630432

00:08:27.962 --> 00:08:29.090 conditions were random.  
NOTE Confidence: 0.845028519630432

00:08:29.090 --> 00:08:31.827 They lived in the same housing room  
NOTE Confidence: 0.845028519630432

00:08:31.827 --> 00:08:34.455 and they continue to get pure exposure,  
NOTE Confidence: 0.845028519630432

00:08:34.455 --> 00:08:36.830 but without the important exposure  
NOTE Confidence: 0.845028519630432

00:08:36.830 --> 00:08:39.679 to adults or mothers or other  
NOTE Confidence: 0.845028519630432

00:08:39.679 --> 00:08:42.307 caregivers to form a secure attachment.  
NOTE Confidence: 0.845028519630432

00:08:42.310 --> 00:08:46.050 And in a recent study.  
NOTE Confidence: 0.845028519630432

00:08:46.050 --> 00:08:48.222 Published in the working Paper series  
NOTE Confidence: 0.845028519630432

00:08:48.222 --> 00:08:50.998 in the National Bureau of Economic Research,  
NOTE Confidence: 0.845028519630432

00:08:51.000 --> 00:08:53.286 we found that these very early,  
NOTE Confidence: 0.845028519630432

00:08:53.290 --> 00:08:54.052 secure attachments,  
NOTE Confidence: 0.845028519630432

00:08:54.052 --> 00:08:56.338 those monkeys that were mother reared,  
NOTE Confidence: 0.845028519630432

00:08:56.340 --> 00:08:58.245 had long lasting effects even

NOTE Confidence: 0.845028519630432  
00:08:58.245 --> 00:08:59.388 into the second  
NOTE Confidence: 0.852993592619896  
00:08:59.390 --> 00:09:01.810 generation. So we studied  
NOTE Confidence: 0.852737367153168  
00:09:01.810 --> 00:09:04.645 three decades of data on 650 mother  
NOTE Confidence: 0.852737367153168  
00:09:04.645 --> 00:09:06.977 offspring pairs and what we found  
NOTE Confidence: 0.852737367153168  
00:09:06.977 --> 00:09:09.399 was that if an infant which we're  
NOTE Confidence: 0.852737367153168  
00:09:09.478 --> 00:09:12.278 calling generation was generation two,  
NOTE Confidence: 0.852737367153168  
00:09:12.280 --> 00:09:14.380 was reared with its mother,  
NOTE Confidence: 0.852737367153168  
00:09:14.380 --> 00:09:17.306 and its mother was also mother rear.  
NOTE Confidence: 0.852737367153168  
00:09:17.310 --> 00:09:19.764 So there were two generations of  
NOTE Confidence: 0.852737367153168  
00:09:19.764 --> 00:09:21.400 secure attachments that infant  
NOTE Confidence: 0.852737367153168  
00:09:21.470 --> 00:09:23.158 realized health advantages across  
NOTE Confidence: 0.852737367153168  
00:09:23.158 --> 00:09:25.270 the life course in infancy.  
NOTE Confidence: 0.852737367153168  
00:09:25.270 --> 00:09:28.570 Those infants had a higher rate of  
NOTE Confidence: 0.852737367153168  
00:09:28.570 --> 00:09:31.938 survival in the first month of life.  
NOTE Confidence: 0.852737367153168  
00:09:31.940 --> 00:09:34.454 As adolescents, they had a higher  
NOTE Confidence: 0.852737367153168



00:09:34.454 --> 00:09:37.149 frequency of time in good health,  
NOTE Confidence: 0.852737367153168

00:09:37.150 --> 00:09:39.320 meaning they did not require  
NOTE Confidence: 0.852737367153168

00:09:39.320 --> 00:09:40.188 veterinary interventions,  
NOTE Confidence: 0.852737367153168

00:09:40.190 --> 00:09:42.235 and in adulthood those infants  
NOTE Confidence: 0.852737367153168

00:09:42.235 --> 00:09:44.280 achieved a higher social rank  
NOTE Confidence: 0.852737367153168

00:09:44.348 --> 00:09:47.400 than any of the other infants not  
NOTE Confidence: 0.852737367153168

00:09:47.400 --> 00:09:49.222 experiencing secure attachment or  
NOTE Confidence: 0.852737367153168

00:09:49.222 --> 00:09:51.880 whose mothers did not experience secure  
NOTE Confidence: 0.852737367153168

00:09:51.880 --> 00:09:53.960 attachment and similar to humans  
NOTE Confidence: 0.852737367153168

00:09:53.960 --> 00:09:56.210 are higher social rank in rhesus  
NOTE Confidence: 0.852737367153168

00:09:56.210 --> 00:09:58.888 monkeys is associated with multiple  
NOTE Confidence: 0.852737367153168

00:09:58.888 --> 00:10:01.356 numerous beneficial health outcomes.  
NOTE Confidence: 0.852737367153168

00:10:01.360 --> 00:10:02.608 In the future,  
NOTE Confidence: 0.852737367153168

00:10:02.608 --> 00:10:04.688 we hope with additional funding  
NOTE Confidence: 0.852737367153168

00:10:04.688 --> 00:10:06.790 to identify the biological  
NOTE Confidence: 0.852737367153168

00:10:06.790 --> 00:10:09.770 mechanisms that are responsible for

NOTE Confidence: 0.852737367153168  
00:10:09.770 --> 00:10:11.558 these intergenerational effects.  
NOTE Confidence: 0.852737367153168  
00:10:11.560 --> 00:10:14.470 So we're just beginning to start  
NOTE Confidence: 0.852737367153168  
00:10:14.470 --> 00:10:17.076 looking at DNA methylation across  
NOTE Confidence: 0.852737367153168  
00:10:17.076 --> 00:10:19.991 generations and across the lifespan  
NOTE Confidence: 0.852737367153168  
00:10:19.991 --> 00:10:22.323 at measures of inflammation.  
NOTE Confidence: 0.852737367153168  
00:10:22.330 --> 00:10:25.570 If you had perhaps seen my earlier post  
NOTE Confidence: 0.852737367153168  
00:10:25.570 --> 00:10:28.950 earlier this week on Lactational programming,  
NOTE Confidence: 0.852737367153168  
00:10:28.950 --> 00:10:31.602 that's another mechanism were probing as  
NOTE Confidence: 0.852737367153168  
00:10:31.602 --> 00:10:34.630 well as several other biological mechanisms,  
NOTE Confidence: 0.852737367153168  
00:10:34.630 --> 00:10:37.830 and we also hope to examine potential  
NOTE Confidence: 0.852737367153168  
00:10:37.830 --> 00:10:40.780 interventions for subset of these monkeys.  
NOTE Confidence: 0.852737367153168  
00:10:40.780 --> 00:10:42.196 They experienced enhanced  
NOTE Confidence: 0.852737367153168  
00:10:42.196 --> 00:10:43.140 social interactions,  
NOTE Confidence: 0.852737367153168  
00:10:43.140 --> 00:10:44.514 either naturalistically enhanced  
NOTE Confidence: 0.852737367153168  
00:10:44.514 --> 00:10:46.804 face to face interactions between  
NOTE Confidence: 0.852737367153168

00:10:46.804 --> 00:10:48.350 caregiver and offspring,  
NOTE Confidence: 0.852737367153168

00:10:48.350 --> 00:10:50.262 or experimentally controlled enhanced  
NOTE Confidence: 0.852737367153168

00:10:50.262 --> 00:10:52.652 social interactions in the laboratory.  
NOTE Confidence: 0.852737367153168

00:10:52.660 --> 00:10:54.660 Other monkeys experience later exposure  
NOTE Confidence: 0.852737367153168

00:10:54.660 --> 00:10:56.660 to adults after nursery rearing,  
NOTE Confidence: 0.852737367153168

00:10:56.660 --> 00:10:59.060 and we're also interested in seeing  
NOTE Confidence: 0.852737367153168

00:10:59.060 --> 00:11:02.285 how other factors like the extent of  
NOTE Confidence: 0.852737367153168

00:11:02.285 --> 00:11:04.710 an individual social network might  
NOTE Confidence: 0.852737367153168

00:11:04.794 --> 00:11:07.419 shape it's later health outcomes.  
NOTE Confidence: 0.852737367153168

00:11:07.420 --> 00:11:09.520 I want to thank you very much  
NOTE Confidence: 0.852737367153168

00:11:09.520 --> 00:11:11.831 for your attention and I need to  
NOTE Confidence: 0.852737367153168

00:11:11.831 --> 00:11:13.516 absolutely acknowledge all of the  
NOTE Confidence: 0.852737367153168

00:11:13.516 --> 00:11:15.670 people who made this work possible,  
NOTE Confidence: 0.852737367153168

00:11:15.670 --> 00:11:17.650 as well as the funding sources  
NOTE Confidence: 0.852737367153168

00:11:17.650 --> 00:11:18.970 up until this point.  
NOTE Confidence: 0.852737367153168

00:11:18.970 --> 00:11:20.950 Very happy to take your questions.

NOTE Confidence: 0.852737367153168  
00:11:20.950 --> 00:11:22.270 Thank you so much.  
NOTE Confidence: 0.824783980846405  
00:11:23.150 --> 00:11:26.120 OK, thank you.  
NOTE Confidence: 0.849002769360176  
00:11:26.120 --> 00:11:27.776 I guess we'll.  
NOTE Confidence: 0.849002769360176  
00:11:27.776 --> 00:11:33.320 Is it anyone have a question or should I ask?  
NOTE Confidence: 0.849002769360176  
00:11:33.320 --> 00:11:38.516 Ask the first question? Going once.  
NOTE Confidence: 0.849002769360176  
00:11:38.520 --> 00:11:41.072 So I guess 1 one thing that the  
NOTE Confidence: 0.849002769360176  
00:11:41.072 --> 00:11:43.479 research brings up is I was curious what.  
NOTE Confidence: 0.849002769360176  
00:11:43.480 --> 00:11:45.960 What do you think the lessons are for?  
NOTE Confidence: 0.849002769360176  
00:11:45.960 --> 00:11:47.892 They they care of young children  
NOTE Confidence: 0.849002769360176  
00:11:47.892 --> 00:11:50.238 and in what society can do to sort  
NOTE Confidence: 0.849002769360176  
00:11:50.238 --> 00:11:52.532 of have the most bang for your Buck  
NOTE Confidence: 0.849002769360176  
00:11:52.532 --> 00:11:54.020 in helping young children.  
NOTE Confidence: 0.849002769360176  
00:11:54.020 --> 00:11:55.880 Based on the research you do?  
NOTE Confidence: 0.849002769360176  
00:11:55.880 --> 00:11:57.120 Yeah, that's a great  
NOTE Confidence: 0.805917143821716  
00:11:57.120 --> 00:11:57.766 question Michael.  
NOTE Confidence: 0.805917143821716

00:11:57.766 --> 00:11:59.704 Thank you and I'm really delighted  
NOTE Confidence: 0.805917143821716

00:11:59.704 --> 00:12:02.076 to be a part of this esteemed group.  
NOTE Confidence: 0.805917143821716

00:12:02.080 --> 00:12:04.280 Thank you all for having me at one  
NOTE Confidence: 0.805917143821716

00:12:04.280 --> 00:12:06.789 of the points we made in that paper  
NOTE Confidence: 0.805917143821716

00:12:06.789 --> 00:12:09.356 in the NBR working series. Is that?  
NOTE Confidence: 0.805917143821716

00:12:09.356 --> 00:12:11.654 These findings support previous work in  
NOTE Confidence: 0.805917143821716

00:12:11.654 --> 00:12:13.692 humans that has emphasized investment  
NOTE Confidence: 0.805917143821716

00:12:13.692 --> 00:12:16.506 in the first five years for children,  
NOTE Confidence: 0.805917143821716

00:12:16.510 --> 00:12:18.535 but especially by looking at  
NOTE Confidence: 0.805917143821716

00:12:18.535 --> 00:12:20.155 this model of causality,  
NOTE Confidence: 0.805917143821716

00:12:20.160 --> 00:12:21.648 an or nonhuman primates,  
NOTE Confidence: 0.805917143821716

00:12:21.648 --> 00:12:24.610 which were unable to do in children.  
NOTE Confidence: 0.805917143821716

00:12:24.610 --> 00:12:27.396 We can even more definitively say that  
NOTE Confidence: 0.805917143821716

00:12:27.396 --> 00:12:29.878 investment in the first five years,  
NOTE Confidence: 0.805917143821716

00:12:29.880 --> 00:12:33.800 and I might even extend that to the first 6  
NOTE Confidence: 0.805917143821716

00:12:33.892 --> 00:12:37.627 if we think of the first year prenatal E.

NOTE Confidence: 0.805917143821716

00:12:37.630 --> 00:12:40.724 Doing all that we can to encourage

NOTE Confidence: 0.805917143821716

00:12:40.724 --> 00:12:42.592 policymakers to provide supports

NOTE Confidence: 0.805917143821716

00:12:42.592 --> 00:12:44.824 for young children and their

NOTE Confidence: 0.805917143821716

00:12:44.824 --> 00:12:46.894 families and caregivers will enable

NOTE Confidence: 0.805917143821716

00:12:46.894 --> 00:12:49.380 children to form secure attachments,

NOTE Confidence: 0.805917143821716

00:12:49.380 --> 00:12:51.972 which obviously not only have health

NOTE Confidence: 0.805917143821716

00:12:51.972 --> 00:12:54.350 impacts across that individual lifespan,

NOTE Confidence: 0.805917143821716

00:12:54.350 --> 00:12:56.162 but potentially their grandchildren's

NOTE Confidence: 0.805917143821716

00:12:56.162 --> 00:12:59.940 as well. Though.

NOTE Confidence: 0.889447152614594

00:13:01.240 --> 00:13:03.977 I guess anyone else have another question?

NOTE Confidence: 0.829941511154175

00:13:04.820 --> 00:13:06.754 I'll ask a question, great talk,

NOTE Confidence: 0.829941511154175

00:13:06.754 --> 00:13:07.722 really interesting stuff.

NOTE Confidence: 0.829941511154175

00:13:07.722 --> 00:13:09.010 I was just wondering,

NOTE Confidence: 0.829941511154175

00:13:09.010 --> 00:13:11.138 you mentioned like the very what about

NOTE Confidence: 0.829941511154175

00:13:11.138 --> 00:13:12.872 the variability between macaques, right?

NOTE Confidence: 0.829941511154175

00:13:12.872 --> 00:13:14.160 You showed the overall?  
NOTE Confidence: 0.829941511154175

00:13:14.160 --> 00:13:16.225 Did you notice a lot of variability  
NOTE Confidence: 0.829941511154175

00:13:16.225 --> 00:13:18.212 where some just seem to naturally  
NOTE Confidence: 0.829941511154175

00:13:18.212 --> 00:13:20.280 do better where others didn't? Or  
NOTE Confidence: 0.829941511154175

00:13:20.280 --> 00:13:21.240 they pretty stereotyped  
NOTE Confidence: 0.829941511154175

00:13:21.240 --> 00:13:22.528 across the board, right?  
NOTE Confidence: 0.829941511154175

00:13:22.528 --> 00:13:23.814 Again, a great question.  
NOTE Confidence: 0.829941511154175

00:13:23.814 --> 00:13:25.647 And just like with human children,  
NOTE Confidence: 0.829941511154175

00:13:25.647 --> 00:13:27.381 there is a good amount of  
NOTE Confidence: 0.829941511154175

00:13:27.381 --> 00:13:28.330 individual variability,  
NOTE Confidence: 0.829941511154175

00:13:28.330 --> 00:13:29.940 and so within each type  
NOTE Confidence: 0.829941511154175

00:13:29.940 --> 00:13:31.224 of random ring condition,  
NOTE Confidence: 0.829941511154175

00:13:31.224 --> 00:13:33.190 you know we might see some  
NOTE Confidence: 0.829941511154175

00:13:33.190 --> 00:13:34.840 mother reared infants who maybe.  
NOTE Confidence: 0.829941511154175

00:13:34.840 --> 00:13:37.150 Do require more medical care in adolescence,  
NOTE Confidence: 0.829941511154175

00:13:37.150 --> 00:13:39.138 or maybe have a little bit lower

NOTE Confidence: 0.829941511154175  
00:13:39.138 --> 00:13:40.847 social rank and then seeing  
NOTE Confidence: 0.829941511154175  
00:13:40.847 --> 00:13:42.427 with nursery reared infants,  
NOTE Confidence: 0.829941511154175  
00:13:42.430 --> 00:13:45.070 they might not have as high of stress,  
NOTE Confidence: 0.829941511154175  
00:13:45.070 --> 00:13:45.378 responsivity,  
NOTE Confidence: 0.829941511154175  
00:13:45.378 --> 00:13:47.842 and so when I was talking about how  
NOTE Confidence: 0.829941511154175  
00:13:47.842 --> 00:13:50.020 with by securing future funding we  
NOTE Confidence: 0.829941511154175  
00:13:50.020 --> 00:13:52.132 hope to look at other mechanisms.  
NOTE Confidence: 0.829941511154175  
00:13:52.132 --> 00:13:54.310 Those are the kinds of things  
NOTE Confidence: 0.829941511154175  
00:13:54.376 --> 00:13:55.960 we want to look and see.  
NOTE Confidence: 0.829941511154175  
00:13:55.960 --> 00:13:57.832 If the interventions that we know  
NOTE Confidence: 0.829941511154175  
00:13:57.832 --> 00:13:59.529 have happened might be accounting  
NOTE Confidence: 0.829941511154175  
00:13:59.529 --> 00:14:01.240 for some of that variability.  
NOTE Confidence: 0.829941511154175  
00:14:01.240 --> 00:14:02.890 So there is some variability  
NOTE Confidence: 0.829941511154175  
00:14:02.890 --> 00:14:04.540 in some of the outcomes,  
NOTE Confidence: 0.829941511154175  
00:14:04.540 --> 00:14:05.864 but collectively the group  
NOTE Confidence: 0.829941511154175



00:14:05.864 --> 00:14:07.188 differences are most striking.  
NOTE Confidence: 0.829941511154175

00:14:07.190 --> 00:14:09.465 But we're very interested in  
NOTE Confidence: 0.829941511154175

00:14:09.465 --> 00:14:11.245 individual trajectory's, thanks.  
NOTE Confidence: 0.829941511154175

00:14:11.245 --> 00:14:12.110 So  
NOTE Confidence: 0.765072107315063

00:14:12.110 --> 00:14:14.485 thank you very much for  
NOTE Confidence: 0.765072107315063

00:14:14.485 --> 00:14:16.385 the great talking next.  
NOTE Confidence: 0.765072107315063

00:14:16.390 --> 00:14:19.603 Next I get to introduce cardiac who  
NOTE Confidence: 0.765072107315063

00:14:19.603 --> 00:14:23.530 get to talk about why he's a Unicorn.  
NOTE Confidence: 0.765072107315063

00:14:23.530 --> 00:14:26.398 Besides being an avid sneaker enthusiast.  
NOTE Confidence: 0.765072107315063

00:14:26.400 --> 00:14:28.320 Kartik is this Daniel here  
NOTE Confidence: 0.765072107315063

00:14:28.320 --> 00:14:30.240 but his great research I.  
NOTE Confidence: 0.765072107315063

00:14:30.240 --> 00:14:32.155 I think he's just a  
NOTE Confidence: 0.765072107315063

00:14:32.155 --> 00:14:33.304 wonderfully gifted clinician,  
NOTE Confidence: 0.765072107315063

00:14:33.310 --> 00:14:35.500 especially focusing on kids with  
NOTE Confidence: 0.765072107315063

00:14:35.500 --> 00:14:37.252 developmental disabilities in the  
NOTE Confidence: 0.765072107315063

00:14:37.252 --> 00:14:39.085 intersection with genetics that I've

NOTE Confidence: 0.765072107315063  
00:14:39.085 --> 00:14:40.750 been unlucky enough to supervise  
NOTE Confidence: 0.765072107315063  
00:14:40.750 --> 00:14:42.529 him in the outpatient clinic.  
NOTE Confidence: 0.765072107315063  
00:14:42.530 --> 00:14:44.126 And it's wonderful, say,  
NOTE Confidence: 0.765072107315063  
00:14:44.126 --> 00:14:47.851 get to see him in action doing that and  
NOTE Confidence: 0.765072107315063  
00:14:47.851 --> 00:14:50.756 you're going to see what a wonderful  
NOTE Confidence: 0.765072107315063  
00:14:50.845 --> 00:14:53.287 scientific mind he is also so.  
NOTE Confidence: 0.765072107315063  
00:14:53.290 --> 00:14:54.250 Kartik is up.  
NOTE Confidence: 0.810555577278137  
00:14:56.730 --> 00:14:58.638 I am I think I'm a  
NOTE Confidence: 0.810555577278137  
00:14:58.640 --> 00:15:00.428 fifth year integrated fellow at the  
NOTE Confidence: 0.810555577278137  
00:15:00.428 --> 00:15:02.261 Child Study Center and I'm currently  
NOTE Confidence: 0.810555577278137  
00:15:02.261 --> 00:15:04.019 working in the laboratory of men  
NOTE Confidence: 0.810555577278137  
00:15:04.019 --> 00:15:06.459 incest and I'll present to talk today  
NOTE Confidence: 0.810555577278137  
00:15:06.459 --> 00:15:07.899 titled History System Schizophrenia,  
NOTE Confidence: 0.810555577278137  
00:15:07.900 --> 00:15:09.490 the role of in utero,  
NOTE Confidence: 0.810555577278137  
00:15:09.490 --> 00:15:10.935 disruption of prefrontal cortical dynamics  
NOTE Confidence: 0.810555577278137

00:15:10.935 --> 00:15:13.000 circuitry in the etiology of schizophrenia,  
NOTE Confidence: 0.810555577278137

00:15:13.000 --> 00:15:14.908 a term that I recently learned  
NOTE Confidence: 0.810555577278137

00:15:14.910 --> 00:15:15.550 with hysteresis,  
NOTE Confidence: 0.810555577278137

00:15:15.550 --> 00:15:17.930 which I think is very relevant to the  
NOTE Confidence: 0.810555577278137

00:15:17.930 --> 00:15:20.966 work that we do with the Child study center.  
NOTE Confidence: 0.810555577278137

00:15:20.970 --> 00:15:22.605 What hysteresis is defined as  
NOTE Confidence: 0.810555577278137

00:15:22.605 --> 00:15:24.621 is the dependence of the current  
NOTE Confidence: 0.810555577278137

00:15:24.621 --> 00:15:26.798 state of a system on its history.  
NOTE Confidence: 0.810555577278137

00:15:26.800 --> 00:15:28.774 I think no study best represents  
NOTE Confidence: 0.810555577278137

00:15:28.774 --> 00:15:30.935 that then the Asus study which  
NOTE Confidence: 0.810555577278137

00:15:30.935 --> 00:15:33.257 showed that early life traumas abuse  
NOTE Confidence: 0.810555577278137

00:15:33.257 --> 00:15:34.982 neglect and household dysfunction  
NOTE Confidence: 0.810555577278137

00:15:34.982 --> 00:15:37.616 lead to later changes in behavior  
NOTE Confidence: 0.810555577278137

00:15:37.616 --> 00:15:39.670 and physical and mental health.  
NOTE Confidence: 0.810555577278137

00:15:39.670 --> 00:15:40.450 For example,  
NOTE Confidence: 0.810555577278137

00:15:40.450 --> 00:15:42.530 early life trauma increases your

NOTE Confidence: 0.810555577278137  
00:15:42.530 --> 00:15:44.610 chances of developing diabetes or  
NOTE Confidence: 0.810555577278137  
00:15:44.681 --> 00:15:47.075 heart disease much later in your life.  
NOTE Confidence: 0.810555577278137  
00:15:47.080 --> 00:15:49.246 I think this concept of history's  
NOTE Confidence: 0.810555577278137  
00:15:49.246 --> 00:15:51.627 is also very relevant to biological  
NOTE Confidence: 0.810555577278137  
00:15:51.627 --> 00:15:52.926 psychiatry as well,  
NOTE Confidence: 0.810555577278137  
00:15:52.930 --> 00:15:53.710 specifically schizophrenia.  
NOTE Confidence: 0.810555577278137  
00:15:53.710 --> 00:15:55.270 The neuro developmental theory  
NOTE Confidence: 0.810555577278137  
00:15:55.270 --> 00:15:56.830 of schizophrenia proposes that.  
NOTE Confidence: 0.810555577278137  
00:15:56.830 --> 00:15:58.398 Early life in utero.  
NOTE Confidence: 0.810555577278137  
00:15:58.398 --> 00:16:00.358 Disruption of brain development leads  
NOTE Confidence: 0.810555577278137  
00:16:00.358 --> 00:16:03.126 to the later symptoms of schizophrenia,  
NOTE Confidence: 0.810555577278137  
00:16:03.130 --> 00:16:05.650 which usually occur during early adolescence.  
NOTE Confidence: 0.810555577278137  
00:16:05.650 --> 00:16:06.704 Or, sorry,  
NOTE Confidence: 0.810555577278137  
00:16:06.704 --> 00:16:09.339 late adolescence or early adulthood.  
NOTE Confidence: 0.810555577278137  
00:16:09.340 --> 00:16:11.420 While the data supporting that  
NOTE Confidence: 0.810555577278137

00:16:11.420 --> 00:16:12.668 was initially circumstantial,  
NOTE Confidence: 0.810555577278137

00:16:12.670 --> 00:16:15.166 more recent genetic data has identified  
NOTE Confidence: 0.810555577278137

00:16:15.166 --> 00:16:16.830 a disruption of schizophrenia.  
NOTE Confidence: 0.810555577278137

00:16:16.830 --> 00:16:18.390 Disruption of schizophrenia alleles  
NOTE Confidence: 0.810555577278137

00:16:18.390 --> 00:16:20.340 in the frontal cortex during  
NOTE Confidence: 0.810555577278137

00:16:20.340 --> 00:16:21.820 mid fetal development,  
NOTE Confidence: 0.810555577278137

00:16:21.820 --> 00:16:24.316 and so this begs the larger  
NOTE Confidence: 0.810555577278137

00:16:24.316 --> 00:16:25.148 overarching question,  
NOTE Confidence: 0.810555577278137

00:16:25.150 --> 00:16:26.736 how do neurodevelopmental events  
NOTE Confidence: 0.810555577278137

00:16:26.736 --> 00:16:28.752 in the mid fetal frontal cortex  
NOTE Confidence: 0.810555577278137

00:16:28.752 --> 00:16:31.352 lead to the complex symptoms of  
NOTE Confidence: 0.810555577278137

00:16:31.352 --> 00:16:33.877 schizophrenia in adolescents and adults?  
NOTE Confidence: 0.810555577278137

00:16:33.880 --> 00:16:35.544 To address this question,  
NOTE Confidence: 0.810555577278137

00:16:35.544 --> 00:16:37.624 we were interested in what  
NOTE Confidence: 0.810555577278137

00:16:37.630 --> 00:16:39.110 is uniquely going on.  
NOTE Confidence: 0.810555577278137

00:16:39.110 --> 00:16:41.060 In the mid fetal frontal cortex

NOTE Confidence: 0.810555577278137  
00:16:41.060 --> 00:16:42.650 to address this question,  
NOTE Confidence: 0.810555577278137  
00:16:42.650 --> 00:16:44.345 we used existing human transcriptomic  
NOTE Confidence: 0.810555577278137  
00:16:44.345 --> 00:16:46.796 data from the brain span in psych  
NOTE Confidence: 0.810555577278137  
00:16:46.796 --> 00:16:48.546 encode initiatives that were partially  
NOTE Confidence: 0.810555577278137  
00:16:48.546 --> 00:16:50.807 generated in the system lab and looked  
NOTE Confidence: 0.810555577278137  
00:16:50.807 --> 00:16:52.876 for genes that were enriched in the  
NOTE Confidence: 0.810555577278137  
00:16:52.876 --> 00:16:54.832 frontal lobe or the frontal cortex  
NOTE Confidence: 0.810555577278137  
00:16:54.832 --> 00:16:57.500 compared to the other regions of the brain.  
NOTE Confidence: 0.810555577278137  
00:16:57.500 --> 00:16:59.756 But we identified is a lot of genes  
NOTE Confidence: 0.810555577278137  
00:16:59.756 --> 00:17:01.460 involved in circuit formation,  
NOTE Confidence: 0.810555577278137  
00:17:01.460 --> 00:17:02.120 synapse formation,  
NOTE Confidence: 0.810555577278137  
00:17:02.120 --> 00:17:02.780 Axon guidance,  
NOTE Confidence: 0.810555577278137  
00:17:02.780 --> 00:17:03.770 which was known.  
NOTE Confidence: 0.810555577278137  
00:17:03.770 --> 00:17:05.546 We know that circuits are developing  
NOTE Confidence: 0.810555577278137  
00:17:05.546 --> 00:17:07.400 during this period of development,  
NOTE Confidence: 0.810555577278137

00:17:07.400 --> 00:17:09.470 but with something that was novel.  
NOTE Confidence: 0.810555577278137

00:17:09.470 --> 00:17:10.802 As we identified it,  
NOTE Confidence: 0.810555577278137

00:17:10.802 --> 00:17:12.134 enrichment of genes associated  
NOTE Confidence: 0.810555577278137

00:17:12.134 --> 00:17:13.619 with retinoic acid signaling.  
NOTE Confidence: 0.810555577278137

00:17:13.620 --> 00:17:15.876 Retinoic acid is a vitamin A  
NOTE Confidence: 0.810555577278137

00:17:15.876 --> 00:17:17.806 derivative that's very important for  
NOTE Confidence: 0.810555577278137

00:17:17.806 --> 00:17:19.984 various aspects of not just brain  
NOTE Confidence: 0.810555577278137

00:17:19.984 --> 00:17:22.190 development but whole body development.  
NOTE Confidence: 0.810555577278137

00:17:22.190 --> 00:17:24.165 This finding was significant and  
NOTE Confidence: 0.810555577278137

00:17:24.165 --> 00:17:26.139 clinically because disruption of retinoic  
NOTE Confidence: 0.810555577278137

00:17:26.140 --> 00:17:27.880 acid signaling has been associated  
NOTE Confidence: 0.810555577278137

00:17:27.880 --> 00:17:30.490 with an increased risk of schizophrenia.  
NOTE Confidence: 0.810555577278137

00:17:30.490 --> 00:17:30.984 Specifically,  
NOTE Confidence: 0.810555577278137

00:17:30.984 --> 00:17:33.948 in cases with severe cognitive deficits.  
NOTE Confidence: 0.810555577278137

00:17:33.950 --> 00:17:36.556 So then we asked our next question  
NOTE Confidence: 0.810555577278137

00:17:36.556 --> 00:17:38.780 what is the role of retinoic acid

NOTE Confidence: 0.810555577278137

00:17:38.780 --> 00:17:40.800 signaling in mid fetal frontal cortex?

NOTE Confidence: 0.810555577278137

00:17:40.800 --> 00:17:42.893 What is retinoic acid doing and to

NOTE Confidence: 0.810555577278137

00:17:42.893 --> 00:17:45.296 study this we did various studies but

NOTE Confidence: 0.810555577278137

00:17:45.296 --> 00:17:47.462 I'll focus on one specific finding

NOTE Confidence: 0.810555577278137

00:17:47.528 --> 00:17:49.663 that we found in the early post

NOTE Confidence: 0.810555577278137

00:17:49.663 --> 00:17:51.555 Natal mouse which is very similar

NOTE Confidence: 0.810555577278137

00:17:51.555 --> 00:17:53.180 to mid fetal human development.

NOTE Confidence: 0.810555577278137

00:17:53.180 --> 00:17:55.196 What we looked at was connectivity

NOTE Confidence: 0.810555577278137

00:17:55.196 --> 00:17:57.214 between the front of the brain

NOTE Confidence: 0.810555577278137

00:17:57.214 --> 00:17:59.044 to other regions of the brain.

NOTE Confidence: 0.810555577278137

00:17:59.050 --> 00:18:01.006 We found a very selective deficit.

NOTE Confidence: 0.847435474395752

00:18:01.010 --> 00:18:03.116 We found a dramatic reduction of

NOTE Confidence: 0.847435474395752

00:18:03.116 --> 00:18:05.299 connectivity between the front of the brain.

NOTE Confidence: 0.847435474395752

00:18:05.300 --> 00:18:07.468 The prefrontal cortex and the thalamus on the

NOTE Confidence: 0.847435474395752

00:18:07.468 --> 00:18:09.859 left is the control of the wild type mouse.

NOTE Confidence: 0.847435474395752



00:18:09.860 --> 00:18:12.155 On the right is a mouse or we specifically  
NOTE Confidence: 0.847435474395752

00:18:12.155 --> 00:18:13.880 reduce retinoic acid signaling just in  
NOTE Confidence: 0.847435474395752

00:18:13.880 --> 00:18:16.107 the front of the brain and what you  
NOTE Confidence: 0.847435474395752

00:18:16.107 --> 00:18:18.175 can see here is a dramatic reduction in  
NOTE Confidence: 0.847435474395752

00:18:18.175 --> 00:18:19.825 the amount of connections between the  
NOTE Confidence: 0.847435474395752

00:18:19.825 --> 00:18:22.710 front of the brain and the thalamus.  
NOTE Confidence: 0.847435474395752

00:18:22.710 --> 00:18:25.425 And this is very interesting from a  
NOTE Confidence: 0.847435474395752

00:18:25.425 --> 00:18:27.005 clinical perspective because reduce  
NOTE Confidence: 0.847435474395752

00:18:27.005 --> 00:18:28.801 connections between the frontal cortex  
NOTE Confidence: 0.847435474395752

00:18:28.801 --> 00:18:31.242 and the thalamus have been described in  
NOTE Confidence: 0.847435474395752

00:18:31.242 --> 00:18:33.438 patients with schizophrenia both early onset.  
NOTE Confidence: 0.847435474395752

00:18:33.440 --> 00:18:35.360 So patients within four weeks of  
NOTE Confidence: 0.847435474395752

00:18:35.360 --> 00:18:37.555 diagnosis as well as patients with  
NOTE Confidence: 0.847435474395752

00:18:37.555 --> 00:18:40.093 chronic schizophrenia as well in addition,  
NOTE Confidence: 0.847435474395752

00:18:40.100 --> 00:18:42.230 work that was actually done here  
NOTE Confidence: 0.847435474395752

00:18:42.230 --> 00:18:44.170 at Yale by Alan Tisha.

NOTE Confidence: 0.847435474395752

00:18:44.170 --> 00:18:46.390 Bitch showed that patients that later

NOTE Confidence: 0.847435474395752

00:18:46.390 --> 00:18:47.926 developed schizophrenia during their

NOTE Confidence: 0.847435474395752

00:18:47.926 --> 00:18:49.916 prodromal stage during their adolescence

NOTE Confidence: 0.847435474395752

00:18:49.916 --> 00:18:51.841 period showed reduced connectivity between

NOTE Confidence: 0.847435474395752

00:18:51.841 --> 00:18:54.553 the frontal cortex of the thalamus as well.

NOTE Confidence: 0.847435474395752

00:18:54.560 --> 00:18:55.787 And this circuit,

NOTE Confidence: 0.847435474395752

00:18:55.787 --> 00:18:57.832 the connection between the front

NOTE Confidence: 0.847435474395752

00:18:57.832 --> 00:19:00.309 of the brain in the thalamus,

NOTE Confidence: 0.847435474395752

00:19:00.310 --> 00:19:02.968 is deeply important for cognition and

NOTE Confidence: 0.847435474395752

00:19:02.968 --> 00:19:05.660 has been associated with IQ and is

NOTE Confidence: 0.847435474395752

00:19:05.660 --> 00:19:07.779 involved in working memory perspective

NOTE Confidence: 0.847435474395752

00:19:07.779 --> 00:19:10.377 clinical studies in kids found that

NOTE Confidence: 0.847435474395752

00:19:10.377 --> 00:19:12.980 patients that kids that later develop

NOTE Confidence: 0.847435474395752

00:19:12.980 --> 00:19:15.085 psychotic disorders showed a progressive

NOTE Confidence: 0.847435474395752

00:19:15.148 --> 00:19:17.710 decline in IQ starting as early somewhere

NOTE Confidence: 0.847435474395752

00:19:17.710 --> 00:19:20.010 between 818 months in four years.  
NOTE Confidence: 0.847435474395752

00:19:20.010 --> 00:19:22.810 This is seen both in full scale  
NOTE Confidence: 0.847435474395752

00:19:22.900 --> 00:19:25.504 IQ verbal IQ in non verbal IQ.  
NOTE Confidence: 0.847435474395752

00:19:25.510 --> 00:19:27.445 So even though diagnosis of  
NOTE Confidence: 0.847435474395752

00:19:27.445 --> 00:19:29.380 schizophrenia can occur much later,  
NOTE Confidence: 0.847435474395752

00:19:29.380 --> 00:19:31.588 they are actually showing cognitive decline  
NOTE Confidence: 0.847435474395752

00:19:31.588 --> 00:19:33.640 decades before there later diagnosis.  
NOTE Confidence: 0.847435474395752

00:19:33.640 --> 00:19:35.956 So putting all this data together,  
NOTE Confidence: 0.847435474395752

00:19:35.960 --> 00:19:38.529 what we propose is that disruption of  
NOTE Confidence: 0.847435474395752

00:19:38.529 --> 00:19:40.552 genes associated with retinoic acid  
NOTE Confidence: 0.847435474395752

00:19:40.552 --> 00:19:42.697 signaling lead to reduce connectivity  
NOTE Confidence: 0.847435474395752

00:19:42.697 --> 00:19:44.858 between the front of the brain.  
NOTE Confidence: 0.847435474395752

00:19:44.860 --> 00:19:46.730 The prefrontal cortex in the  
NOTE Confidence: 0.847435474395752

00:19:46.730 --> 00:19:48.600 mediodorsal thalamus and this occurs  
NOTE Confidence: 0.847435474395752

00:19:48.666 --> 00:19:50.278 during in utero development.  
NOTE Confidence: 0.847435474395752

00:19:50.280 --> 00:19:51.844 Specifically during mid field

NOTE Confidence: 0.847435474395752

00:19:51.844 --> 00:19:53.799 development or the 2nd trimester.

NOTE Confidence: 0.847435474395752

00:19:53.800 --> 00:19:55.690 And this explains the early

NOTE Confidence: 0.847435474395752

00:19:55.690 --> 00:19:57.202 cognitive symptoms in schizophrenia,

NOTE Confidence: 0.847435474395752

00:19:57.210 --> 00:19:59.110 which manifest as early as

NOTE Confidence: 0.847435474395752

00:19:59.110 --> 00:20:01.095 one to two years of life.

NOTE Confidence: 0.847435474395752

00:20:01.095 --> 00:20:03.090 But we are interested in how this

NOTE Confidence: 0.847435474395752

00:20:03.152 --> 00:20:05.288 specific deficit can lead to later

NOTE Confidence: 0.847435474395752

00:20:05.288 --> 00:20:07.727 changes that underlie the positive and

NOTE Confidence: 0.847435474395752

00:20:07.727 --> 00:20:09.627 negative symptoms of schizophrenia.

NOTE Confidence: 0.847435474395752

00:20:09.630 --> 00:20:11.748 We propose is that this selective

NOTE Confidence: 0.847435474395752

00:20:11.748 --> 00:20:13.160 disruption of this circuit,

NOTE Confidence: 0.847435474395752

00:20:13.160 --> 00:20:15.976 that which is due to retinoic acid signaling,

NOTE Confidence: 0.847435474395752

00:20:15.980 --> 00:20:17.039 leads to secondary,

NOTE Confidence: 0.847435474395752

00:20:17.039 --> 00:20:19.510 can pensa Tori changes in the brain,

NOTE Confidence: 0.847435474395752

00:20:19.510 --> 00:20:21.490 and this has been previously described

NOTE Confidence: 0.847435474395752

00:20:21.490 --> 00:20:23.631 in other studies that show increased  
NOTE Confidence: 0.847435474395752

00:20:23.631 --> 00:20:25.151 connectivity between the thalamus  
NOTE Confidence: 0.847435474395752

00:20:25.151 --> 00:20:27.279 and other regions of the brain,  
NOTE Confidence: 0.847435474395752

00:20:27.280 --> 00:20:29.040 and these can pensa Tori.  
NOTE Confidence: 0.847435474395752

00:20:29.040 --> 00:20:30.810 Changes may underlie the later  
NOTE Confidence: 0.847435474395752

00:20:30.810 --> 00:20:31.518 positive symptoms.  
NOTE Confidence: 0.847435474395752

00:20:31.520 --> 00:20:32.320 Of schizophrenia,  
NOTE Confidence: 0.847435474395752

00:20:32.320 --> 00:20:33.920 specifically hallucinations or delusions,  
NOTE Confidence: 0.847435474395752

00:20:33.920 --> 00:20:36.320 but this is also very exciting.  
NOTE Confidence: 0.847435474395752

00:20:36.320 --> 00:20:38.148 From an interventional perspective,  
NOTE Confidence: 0.847435474395752

00:20:38.148 --> 00:20:40.433 the prodromal period of schizophrenia  
NOTE Confidence: 0.847435474395752

00:20:40.433 --> 00:20:42.702 is historically been thought to be  
NOTE Confidence: 0.847435474395752

00:20:42.702 --> 00:20:45.637 just a couple years before the onset of  
NOTE Confidence: 0.847435474395752

00:20:45.637 --> 00:20:47.517 full positive symptoms and diagnosis.  
NOTE Confidence: 0.847435474395752

00:20:47.520 --> 00:20:47.972 However,  
NOTE Confidence: 0.847435474395752

00:20:47.972 --> 00:20:50.232 the prodromal period of schizophrenia

NOTE Confidence: 0.847435474395752  
00:20:50.232 --> 00:20:53.203 now can be extended to in euro  
NOTE Confidence: 0.847435474395752  
00:20:53.203 --> 00:20:55.381 development and this gives us an  
NOTE Confidence: 0.847435474395752  
00:20:55.381 --> 00:20:57.667 extremely long period to try to  
NOTE Confidence: 0.847435474395752  
00:20:57.667 --> 00:20:59.928 intervene to prevent or mitigate the  
NOTE Confidence: 0.847435474395752  
00:20:59.928 --> 00:21:01.560 morbidity of schizophrenia specifically.  
NOTE Confidence: 0.847435474395752  
00:21:01.560 --> 00:21:03.984 If we can target this reduced  
NOTE Confidence: 0.847435474395752  
00:21:03.984 --> 00:21:05.600 connectivity between the thalamus  
NOTE Confidence: 0.847435474395752  
00:21:05.666 --> 00:21:07.270 in the prefrontal cortex,  
NOTE Confidence: 0.827691733837128  
00:21:07.270 --> 00:21:09.718 we can hopefully reduce the early  
NOTE Confidence: 0.827691733837128  
00:21:09.718 --> 00:21:11.350 cognitive symptoms of schizophrenia,  
NOTE Confidence: 0.827691733837128  
00:21:11.350 --> 00:21:14.165 as well as preventing the later secondary  
NOTE Confidence: 0.827691733837128  
00:21:14.165 --> 00:21:16.160 circuit changes and completely preventing  
NOTE Confidence: 0.827691733837128  
00:21:16.215 --> 00:21:18.290 the positive symptoms of schizophrenia.  
NOTE Confidence: 0.827691733837128  
00:21:18.290 --> 00:21:21.138 Currently, I think one approach that we  
NOTE Confidence: 0.827691733837128  
00:21:21.140 --> 00:21:24.742 can use to kind of target this early life.  
NOTE Confidence: 0.827691733837128

00:21:24.742 --> 00:21:26.278 Disconnectivity and cognitive symptoms  
NOTE Confidence: 0.827691733837128

00:21:26.278 --> 00:21:28.489 is brain training cognitive training.  
NOTE Confidence: 0.827691733837128

00:21:28.490 --> 00:21:30.545 Try to work on cognitive  
NOTE Confidence: 0.827691733837128

00:21:30.545 --> 00:21:32.189 skills in working memory.  
NOTE Confidence: 0.827691733837128

00:21:32.190 --> 00:21:34.038 To try to strengthen this circuit,  
NOTE Confidence: 0.827691733837128

00:21:34.040 --> 00:21:35.993 hopefully in the future using deep brain  
NOTE Confidence: 0.827691733837128

00:21:35.993 --> 00:21:37.430 stimulation or pharmacological interventions,  
NOTE Confidence: 0.827691733837128

00:21:37.430 --> 00:21:39.266 we can directly target and strengthen  
NOTE Confidence: 0.827691733837128

00:21:39.266 --> 00:21:40.810 this circuit early in life,  
NOTE Confidence: 0.827691733837128

00:21:40.810 --> 00:21:42.964 and this is something that I'm  
NOTE Confidence: 0.827691733837128

00:21:42.964 --> 00:21:45.169 interested in pursuing in the future.  
NOTE Confidence: 0.827691733837128

00:21:45.170 --> 00:21:47.850 So I'd like to acknowledge the large number  
NOTE Confidence: 0.827691733837128

00:21:47.850 --> 00:21:50.300 of people are involved in this study,  
NOTE Confidence: 0.827691733837128

00:21:50.300 --> 00:21:52.847 especially members of the test in lab as well  
NOTE Confidence: 0.827691733837128

00:21:52.847 --> 00:21:55.429 as our collaborators and funding sources,  
NOTE Confidence: 0.827691733837128

00:21:55.430 --> 00:21:57.754 and I'd like to specifically think this

NOTE Confidence: 0.827691733837128  
00:21:57.754 --> 00:21:59.878 element program the Child Study Center,  
NOTE Confidence: 0.827691733837128  
00:21:59.880 --> 00:22:01.585 which was essential for the  
NOTE Confidence: 0.827691733837128  
00:22:01.585 --> 00:22:02.949 completion of this project,  
NOTE Confidence: 0.827691733837128  
00:22:02.950 --> 00:22:04.318 specifically Michael Block Northeast,  
NOTE Confidence: 0.827691733837128  
00:22:04.318 --> 00:22:06.373 to be tiny, Cologne and Doctor  
NOTE Confidence: 0.827691733837128  
00:22:06.373 --> 00:22:08.078 Linda Maze for their support.  
NOTE Confidence: 0.827691733837128  
00:22:08.080 --> 00:22:08.770 Thank you.  
NOTE Confidence: 0.885946810245514  
00:22:10.320 --> 00:22:12.258 Thank thank you  
NOTE Confidence: 0.885946810245514  
00:22:12.260 --> 00:22:14.868 for the excellent presentation.  
NOTE Confidence: 0.885946810245514  
00:22:14.868 --> 00:22:20.000 Will give a few seconds for people to.  
NOTE Confidence: 0.885946810245514  
00:22:20.000 --> 00:22:22.112 I guess we have a question  
NOTE Confidence: 0.885946810245514  
00:22:22.112 --> 00:22:23.168 from Tom Fernandez.  
NOTE Confidence: 0.885946810245514  
00:22:23.170 --> 00:22:25.490 You want to unmute yourself  
NOTE Confidence: 0.885946810245514  
00:22:25.490 --> 00:22:28.000 and ask the question. Not sure  
NOTE Confidence: 0.797715485095978  
00:22:28.000 --> 00:22:29.626 card. So now that retinoic  
NOTE Confidence: 0.797715485095978



00:22:29.626 --> 00:22:31.250 acid is implicated, are you  
NOTE Confidence: 0.797715485095978

00:22:31.250 --> 00:22:32.875 aware of any treatment studies  
NOTE Confidence: 0.797715485095978

00:22:32.875 --> 00:22:34.500 plans that target this pathway?  
NOTE Confidence: 0.797715485095978

00:22:34.500 --> 00:22:36.130 Or are you planning to  
NOTE Confidence: 0.797715485095978

00:22:36.130 --> 00:22:37.750 stay? Yeah yeah, it's a  
NOTE Confidence: 0.797715485095978

00:22:37.750 --> 00:22:38.400 great question.  
NOTE Confidence: 0.797715485095978

00:22:38.400 --> 00:22:40.352 There are some groups in Australia  
NOTE Confidence: 0.797715485095978

00:22:40.352 --> 00:22:41.655 there considering retinoic acid  
NOTE Confidence: 0.797715485095978

00:22:41.655 --> 00:22:43.280 as a possible later intervention.  
NOTE Confidence: 0.797715485095978

00:22:43.280 --> 00:22:45.876 They were building up a study that showed  
NOTE Confidence: 0.797715485095978

00:22:45.876 --> 00:22:47.790 during the 2nd trimester of pregnancy  
NOTE Confidence: 0.797715485095978

00:22:47.790 --> 00:22:49.780 and this was a perspective trial.  
NOTE Confidence: 0.797715485095978

00:22:49.780 --> 00:22:52.160 That page like mothers at later had  
NOTE Confidence: 0.797715485095978

00:22:52.160 --> 00:22:53.537 children with schizophrenia show  
NOTE Confidence: 0.797715485095978

00:22:53.537 --> 00:22:55.295 to reduce level of retinoic acid.  
NOTE Confidence: 0.797715485095978

00:22:55.300 --> 00:22:57.617 It wasn't significant this small study but.

NOTE Confidence: 0.797715485095978  
00:22:57.620 --> 00:22:58.846 That trended that way,  
NOTE Confidence: 0.797715485095978  
00:22:58.846 --> 00:23:01.305 the issue is retinoic acid is involved in  
NOTE Confidence: 0.797715485095978  
00:23:01.305 --> 00:23:03.137 so many aspects of development, right?  
NOTE Confidence: 0.797715485095978  
00:23:03.137 --> 00:23:05.216 And so I didn't get go into  
NOTE Confidence: 0.797715485095978  
00:23:05.216 --> 00:23:06.828 the basic science of it.  
NOTE Confidence: 0.797715485095978  
00:23:06.830 --> 00:23:08.075 It's in my poster,  
NOTE Confidence: 0.797715485095978  
00:23:08.075 --> 00:23:09.700 but basically retinoic acid is  
NOTE Confidence: 0.797715485095978  
00:23:09.700 --> 00:23:11.612 exquisitely controlled by a set of  
NOTE Confidence: 0.797715485095978  
00:23:11.612 --> 00:23:13.274 like activating genes that produce it,  
NOTE Confidence: 0.797715485095978  
00:23:13.280 --> 00:23:15.513 and jeans that degrade it to get  
NOTE Confidence: 0.797715485095978  
00:23:15.513 --> 00:23:17.268 it really localized in one area.  
NOTE Confidence: 0.797715485095978  
00:23:17.270 --> 00:23:19.885 So to really to be able to target retinoic  
NOTE Confidence: 0.797715485095978  
00:23:19.885 --> 00:23:22.488 acid would have to do it during pregnancy,  
NOTE Confidence: 0.797715485095978  
00:23:22.490 --> 00:23:24.326 and that would be pretty difficult.  
NOTE Confidence: 0.797715485095978  
00:23:24.330 --> 00:23:26.170 We show in our paper that  
NOTE Confidence: 0.797715485095978

00:23:26.170 --> 00:23:27.726 if you force like have.  
NOTE Confidence: 0.797715485095978

00:23:27.726 --> 00:23:29.286 Extra expression of retinoic acid.  
NOTE Confidence: 0.797715485095978

00:23:29.290 --> 00:23:30.650 You get extra connectivity and  
NOTE Confidence: 0.797715485095978

00:23:30.650 --> 00:23:32.770 so it could be a possibility,  
NOTE Confidence: 0.797715485095978

00:23:32.770 --> 00:23:34.975 but I think anytime you intervene with  
NOTE Confidence: 0.797715485095978

00:23:34.975 --> 00:23:37.192 a child or during pregnancy you have  
NOTE Confidence: 0.797715485095978

00:23:37.192 --> 00:23:39.082 to be really confident that you're  
NOTE Confidence: 0.797715485095978

00:23:39.082 --> 00:23:41.610 going to make a be able to intervene.  
NOTE Confidence: 0.797715485095978

00:23:41.610 --> 00:23:43.514 I'm hoping that you know that's why  
NOTE Confidence: 0.797715485095978

00:23:43.514 --> 00:23:45.040 maybe later life intervention on  
NOTE Confidence: 0.797715485095978

00:23:45.040 --> 00:23:47.014 that circuit instead of like just  
NOTE Confidence: 0.797715485095978

00:23:47.014 --> 00:23:48.878 retinoic acid focus just strengthen.  
NOTE Confidence: 0.797715485095978

00:23:48.880 --> 00:23:50.455 That circuit could be more  
NOTE Confidence: 0.797715485095978

00:23:50.455 --> 00:23:51.957 effective strategy, but who knows?  
NOTE Confidence: 0.797715485095978

00:23:51.957 --> 00:23:54.343 I think there is a possibility of early  
NOTE Confidence: 0.797715485095978

00:23:54.343 --> 00:23:56.450 life like in Euro intervention to to

NOTE Confidence: 0.797715485095978  
00:23:56.450 --> 00:23:58.678 kind of intervene on that circuit.  
NOTE Confidence: 0.789360105991364  
00:24:00.220 --> 00:24:02.208 Hartikainen question first of all, thank  
NOTE Confidence: 0.789360105991364  
00:24:02.210 --> 00:24:04.190 you. That was really, really fascinating.  
NOTE Confidence: 0.789360105991364  
00:24:04.190 --> 00:24:06.176 I'm really glad to see you  
NOTE Confidence: 0.789360105991364  
00:24:06.176 --> 00:24:07.832 focusing on schizophrenia. I think.  
NOTE Confidence: 0.789360105991364  
00:24:07.832 --> 00:24:09.818 I think it's an understudied area.  
NOTE Confidence: 0.789360105991364  
00:24:09.820 --> 00:24:11.804 Thank you. What do we know?  
NOTE Confidence: 0.789360105991364  
00:24:11.804 --> 00:24:13.790 What retinoic acid might interact with  
NOTE Confidence: 0.789360105991364  
00:24:13.790 --> 00:24:15.118 in the brain? What  
NOTE Confidence: 0.789360105991364  
00:24:15.120 --> 00:24:16.440 other components? Sure, sure,  
NOTE Confidence: 0.789360105991364  
00:24:16.440 --> 00:24:18.090 so the testing lab is.  
NOTE Confidence: 0.789360105991364  
00:24:18.090 --> 00:24:19.750 It's like a neurogenetics lab.  
NOTE Confidence: 0.789360105991364  
00:24:19.750 --> 00:24:21.405 Like we really interesting like  
NOTE Confidence: 0.789360105991364  
00:24:21.405 --> 00:24:23.060 signaling pathways downstream a bit.  
NOTE Confidence: 0.789360105991364  
00:24:23.060 --> 00:24:25.046 And so in our initial study,  
NOTE Confidence: 0.789360105991364

00:24:25.050 --> 00:24:27.262 we actually identified a lot of jeans  
NOTE Confidence: 0.789360105991364

00:24:27.262 --> 00:24:29.019 that weren't directly retinoic acid,  
NOTE Confidence: 0.789360105991364

00:24:29.020 --> 00:24:30.386 like related proteins, but.  
NOTE Confidence: 0.789360105991364

00:24:30.386 --> 00:24:32.188 Can be regulated by retinoic  
NOTE Confidence: 0.789360105991364

00:24:32.188 --> 00:24:34.726 acid and so there's kind of two  
NOTE Confidence: 0.789360105991364

00:24:34.726 --> 00:24:36.538 studies that we've we've submitted.  
NOTE Confidence: 0.789360105991364

00:24:36.538 --> 00:24:38.710 One is looking at gene downstream,  
NOTE Confidence: 0.789360105991364

00:24:38.710 --> 00:24:39.432 retinoic acid.  
NOTE Confidence: 0.789360105991364

00:24:39.432 --> 00:24:40.515 That's important for  
NOTE Confidence: 0.789360105991364

00:24:40.515 --> 00:24:41.598 Synapse formation directly,  
NOTE Confidence: 0.789360105991364

00:24:41.600 --> 00:24:43.410 and actually shows a human  
NOTE Confidence: 0.789360105991364

00:24:43.410 --> 00:24:44.134 specific expression.  
NOTE Confidence: 0.789360105991364

00:24:44.140 --> 00:24:46.100 Human and chimpanzee specific expression  
NOTE Confidence: 0.789360105991364

00:24:46.100 --> 00:24:48.480 that actually not present macaques and so,  
NOTE Confidence: 0.789360105991364

00:24:48.480 --> 00:24:51.014 and it also seems to regulate certain  
NOTE Confidence: 0.789360105991364

00:24:51.014 --> 00:24:52.826 other interesting genes including genes,

NOTE Confidence: 0.789360105991364

00:24:52.826 --> 00:24:54.802 plane, autism in jeans and schizophrenia.

NOTE Confidence: 0.789360105991364

00:24:54.802 --> 00:24:57.987 So I have a couple jeans that I cherry

NOTE Confidence: 0.789360105991364

00:24:57.987 --> 00:25:00.057 picked that I'm specifically interesting,

NOTE Confidence: 0.789360105991364

00:25:00.060 --> 00:25:00.409 interesting.

NOTE Confidence: 0.789360105991364

00:25:00.409 --> 00:25:01.456 Following up, yeah,

NOTE Confidence: 0.789360105991364

00:25:01.456 --> 00:25:03.201 we're still trying to kind

NOTE Confidence: 0.789360105991364

00:25:03.201 --> 00:25:04.909 of flesh out this network.

NOTE Confidence: 0.789360105991364

00:25:04.910 --> 00:25:06.314 What retinoic acid specifically

NOTE Confidence: 0.789360105991364

00:25:06.314 --> 00:25:08.069 regulating in the front of

NOTE Confidence: 0.789360105991364

00:25:08.069 --> 00:25:09.668 the brain at that period.

NOTE Confidence: 0.798035621643066

00:25:10.260 --> 00:25:12.192 And I guess he just above question

NOTE Confidence: 0.798035621643066

00:25:12.192 --> 00:25:14.235 is what are there any other

NOTE Confidence: 0.798035621643066

00:25:14.235 --> 00:25:15.771 sort of psychiatric disorders

NOTE Confidence: 0.798035621643066

00:25:15.771 --> 00:25:18.157 that retinoic acid and kind of

NOTE Confidence: 0.798035621643066

00:25:18.157 --> 00:25:19.327 fetal cortical development?

NOTE Confidence: 0.798035621643066

00:25:19.330 --> 00:25:20.398 Irrelevant for sure.  
NOTE Confidence: 0.798035621643066

00:25:20.398 --> 00:25:23.170 I mean in this case frame line 22,  
NOTE Confidence: 0.798035621643066

00:25:23.170 --> 00:25:24.220 Q 11 is  
NOTE Confidence: 0.798035621643066

00:25:24.220 --> 00:25:26.308 thought to be a retinoic acid  
NOTE Confidence: 0.798035621643066

00:25:26.308 --> 00:25:28.060 disregulation when they look at  
NOTE Confidence: 0.798035621643066

00:25:28.060 --> 00:25:29.457 actually the heart abnormalities.  
NOTE Confidence: 0.798035621643066

00:25:29.457 --> 00:25:31.550 So I hypothesize maybe that underlies  
NOTE Confidence: 0.798035621643066

00:25:31.550 --> 00:25:33.290 their increased chance of schizophrenia,  
NOTE Confidence: 0.798035621643066

00:25:33.290 --> 00:25:35.140 certain retinoic acid associated genes  
NOTE Confidence: 0.798035621643066

00:25:35.140 --> 00:25:37.479 are also implicated in autism as well.  
NOTE Confidence: 0.798035621643066

00:25:37.480 --> 00:25:39.580 I mean, there's so much similarity.  
NOTE Confidence: 0.798035621643066

00:25:39.580 --> 00:25:42.450 I think both genetically as well as maybe.  
NOTE Confidence: 0.798035621643066

00:25:42.450 --> 00:25:44.312 If you look at just like the  
NOTE Confidence: 0.798035621643066

00:25:44.312 --> 00:25:45.740 social kind of symptoms,  
NOTE Confidence: 0.798035621643066

00:25:45.740 --> 00:25:47.833 the apathy that you see in the  
NOTE Confidence: 0.798035621643066

00:25:47.833 --> 00:25:48.730 negative symptoms schizophrenia.

NOTE Confidence: 0.798035621643066

00:25:48.730 --> 00:25:49.922 So there's definitely jeans

NOTE Confidence: 0.798035621643066

00:25:49.922 --> 00:25:51.114 related during the week.

NOTE Confidence: 0.798035621643066

00:25:51.120 --> 00:25:52.692 Acid there involved in that as

NOTE Confidence: 0.798035621643066

00:25:52.692 --> 00:25:54.410 well as early neural development.

NOTE Confidence: 0.798035621643066

00:25:54.410 --> 00:25:55.905 Microcephaly also seems to affect

NOTE Confidence: 0.798035621643066

00:25:55.905 --> 00:25:57.400 genes involved in a retinoic

NOTE Confidence: 0.822806225882636

00:25:57.400 --> 00:25:59.665 acid. Well thank thank you

NOTE Confidence: 0.822806225882636

00:25:59.665 --> 00:26:01.477 for the great presentation.

NOTE Confidence: 0.822806225882636

00:26:01.480 --> 00:26:03.670 Next up, we have your compatriot

NOTE Confidence: 0.822806225882636

00:26:03.670 --> 00:26:05.130 in this only program.

NOTE Confidence: 0.822806225882636

00:26:05.130 --> 00:26:07.368 Emily Olson, who's also a fifth

NOTE Confidence: 0.822806225882636

00:26:07.368 --> 00:26:09.335 year in the Soulmate Integrated

NOTE Confidence: 0.822806225882636

00:26:09.335 --> 00:26:12.100 Program and the I guess the thing

NOTE Confidence: 0.822806225882636

00:26:12.100 --> 00:26:14.616 that makes her a Unicorn is to me.

NOTE Confidence: 0.822806225882636

00:26:14.620 --> 00:26:17.112 He is. I've had the pleasure of

NOTE Confidence: 0.822806225882636



00:26:17.112 --> 00:26:19.370 working with her in that thread.

NOTE Confidence: 0.822806225882636

00:26:19.370 --> 00:26:21.596 So CD Clinic and specifically looking

NOTE Confidence: 0.822806225882636

00:26:21.596 --> 00:26:23.876 at treating kids with body focused

NOTE Confidence: 0.822806225882636

00:26:23.876 --> 00:26:26.066 repetitive behaviors and ADHD and not

NOTE Confidence: 0.822806225882636

00:26:26.066 --> 00:26:29.281 only is she going to give a first rate

NOTE Confidence: 0.822806225882636

00:26:29.281 --> 00:26:31.010 genetics presentation on the subject.

NOTE Confidence: 0.822806225882636

00:26:31.010 --> 00:26:33.080 But he's really interested and she's

NOTE Confidence: 0.822806225882636

00:26:33.080 --> 00:26:35.569 done a lot already to help make our

NOTE Confidence: 0.822806225882636

00:26:35.569 --> 00:26:38.087 care of those kids better in the clinic.

NOTE Confidence: 0.822806225882636

00:26:38.090 --> 00:26:39.930 So without further ado,

NOTE Confidence: 0.822806225882636

00:26:39.930 --> 00:26:40.850 here's Emily.

NOTE Confidence: 0.822806225882636

00:26:40.850 --> 00:26:43.150 So hello, my name is

NOTE Confidence: 0.807969450950623

00:26:43.150 --> 00:26:44.461 Doctor Emily Olson.

NOTE Confidence: 0.807969450950623

00:26:44.461 --> 00:26:46.646 I'm currently a fifth year

NOTE Confidence: 0.807969450950623

00:26:46.646 --> 00:26:49.026 resident in the child insults

NOTE Confidence: 0.807969450950623

00:26:49.026 --> 00:26:50.934 psychiatry training program here

NOTE Confidence: 0.807969450950623

00:26:50.934 --> 00:26:53.730 at the Yale Child Study Center.

NOTE Confidence: 0.886558711528778

00:26:55.770 --> 00:26:58.020 Today I'm delighted to have the

NOTE Confidence: 0.886558711528778

00:26:58.020 --> 00:27:01.286 opportunity to talk to you about a research

NOTE Confidence: 0.886558711528778

00:27:01.286 --> 00:27:03.406 project focused on two conditions,

NOTE Confidence: 0.886558711528778

00:27:03.410 --> 00:27:05.014 trichotillomania or hair pulling

NOTE Confidence: 0.886558711528778

00:27:05.014 --> 00:27:06.217 disorder and excoriation,

NOTE Confidence: 0.886558711528778

00:27:06.220 --> 00:27:08.440 or skin picking disorder.

NOTE Confidence: 0.886558711528778

00:27:08.440 --> 00:27:10.882 These are conditions that you may

NOTE Confidence: 0.886558711528778

00:27:10.882 --> 00:27:13.320 not have heard much about before,

NOTE Confidence: 0.886558711528778

00:27:13.320 --> 00:27:15.360 but they're actually relatively common,

NOTE Confidence: 0.886558711528778

00:27:15.360 --> 00:27:17.396 impacting at least 1% of

NOTE Confidence: 0.886558711528778

00:27:17.396 --> 00:27:18.620 the population there.

NOTE Confidence: 0.886558711528778

00:27:18.620 --> 00:27:21.056 Classified as OC D related disorders

NOTE Confidence: 0.886558711528778

00:27:21.060 --> 00:27:23.073 and individuals who have them

NOTE Confidence: 0.886558711528778

00:27:23.073 --> 00:27:25.479 often spend hours a day pulling

NOTE Confidence: 0.886558711528778

00:27:25.479 --> 00:27:28.386 or picking at their hair or skin,  
NOTE Confidence: 0.886558711528778

00:27:28.386 --> 00:27:30.421 which leads to significant distress,  
NOTE Confidence: 0.886558711528778

00:27:30.421 --> 00:27:31.642 functional impairment at  
NOTE Confidence: 0.886558711528778

00:27:31.642 --> 00:27:33.270 school and social situations,  
NOTE Confidence: 0.886558711528778

00:27:33.270 --> 00:27:35.730 and also medical complications.  
NOTE Confidence: 0.886558711528778

00:27:35.730 --> 00:27:38.088 These conditions usually onset in early  
NOTE Confidence: 0.886558711528778

00:27:38.088 --> 00:27:40.668 adolescence and if untreated can impact  
NOTE Confidence: 0.886558711528778

00:27:40.668 --> 00:27:42.556 individuals throughout their lifetime.  
NOTE Confidence: 0.886558711528778

00:27:42.560 --> 00:27:45.122 They predominantly occur in females and  
NOTE Confidence: 0.886558711528778

00:27:45.122 --> 00:27:47.728 currently the really difficult to treat  
NOTE Confidence: 0.886558711528778

00:27:47.728 --> 00:27:49.818 behavioral treatments have some effect,  
NOTE Confidence: 0.886558711528778

00:27:49.820 --> 00:27:52.382 at least in the short term,  
NOTE Confidence: 0.886558711528778

00:27:52.382 --> 00:27:54.946 but there are no first line  
NOTE Confidence: 0.886558711528778

00:27:54.946 --> 00:27:55.798 pharmacological treatments,  
NOTE Confidence: 0.886558711528778

00:27:55.800 --> 00:27:58.639 and no FDA approved medications.  
NOTE Confidence: 0.886558711528778

00:27:58.640 --> 00:28:01.293 And so an important step when we

NOTE Confidence: 0.886558711528778  
00:28:01.293 --> 00:28:03.244 think about developing new treatments  
NOTE Confidence: 0.886558711528778  
00:28:03.244 --> 00:28:05.848 for patients and families is to try  
NOTE Confidence: 0.886558711528778  
00:28:05.848 --> 00:28:08.218 and understand the biology more.  
NOTE Confidence: 0.886558711528778  
00:28:08.220 --> 00:28:10.880 And what we know from past research  
NOTE Confidence: 0.886558711528778  
00:28:10.880 --> 00:28:12.710 is that genetic factors are  
NOTE Confidence: 0.886558711528778  
00:28:12.778 --> 00:28:15.108 important in the development of  
NOTE Confidence: 0.886558711528778  
00:28:15.108 --> 00:28:16.972 these conditions and actually,  
NOTE Confidence: 0.886558711528778  
00:28:16.980 --> 00:28:18.900 some data suggests that similar  
NOTE Confidence: 0.886558711528778  
00:28:18.900 --> 00:28:20.436 genes contribute to both  
NOTE Confidence: 0.886558711528778  
00:28:20.436 --> 00:28:21.979 trichotillomania excoriation disorder,  
NOTE Confidence: 0.886558711528778  
00:28:21.980 --> 00:28:25.316 which is why I'm studying them here together.  
NOTE Confidence: 0.886558711528778  
00:28:25.320 --> 00:28:27.380 But something that's been  
NOTE Confidence: 0.886558711528778  
00:28:27.380 --> 00:28:28.925 harder for scientists.  
NOTE Confidence: 0.886558711528778  
00:28:28.930 --> 00:28:31.040 Has been finding specific risks,  
NOTE Confidence: 0.886558711528778  
00:28:31.040 --> 00:28:33.200 jeans and when you think about  
NOTE Confidence: 0.886558711528778

00:28:33.200 --> 00:28:34.640 developing new treatments and  
NOTE Confidence: 0.886558711528778

00:28:34.707 --> 00:28:36.510 identifying druggable targets.  
NOTE Confidence: 0.886558711528778

00:28:36.510 --> 00:28:38.625 This is actually really important  
NOTE Confidence: 0.886558711528778

00:28:38.625 --> 00:28:41.515 and one of the reasons for this  
NOTE Confidence: 0.886558711528778

00:28:41.515 --> 00:28:43.944 gap is that there are no previous  
NOTE Confidence: 0.886558711528778

00:28:43.944 --> 00:28:46.279 Lee published genome wide studies  
NOTE Confidence: 0.886558711528778

00:28:46.279 --> 00:28:49.135 in either disorder and so really.  
NOTE Confidence: 0.886558711528778

00:28:49.140 --> 00:28:51.852 My goal with this project was to bring  
NOTE Confidence: 0.886558711528778

00:28:51.852 --> 00:28:54.661 state of the art genomic approaches  
NOTE Confidence: 0.886558711528778

00:28:54.661 --> 00:28:57.140 to these understudy conditions of  
NOTE Confidence: 0.886558711528778

00:28:57.140 --> 00:28:59.315 Trichotillomania Annex creation disorder.  
NOTE Confidence: 0.886558711528778

00:28:59.315 --> 00:29:01.070 Then child psychiatry.  
NOTE Confidence: 0.886558711528778

00:29:01.070 --> 00:29:04.010 One approach that's been especially fruitful  
NOTE Confidence: 0.886558711528778

00:29:04.010 --> 00:29:07.775 is DNA sequencing of parent child trios.  
NOTE Confidence: 0.886558711528778

00:29:07.775 --> 00:29:10.791 So because each of us in here at  
NOTE Confidence: 0.886558711528778

00:29:10.791 --> 00:29:13.417 half of our DNA from our parents,

NOTE Confidence: 0.886558711528778  
00:29:13.420 --> 00:29:15.478 this approach allows us to not  
NOTE Confidence: 0.886558711528778  
00:29:15.480 --> 00:29:17.200 only look at inherited mutations  
NOTE Confidence: 0.886558711528778  
00:29:17.200 --> 00:29:18.576 associated with the condition,  
NOTE Confidence: 0.886558711528778  
00:29:18.580 --> 00:29:20.640 but  
NOTE Confidence: 0.854884207248688  
00:29:18.920 --> 00:29:20.640 also new or de Novo  
NOTE Confidence: 0.854884207248688  
00:29:20.640 --> 00:29:22.873 mutations and all of us have about  
NOTE Confidence: 0.854884207248688  
00:29:22.873 --> 00:29:25.800 50 to 100 of these de Novo variants.  
NOTE Confidence: 0.854884207248688  
00:29:25.800 --> 00:29:28.480 An when they occur within genes that can  
NOTE Confidence: 0.854884207248688  
00:29:28.480 --> 00:29:30.959 actually impact the proteins that are formed.  
NOTE Confidence: 0.854884207248688  
00:29:30.960 --> 00:29:33.628 An impact brain function.  
NOTE Confidence: 0.854884207248688  
00:29:33.630 --> 00:29:36.066 And so this approach of DNA sequencing  
NOTE Confidence: 0.854884207248688  
00:29:36.066 --> 00:29:38.206 of parent child trios was first  
NOTE Confidence: 0.854884207248688  
00:29:38.206 --> 00:29:40.320 pioneered in the field of autism.  
NOTE Confidence: 0.854884207248688  
00:29:40.320 --> 00:29:43.308 In here I'm showing a recent study where they  
NOTE Confidence: 0.854884207248688  
00:29:43.308 --> 00:29:47.290 found over 100 high competence risk genes.  
NOTE Confidence: 0.854884207248688

00:29:47.290 --> 00:29:49.190 In chronically, these jeans are  
NOTE Confidence: 0.854884207248688

00:29:49.190 --> 00:29:50.710 already impacting patient care,  
NOTE Confidence: 0.854884207248688

00:29:50.710 --> 00:29:52.960 and this is because for  
NOTE Confidence: 0.854884207248688

00:29:52.960 --> 00:29:54.310 patients and families.  
NOTE Confidence: 0.854884207248688

00:29:54.310 --> 00:29:56.697 You know, just knowing why they have  
NOTE Confidence: 0.854884207248688

00:29:56.697 --> 00:29:59.240 a condition can be helpful clinically,  
NOTE Confidence: 0.854884207248688

00:29:59.240 --> 00:30:01.508 if they're planning to have more  
NOTE Confidence: 0.854884207248688

00:30:01.508 --> 00:30:03.822 kids understanding how that how the  
NOTE Confidence: 0.854884207248688

00:30:03.822 --> 00:30:06.092 disorder is inherited is helpful.  
NOTE Confidence: 0.854884207248688

00:30:06.092 --> 00:30:08.864 And then also specific genetic  
NOTE Confidence: 0.854884207248688

00:30:08.864 --> 00:30:11.594 changes do have implications for  
NOTE Confidence: 0.854884207248688

00:30:11.594 --> 00:30:14.390 specific medical treatments as well.  
NOTE Confidence: 0.854884207248688

00:30:14.390 --> 00:30:16.805 And this approach that, as I said,  
NOTE Confidence: 0.854884207248688

00:30:16.810 --> 00:30:18.886 was pioneered in autism more recently.  
NOTE Confidence: 0.854884207248688

00:30:18.890 --> 00:30:21.368 It's been shown to find risk genes  
NOTE Confidence: 0.854884207248688

00:30:21.368 --> 00:30:24.168 in both direct disorder and OC D and

NOTE Confidence: 0.854884207248688  
00:30:24.168 --> 00:30:27.190 studies led by my mentor here at Yale, Dr.  
NOTE Confidence: 0.854884207248688  
00:30:27.190 --> 00:30:28.750 Fernandez.  
NOTE Confidence: 0.854884207248688  
00:30:28.750 --> 00:30:31.658 And so given the similarities  
NOTE Confidence: 0.854884207248688  
00:30:31.658 --> 00:30:34.046 between OC D Tourettes.  
NOTE Confidence: 0.854884207248688  
00:30:34.050 --> 00:30:35.271 With you know,  
NOTE Confidence: 0.854884207248688  
00:30:35.271 --> 00:30:36.899 trichotillomania Annex coordination disorder.  
NOTE Confidence: 0.854884207248688  
00:30:36.900 --> 00:30:39.749 In 2018 we started the tab study,  
NOTE Confidence: 0.854884207248688  
00:30:39.750 --> 00:30:42.192 so we started recruiting individuals with  
NOTE Confidence: 0.854884207248688  
00:30:42.192 --> 00:30:43.820 trichotillomania and excoriation disorder,  
NOTE Confidence: 0.854884207248688  
00:30:43.820 --> 00:30:46.256 as well as both their parents.  
NOTE Confidence: 0.854884207248688  
00:30:46.260 --> 00:30:48.540 We collected saliva for DNA sequencing  
NOTE Confidence: 0.854884207248688  
00:30:48.540 --> 00:30:51.003 and had them complete surveys about  
NOTE Confidence: 0.854884207248688  
00:30:51.003 --> 00:30:53.178 their symptoms and family history,  
NOTE Confidence: 0.854884207248688  
00:30:53.180 --> 00:30:56.050 and here I'm going to show you  
NOTE Confidence: 0.854884207248688  
00:30:56.050 --> 00:30:58.546 data from sequencing of the first  
NOTE Confidence: 0.854884207248688



00:30:58.546 --> 00:31:00.904 65 parent child trios they had,  
NOTE Confidence: 0.854884207248688

00:31:00.910 --> 00:31:03.352 where the child had a primary  
NOTE Confidence: 0.854884207248688

00:31:03.352 --> 00:31:04.980 diagnosis of either trichotillomania,  
NOTE Confidence: 0.854884207248688

00:31:04.980 --> 00:31:07.020 excoriation disorder, or both conditions.  
NOTE Confidence: 0.854884207248688

00:31:07.020 --> 00:31:09.750 We compare this to 225 control trios  
NOTE Confidence: 0.854884207248688

00:31:09.750 --> 00:31:11.680 that were previously sequenced,  
NOTE Confidence: 0.854884207248688

00:31:11.680 --> 00:31:13.364 and, in our analysis,  
NOTE Confidence: 0.854884207248688

00:31:13.364 --> 00:31:16.527 we focused on these rare de Novo  
NOTE Confidence: 0.854884207248688

00:31:16.527 --> 00:31:19.237 variants that were thought to  
NOTE Confidence: 0.854884207248688

00:31:19.237 --> 00:31:22.269 influence the coding regions of genes.  
NOTE Confidence: 0.854884207248688

00:31:22.270 --> 00:31:24.662 And what we found is we found a  
NOTE Confidence: 0.854884207248688

00:31:24.662 --> 00:31:27.189 higher rate of these likely damaging  
NOTE Confidence: 0.854884207248688

00:31:27.189 --> 00:31:29.509 mutations in cases versus controls,  
NOTE Confidence: 0.854884207248688

00:31:29.510 --> 00:31:30.650 so this was,  
NOTE Confidence: 0.854884207248688

00:31:30.650 --> 00:31:31.410 you know,  
NOTE Confidence: 0.854884207248688

00:31:31.410 --> 00:31:33.315 very reassuring that this approach

NOTE Confidence: 0.854884207248688  
00:31:33.315 --> 00:31:35.612 was the right approach for finding  
NOTE Confidence: 0.854884207248688  
00:31:35.612 --> 00:31:37.964 risk genes and these likely damaging  
NOTE Confidence: 0.854884207248688  
00:31:37.964 --> 00:31:39.935 mutations are thought to alter  
NOTE Confidence: 0.854884207248688  
00:31:39.935 --> 00:31:41.750 the protein function either by  
NOTE Confidence: 0.854884207248688  
00:31:41.750 --> 00:31:42.839 causing a frameshift,  
NOTE Confidence: 0.854884207248688  
00:31:42.840 --> 00:31:44.750 introducing a new stop codon,  
NOTE Confidence: 0.854884207248688  
00:31:44.750 --> 00:31:47.345 or maybe just changing an amino  
NOTE Confidence: 0.854884207248688  
00:31:47.345 --> 00:31:49.560 acid that's predicted to be  
NOTE Confidence: 0.854884207248688  
00:31:49.646 --> 00:31:52.256 damaging to the protein function.  
NOTE Confidence: 0.854884207248688  
00:31:52.260 --> 00:31:55.284 And so we can also use these.  
NOTE Confidence: 0.854884207248688  
00:31:55.290 --> 00:31:57.190 Look at these jeans.  
NOTE Confidence: 0.854884207248688  
00:31:57.190 --> 00:32:00.040 They have these likely damaging mutations  
NOTE Confidence: 0.854884207248688  
00:32:00.120 --> 00:32:02.647 and see if they overlap for risk.  
NOTE Confidence: 0.854884207248688  
00:32:02.650 --> 00:32:05.242 Genes for other disorders and so  
NOTE Confidence: 0.854884207248688  
00:32:05.242 --> 00:32:08.405 we did that and what we found is  
NOTE Confidence: 0.854884207248688

00:32:08.405 --> 00:32:10.810 that a few individuals did have  
NOTE Confidence: 0.854884207248688

00:32:10.810 --> 00:32:12.674 likely damaging mutations that  
NOTE Confidence: 0.854884207248688

00:32:12.674 --> 00:32:15.640 were risk genes for say autism.  
NOTE Confidence: 0.854884207248688

00:32:15.640 --> 00:32:18.238 But these individuals don't have autism.  
NOTE Confidence: 0.854884207248688

00:32:18.240 --> 00:32:19.970 They have excoriation disorder  
NOTE Confidence: 0.854884207248688

00:32:19.970 --> 00:32:21.030 or trichotillomania.  
NOTE Confidence: 0.854884207248688

00:32:21.030 --> 00:32:24.278 And this gets up this idea plea  
NOTE Confidence: 0.854884207248688

00:32:24.280 --> 00:32:26.182 atropy the idea that similar genetic  
NOTE Confidence: 0.854884207248688

00:32:26.182 --> 00:32:27.996 changes may have different clinical  
NOTE Confidence: 0.854884207248688

00:32:27.996 --> 00:32:29.968 manifestations in different individuals,  
NOTE Confidence: 0.854884207248688

00:32:29.970 --> 00:32:32.616 and this is something that we're continuing  
NOTE Confidence: 0.807730227708817

00:32:32.620 --> 00:32:35.160 to explore. In addition,  
NOTE Confidence: 0.808296918869019

00:32:35.160 --> 00:32:38.553 we can look at the jeans that have these  
NOTE Confidence: 0.808296918869019

00:32:38.553 --> 00:32:41.235 likely damage invariants and see if  
NOTE Confidence: 0.808296918869019

00:32:41.235 --> 00:32:43.850 they are enriched for certain pathways.  
NOTE Confidence: 0.808296918869019

00:32:43.850 --> 00:32:47.584 And here are our top pathways were circadian

NOTE Confidence: 0.808296918869019  
00:32:47.584 --> 00:32:49.520 entrainment and glutamatergic synapse.  
NOTE Confidence: 0.808296918869019  
00:32:49.520 --> 00:32:51.686 And this is really interesting because  
NOTE Confidence: 0.808296918869019  
00:32:51.686 --> 00:32:54.070 the glutamate system is actually already  
NOTE Confidence: 0.808296918869019  
00:32:54.070 --> 00:32:56.692 been implicated in the treatment of  
NOTE Confidence: 0.808296918869019  
00:32:56.692 --> 00:32:58.739 trichotillomania Nicks creations disorder.  
NOTE Confidence: 0.808296918869019  
00:32:58.740 --> 00:33:01.746 And so this is really getting at kind of  
NOTE Confidence: 0.808296918869019  
00:33:01.750 --> 00:33:03.737 the underlying biology of these conditions,  
NOTE Confidence: 0.808296918869019  
00:33:03.737 --> 00:33:06.420 and so at the beginning of this talk,  
NOTE Confidence: 0.808296918869019  
00:33:06.420 --> 00:33:08.758 I told you how sequencing a parent  
NOTE Confidence: 0.808296918869019  
00:33:08.758 --> 00:33:10.762 child trios, you know this approach  
NOTE Confidence: 0.808296918869019  
00:33:10.762 --> 00:33:12.094 was pioneered in autism,  
NOTE Confidence: 0.808296918869019  
00:33:12.100 --> 00:33:15.060 but had been shown to have a lot of discovery  
NOTE Confidence: 0.808296918869019  
00:33:15.132 --> 00:33:17.107 potential and several other conditions  
NOTE Confidence: 0.808296918869019  
00:33:17.107 --> 00:33:20.338 and studies led by my mentor and others.  
NOTE Confidence: 0.808296918869019  
00:33:20.340 --> 00:33:23.188 And then here today I showed you how  
NOTE Confidence: 0.808296918869019

00:33:23.188 --> 00:33:26.158 this also has a discovery potential  
NOTE Confidence: 0.808296918869019

00:33:26.158 --> 00:33:28.330 for two understudy conditions,  
NOTE Confidence: 0.808296918869019

00:33:28.330 --> 00:33:30.222 trichotillomania and excoriation disorder.  
NOTE Confidence: 0.808296918869019

00:33:30.222 --> 00:33:32.587 But we're not stopping there.  
NOTE Confidence: 0.808296918869019

00:33:32.590 --> 00:33:34.683 You know, in the lab we're also  
NOTE Confidence: 0.808296918869019

00:33:34.683 --> 00:33:36.679 looking at childhood anxiety disorders.  
NOTE Confidence: 0.808296918869019

00:33:36.680 --> 00:33:38.385 Another poster here at the  
NOTE Confidence: 0.808296918869019

00:33:38.385 --> 00:33:40.090 associates meeting focused on this,  
NOTE Confidence: 0.808296918869019

00:33:40.090 --> 00:33:42.136 and I also have some really  
NOTE Confidence: 0.808296918869019

00:33:42.136 --> 00:33:43.500 interesting data and ADHD.  
NOTE Confidence: 0.808296918869019

00:33:43.500 --> 00:33:45.504 And it's likely that this approach  
NOTE Confidence: 0.808296918869019

00:33:45.504 --> 00:33:47.930 will continue to be helpful for many  
NOTE Confidence: 0.808296918869019

00:33:47.930 --> 00:33:49.404 childhood onset psychiatric conditions.  
NOTE Confidence: 0.808296918869019

00:33:49.404 --> 00:33:51.786 And so for that app study,  
NOTE Confidence: 0.808296918869019

00:33:51.790 --> 00:33:54.230 the next steps are we're going to continue  
NOTE Confidence: 0.808296918869019

00:33:54.230 --> 00:33:56.240 recruiting and sequencing trios and our,

NOTE Confidence: 0.808296918869019  
00:33:56.240 --> 00:33:56.842 you know,  
NOTE Confidence: 0.808296918869019  
00:33:56.842 --> 00:34:00.268 our hope is that once we get to a few 100  
NOTE Confidence: 0.808296918869019  
00:34:00.268 --> 00:34:02.920 will find the first kind of exome wide.  
NOTE Confidence: 0.808296918869019  
00:34:02.920 --> 00:34:04.192 High confidence risk genes  
NOTE Confidence: 0.808296918869019  
00:34:04.192 --> 00:34:05.690 for these disorders.  
NOTE Confidence: 0.808296918869019  
00:34:05.690 --> 00:34:07.700 And then you know my hope.  
NOTE Confidence: 0.808296918869019  
00:34:07.700 --> 00:34:09.710 And then my plan really is,  
NOTE Confidence: 0.808296918869019  
00:34:09.710 --> 00:34:10.380 you know,  
NOTE Confidence: 0.808296918869019  
00:34:10.380 --> 00:34:12.725 as a next step is then understanding  
NOTE Confidence: 0.808296918869019  
00:34:12.725 --> 00:34:14.740 how these risk genes and pathways,  
NOTE Confidence: 0.808296918869019  
00:34:14.740 --> 00:34:16.080 from a mechanistic standpoint,  
NOTE Confidence: 0.808296918869019  
00:34:16.080 --> 00:34:17.755 how they lead to development  
NOTE Confidence: 0.808296918869019  
00:34:17.755 --> 00:34:18.760 of these disorders,  
NOTE Confidence: 0.808296918869019  
00:34:18.760 --> 00:34:21.368 which I think is a critical next step  
NOTE Confidence: 0.808296918869019  
00:34:21.368 --> 00:34:24.159 in terms of treating these conditions.  
NOTE Confidence: 0.808296918869019

00:34:24.160 --> 00:34:25.984 So with that I just want to thank  
NOTE Confidence: 0.808296918869019

00:34:25.984 --> 00:34:27.754 you know all the individuals  
NOTE Confidence: 0.808296918869019

00:34:27.754 --> 00:34:29.005 and families participated.  
NOTE Confidence: 0.808296918869019

00:34:29.010 --> 00:34:31.124 It's A wonderful population to work with.  
NOTE Confidence: 0.808296918869019

00:34:31.130 --> 00:34:33.244 I want to thank both my mentors,  
NOTE Confidence: 0.808296918869019

00:34:33.250 --> 00:34:35.977 everyone in the lab and all of our funding.  
NOTE Confidence: 0.889599978923798

00:34:38.460 --> 00:34:41.160 So thank you for the excellent talk. I  
NOTE Confidence: 0.889599978923798

00:34:41.160 --> 00:34:43.785 guess I'll have two questions and you  
NOTE Confidence: 0.889599978923798

00:34:43.785 --> 00:34:46.540 can choose which one you want to answer  
NOTE Confidence: 0.889599978923798

00:34:46.540 --> 00:34:49.423 and skip the other one so the the first  
NOTE Confidence: 0.889599978923798

00:34:49.423 --> 00:34:52.314 question you could ask is we we get a  
NOTE Confidence: 0.889599978923798

00:34:52.314 --> 00:34:54.680 lot of these samples through the clinic,  
NOTE Confidence: 0.889599978923798

00:34:54.680 --> 00:34:56.856 but it be worth talking about how you  
NOTE Confidence: 0.889599978923798

00:34:56.856 --> 00:34:59.832 got in the majority of the body focused  
NOTE Confidence: 0.889599978923798

00:34:59.832 --> 00:35:01.814 repetitive behaviors sample for this  
NOTE Confidence: 0.889599978923798

00:35:01.814 --> 00:35:04.145 study and then the second question you

NOTE Confidence: 0.889599978923798

00:35:04.145 --> 00:35:06.615 can answer if you want more scientific

NOTE Confidence: 0.889599978923798

00:35:06.615 --> 00:35:09.538 one is really no one has done this.

NOTE Confidence: 0.889599978923798

00:35:09.540 --> 00:35:12.312 ADHD, like why it seems like such

NOTE Confidence: 0.889599978923798

00:35:12.312 --> 00:35:14.419 a common condition or anxiety.

NOTE Confidence: 0.811951339244843

00:35:16.410 --> 00:35:18.870 I'm I'll answer both questions.

NOTE Confidence: 0.811951339244843

00:35:18.870 --> 00:35:22.502 So the first question. We so, um,

NOTE Confidence: 0.811951339244843

00:35:22.502 --> 00:35:24.698 Michael knows the answer to this,

NOTE Confidence: 0.811951339244843

00:35:24.700 --> 00:35:26.534 but we started this project.

NOTE Confidence: 0.811951339244843

00:35:26.534 --> 00:35:28.736 We actually started in April 2018.

NOTE Confidence: 0.811951339244843

00:35:28.740 --> 00:35:30.208 An there's a foundation,

NOTE Confidence: 0.811951339244843

00:35:30.210 --> 00:35:32.040 the TLC Foundation for Body

NOTE Confidence: 0.811951339244843

00:35:32.040 --> 00:35:33.141 focused repetitive behaviors

NOTE Confidence: 0.811951339244843

00:35:33.141 --> 00:35:34.609 that spatial basically a

NOTE Confidence: 0.845727920532227

00:35:34.610 --> 00:35:35.708 patient centered conference

NOTE Confidence: 0.845727920532227

00:35:35.710 --> 00:35:36.808 that provides support

NOTE Confidence: 0.845727920532227



00:35:36.810 --> 00:35:37.920 and resources. And  
NOTE Confidence: 0.845727920532227

00:35:37.920 --> 00:35:40.475 so we went out to San Francisco.  
NOTE Confidence: 0.845727920532227

00:35:40.480 --> 00:35:43.023 Kind of not knowing what to expect,  
NOTE Confidence: 0.845727920532227

00:35:43.023 --> 00:35:45.687 I was brand new to the field that  
NOTE Confidence: 0.845727920532227

00:35:45.687 --> 00:35:48.194 we brought our saliva kits and  
NOTE Confidence: 0.845727920532227

00:35:48.194 --> 00:35:50.756 our surveys on iPads, and it was.  
NOTE Confidence: 0.845727920532227

00:35:50.756 --> 00:35:52.182 It was really amazing.  
NOTE Confidence: 0.845727920532227

00:35:52.182 --> 00:35:54.236 Um, you know how many people  
NOTE Confidence: 0.845727920532227

00:35:54.236 --> 00:35:56.887 signed up for this study an it was  
NOTE Confidence: 0.845727920532227

00:35:56.887 --> 00:35:58.870 really kind of at this conference.  
NOTE Confidence: 0.845727920532227

00:35:58.870 --> 00:36:00.855 My first day kind of recruiting  
NOTE Confidence: 0.845727920532227

00:36:00.855 --> 00:36:03.172 it was are you know that I  
NOTE Confidence: 0.845727920532227

00:36:03.172 --> 00:36:04.500 realized that this was  
NOTE Confidence: 0.850269138813019

00:36:04.500 --> 00:36:06.150 such an important population because,  
NOTE Confidence: 0.850269138813019

00:36:06.150 --> 00:36:07.149 you know, we're  
NOTE Confidence: 0.850269138813019

00:36:07.150 --> 00:36:08.800 not paying these subjects anything.

NOTE Confidence: 0.850269138813019  
00:36:08.800 --> 00:36:10.460 They're all signing up for  
NOTE Confidence: 0.850269138813019  
00:36:10.460 --> 00:36:12.110 this kind of voluntarily, and  
NOTE Confidence: 0.850269138813019  
00:36:12.110 --> 00:36:14.096 I think it's in part 'cause  
NOTE Confidence: 0.850269138813019  
00:36:14.100 --> 00:36:16.080 there is such limited research on  
NOTE Confidence: 0.850269138813019  
00:36:16.080 --> 00:36:17.912 these conditions. And it is so  
NOTE Confidence: 0.850269138813019  
00:36:17.912 --> 00:36:19.084 understudied in the treatments  
NOTE Confidence: 0.850269138813019  
00:36:19.084 --> 00:36:21.380 are often ineffective. So so, a  
NOTE Confidence: 0.850269138813019  
00:36:21.380 --> 00:36:23.035 lot of our samples have  
NOTE Confidence: 0.850269138813019  
00:36:23.035 --> 00:36:24.360 been through. We've been  
NOTE Confidence: 0.850269138813019  
00:36:24.360 --> 00:36:26.100 to the conference twice, unfortunately.  
NOTE Confidence: 0.850269138813019  
00:36:26.100 --> 00:36:28.386 In 2020, given Kovid and everything,  
NOTE Confidence: 0.850269138813019  
00:36:28.390 --> 00:36:30.300 we couldn't go this year,  
NOTE Confidence: 0.838131546974182  
00:36:30.300 --> 00:36:33.360 but we've the most of our recruitment really  
NOTE Confidence: 0.838131546974182  
00:36:33.360 --> 00:36:34.884 through through the TLC  
NOTE Confidence: 0.838131546974182  
00:36:34.884 --> 00:36:36.408 Foundation and what not.  
NOTE Confidence: 0.838131546974182

00:36:36.410 --> 00:36:37.938 And it's been wonderful.  
NOTE Confidence: 0.838131546974182

00:36:37.938 --> 00:36:40.230 The second question, you know it,  
NOTE Confidence: 0.838131546974182

00:36:40.230 --> 00:36:43.288 it is impressive to me that this hasn't  
NOTE Confidence: 0.838131546974182

00:36:43.290 --> 00:36:46.732 yet been done on a large scale in ADHD.  
NOTE Confidence: 0.838131546974182

00:36:46.732 --> 00:36:49.030 There for some few smaller studies.  
NOTE Confidence: 0.838131546974182

00:36:49.030 --> 00:36:50.955 Ann, I think the biggest  
NOTE Confidence: 0.838131546974182

00:36:50.955 --> 00:36:53.219 study has just about 15 trios.  
NOTE Confidence: 0.838131546974182

00:36:53.220 --> 00:36:55.130 That's published in 80 HD,  
NOTE Confidence: 0.838131546974182

00:36:55.130 --> 00:36:57.420 but we do have some really  
NOTE Confidence: 0.838137841224671

00:36:57.420 --> 00:36:59.230 exciting data. Lemon airy data.  
NOTE Confidence: 0.838137841224671

00:36:59.230 --> 00:37:00.550 An I just started.  
NOTE Confidence: 0.838137841224671

00:37:00.550 --> 00:37:02.190 I received the cleaning Steam  
NOTE Confidence: 0.838142037391663

00:37:02.190 --> 00:37:04.152 Foundation grants and it just started  
NOTE Confidence: 0.838142037391663

00:37:04.152 --> 00:37:06.780 this year and so we're hoping to increase  
NOTE Confidence: 0.838142037391663

00:37:06.780 --> 00:37:09.727 and do a similar project in ADHD as well.  
NOTE Confidence: 0.838142037391663

00:37:09.727 --> 00:37:12.678 And so we're working on that now and then.

NOTE Confidence: 0.838142037391663

00:37:12.680 --> 00:37:14.315 The data is really promising

NOTE Confidence: 0.838142037391663

00:37:14.315 --> 00:37:16.619 that will be able to find high

NOTE Confidence: 0.838142037391663

00:37:16.620 --> 00:37:18.586 confidence risk genes there as well.

NOTE Confidence: 0.838142037391663

00:37:18.586 --> 00:37:19.898 And again childhood anxiety.

NOTE Confidence: 0.838142037391663

00:37:19.900 --> 00:37:21.540 We have really exciting data,

NOTE Confidence: 0.838142037391663

00:37:21.540 --> 00:37:23.501 mainly recruited at the Child Space

NOTE Confidence: 0.838142037391663

00:37:23.501 --> 00:37:25.463 Center here with our anxieties program.

NOTE Confidence: 0.825298964977264

00:37:27.100 --> 00:37:29.756 Thank you I guess Next up for the

NOTE Confidence: 0.825298964977264

00:37:29.756 --> 00:37:32.274 sake of time, we should keep going.

NOTE Confidence: 0.825298964977264

00:37:32.274 --> 00:37:35.076 We have young son show and I guess

NOTE Confidence: 0.825298964977264

00:37:35.076 --> 00:37:37.135 she's a Unicorn. She probably has

NOTE Confidence: 0.825298964977264

00:37:37.135 --> 00:37:39.205 no idea what I'm talking here.

NOTE Confidence: 0.825298964977264

00:37:39.210 --> 00:37:41.978 You were here, I guess, but that's easy.

NOTE Confidence: 0.825298964977264

00:37:41.978 --> 00:37:43.708 Unicorn 'cause she's really a

NOTE Confidence: 0.825298964977264

00:37:43.708 --> 00:37:45.090 wonderful clinician and teacher.

NOTE Confidence: 0.825298964977264

00:37:45.090 --> 00:37:48.177 In addition to being a great researcher.  
NOTE Confidence: 0.825298964977264

00:37:48.180 --> 00:37:50.316 And when the job opened up,  
NOTE Confidence: 0.825298964977264

00:37:50.320 --> 00:37:53.515 tell kind of help from the Enter TV program,  
NOTE Confidence: 0.825298964977264

00:37:53.520 --> 00:37:55.960 which is a sister program.  
NOTE Confidence: 0.825298964977264

00:37:55.960 --> 00:37:58.144 Of this only program in the  
NOTE Confidence: 0.825298964977264

00:37:58.144 --> 00:37:59.236 Adult Psychiatry Department,  
NOTE Confidence: 0.825298964977264

00:37:59.240 --> 00:38:01.851 I thought she'd be created doing it  
NOTE Confidence: 0.825298964977264

00:38:01.851 --> 00:38:04.698 'cause she's got a great eye for talent.  
NOTE Confidence: 0.825298964977264

00:38:04.700 --> 00:38:06.520 But she's also great clinician,  
NOTE Confidence: 0.825298964977264

00:38:06.520 --> 00:38:09.060 mentor and teacher.  
NOTE Confidence: 0.825298964977264

00:38:09.060 --> 00:38:11.360 Without further ado.  
NOTE Confidence: 0.83893221616745

00:38:17.420 --> 00:38:19.898 Thank you for your interest in our  
NOTE Confidence: 0.83893221616745

00:38:19.900 --> 00:38:21.838 work. My name is young Sancho  
NOTE Confidence: 0.83893221616745

00:38:21.838 --> 00:38:23.589 and I'm an assistant professor  
NOTE Confidence: 0.83893221616745

00:38:23.589 --> 00:38:25.917 in the Young Child Study Center.  
NOTE Confidence: 0.83893221616745

00:38:25.920 --> 00:38:27.996 This poster shows some work that

NOTE Confidence: 0.83893221616745

00:38:27.996 --> 00:38:29.380 examined how motivation effects

NOTE Confidence: 0.83893221616745

00:38:29.443 --> 00:38:31.218 the brain circuits that support

NOTE Confidence: 0.83893221616745

00:38:31.218 --> 00:38:32.638 working memory and overall,

NOTE Confidence: 0.83893221616745

00:38:32.640 --> 00:38:34.413 our results suggest that motivation

NOTE Confidence: 0.83893221616745

00:38:34.413 --> 00:38:35.810 improves working memory by

NOTE Confidence: 0.83893221616745

00:38:35.810 --> 00:38:37.535 shaping neural signals in the

NOTE Confidence: 0.83893221616745

00:38:37.535 --> 00:38:39.010 prefrontal and parietal cortex.

NOTE Confidence: 0.83893221616745

00:38:39.010 --> 00:38:41.136 We were interested in motivation and

NOTE Confidence: 0.83893221616745

00:38:41.136 --> 00:38:43.263 cognition together because they are both

NOTE Confidence: 0.83893221616745

00:38:43.263 --> 00:38:45.028 refined during childhood nettle essence,

NOTE Confidence: 0.83893221616745

00:38:45.030 --> 00:38:46.800 meaning they continue to develop,

NOTE Confidence: 0.83893221616745

00:38:46.800 --> 00:38:48.256 which suggests there dynamic

NOTE Confidence: 0.83893221616745

00:38:48.256 --> 00:38:49.348 but also vulnerable.

NOTE Confidence: 0.83893221616745

00:38:49.350 --> 00:38:51.940 Ann is

NOTE Confidence: 0.831729471683502

00:38:50.000 --> 00:38:50.969 a testament to

NOTE Confidence: 0.831729471683502

00:38:50.970 --> 00:38:51.939 this vulnerability. They  
NOTE Confidence: 0.831729471683502

00:38:51.940 --> 00:38:53.884 are both disrupted in a number  
NOTE Confidence: 0.831729471683502

00:38:53.884 --> 00:38:54.856 of psychiatric illnesses,  
NOTE Confidence: 0.831729471683502

00:38:54.860 --> 00:38:56.475 but we still don't really  
NOTE Confidence: 0.831729471683502

00:38:56.475 --> 00:38:58.100 know how the brain links,  
NOTE Confidence: 0.831729471683502

00:38:58.100 --> 00:38:59.395 motivation and cognition to  
NOTE Confidence: 0.831729471683502

00:38:59.395 --> 00:39:00.536 achieve goal directed behaviors,  
NOTE Confidence: 0.831729471683502

00:39:00.536 --> 00:39:02.440 which then limits our ability to design  
NOTE Confidence: 0.831729471683502

00:39:02.484 --> 00:39:03.930 meaningful psychiatric treatments.  
NOTE Confidence: 0.831729471683502

00:39:03.930 --> 00:39:06.518 So to start to embark on this path,  
NOTE Confidence: 0.831729471683502

00:39:06.518 --> 00:39:08.138 understanding how the brain links,  
NOTE Confidence: 0.831729471683502

00:39:08.140 --> 00:39:09.154 motivation and cognition,  
NOTE Confidence: 0.831729471683502

00:39:09.154 --> 00:39:11.520 we made a test to probe incentivized  
NOTE Confidence: 0.831729471683502

00:39:11.577 --> 00:39:13.649 working memory that we called mid kog,  
NOTE Confidence: 0.831729471683502

00:39:13.650 --> 00:39:15.869 which you can read about in the  
NOTE Confidence: 0.831729471683502

00:39:15.869 --> 00:39:17.890 upper right corner and we focused

NOTE Confidence: 0.831729471683502

00:39:17.890 --> 00:39:19.555 on working memory which is.

NOTE Confidence: 0.831729471683502

00:39:19.560 --> 00:39:21.636 A key building block of cognition,

NOTE Confidence: 0.831729471683502

00:39:21.640 --> 00:39:23.650 which refers to the active maintenance

NOTE Confidence: 0.831729471683502

00:39:23.650 --> 00:39:26.103 of information in your mind and it's

NOTE Confidence: 0.831729471683502

00:39:26.103 --> 00:39:27.853 needed for other cognitive functions,

NOTE Confidence: 0.831729471683502

00:39:27.860 --> 00:39:29.936 such as abstractions or problem solving.

NOTE Confidence: 0.831729471683502

00:39:29.940 --> 00:39:32.710 And we use this task with fMRI in

NOTE Confidence: 0.831729471683502

00:39:32.710 --> 00:39:34.780 a group of healthy young adults,

NOTE Confidence: 0.831729471683502

00:39:34.780 --> 00:39:37.090 and we found that incentives or those

NOTE Confidence: 0.831729471683502

00:39:37.090 --> 00:39:38.940 things that motivate our behaviors,

NOTE Confidence: 0.831729471683502

00:39:38.940 --> 00:39:41.010 and in this case it's money,

NOTE Confidence: 0.831729471683502

00:39:41.010 --> 00:39:42.048 improve working memory,

NOTE Confidence: 0.831729471683502

00:39:42.048 --> 00:39:44.470 and that the neural signals are greater,

NOTE Confidence: 0.831729471683502

00:39:44.470 --> 00:39:46.200 and parietal and prefrontal regions

NOTE Confidence: 0.831729471683502

00:39:46.200 --> 00:39:47.584 when working memories incentivized.

NOTE Confidence: 0.831729471683502



00:39:47.590 --> 00:39:50.026 Then when working memory is not incentivized.

NOTE Confidence: 0.831729471683502

00:39:50.030 --> 00:39:50.986 And more specifically,

NOTE Confidence: 0.831729471683502

00:39:50.986 --> 00:39:52.496 the greater neural signal in

NOTE Confidence: 0.831729471683502

00:39:52.496 --> 00:39:53.956 these regions was associated with

NOTE Confidence: 0.831729471683502

00:39:53.956 --> 00:39:55.440 better working memory performance,

NOTE Confidence: 0.831729471683502

00:39:55.440 --> 00:39:57.347 so this work highlighted some key

NOTE Confidence: 0.831729471683502

00:39:57.347 --> 00:39:59.251 mechanisms that help us understand how

NOTE Confidence: 0.831729471683502

00:39:59.251 --> 00:40:01.153 the brain begins to link motivation,

NOTE Confidence: 0.831729471683502

00:40:01.160 --> 00:40:01.478 cognition,

NOTE Confidence: 0.831729471683502

00:40:01.478 --> 00:40:03.704 and in the future we hope to

NOTE Confidence: 0.831729471683502

00:40:03.704 --> 00:40:05.930 use or we will use this tech.

NOTE Confidence: 0.693006694316864

00:40:08.200 --> 00:40:11.537 Whoops,

NOTE Confidence: 0.693006694316864

00:40:11.537 --> 00:40:21.548 sorry I'm back

NOTE Confidence: 0.830135683218638

00:40:21.550 --> 00:40:26.093 so. I guess that was a young

NOTE Confidence: 0.830135683218638

00:40:26.093 --> 00:40:29.049 son was supposed to be.

NOTE Confidence: 0.830135683218638

00:40:29.050 --> 00:40:31.000 We have a full 8 seven

NOTE Confidence: 0.830135683218638  
00:40:31.000 --> 00:40:32.690 minute talk that we had.  
NOTE Confidence: 0.830135683218638  
00:40:32.690 --> 00:40:34.676 We switched it with the poster  
NOTE Confidence: 0.830135683218638  
00:40:34.676 --> 00:40:35.669 session by accident,  
NOTE Confidence: 0.830135683218638  
00:40:35.670 --> 00:40:37.987 so I guess I'm just going to.  
NOTE Confidence: 0.830135683218638  
00:40:37.990 --> 00:40:42.118 Is it OK if I throw it out  
NOTE Confidence: 0.83964592218399  
00:40:40.350 --> 00:40:42.120 to you young son? Yeah, this  
NOTE Confidence: 0.83964592218399  
00:40:42.120 --> 00:40:44.185 is OK. Talk a little bit more  
NOTE Confidence: 0.83964592218399  
00:40:44.185 --> 00:40:45.660 about the work, I don't.  
NOTE Confidence: 0.83964592218399  
00:40:45.660 --> 00:40:48.019 I don't know what happened, but we're not  
NOTE Confidence: 0.83964592218399  
00:40:48.020 --> 00:40:49.500 gonna fix it for the  
NOTE Confidence: 0.83964592218399  
00:40:49.500 --> 00:40:51.560 sake of time, and I apologize, that's  
NOTE Confidence: 0.83964592218399  
00:40:51.560 --> 00:40:53.625 OK. It's a much more succinct presentation  
NOTE Confidence: 0.83964592218399  
00:40:53.625 --> 00:40:56.580 anyway, so I don't know if you want to talk  
NOTE Confidence: 0.83964592218399  
00:40:56.580 --> 00:40:58.350 a little bit more about the  
NOTE Confidence: 0.83964592218399  
00:40:58.350 --> 00:40:59.530 stuff you're presenting in  
NOTE Confidence: 0.83964592218399

00:40:59.530 --> 00:41:01.300 the talk. I think it mostly  
NOTE Confidence: 0.83964592218399

00:41:01.300 --> 00:41:02.480 covered the main points.  
NOTE Confidence: 0.83964592218399

00:41:02.480 --> 00:41:03.935 Basically, we're trying to really  
NOTE Confidence: 0.83964592218399

00:41:03.935 --> 00:41:05.390 understand how the brain coordinates  
NOTE Confidence: 0.83964592218399

00:41:05.437 --> 00:41:06.610 motivation and cognitive processes,  
NOTE Confidence: 0.83964592218399

00:41:06.610 --> 00:41:08.001 because these are two fundamental  
NOTE Confidence: 0.83964592218399

00:41:08.001 --> 00:41:09.603 processes that are disrupted in a  
NOTE Confidence: 0.83964592218399

00:41:09.603 --> 00:41:11.040 number of psychiatric illnesses.  
NOTE Confidence: 0.83964592218399

00:41:11.040 --> 00:41:13.038 Of course they continue to develop  
NOTE Confidence: 0.83964592218399

00:41:13.038 --> 00:41:14.700 as children and adolescents grow,  
NOTE Confidence: 0.83964592218399

00:41:14.700 --> 00:41:16.699 and so we want to understand,  
NOTE Confidence: 0.83964592218399

00:41:16.699 --> 00:41:18.697 sort of how the brain integrates  
NOTE Confidence: 0.83964592218399

00:41:18.697 --> 00:41:20.924 these functions so that we can later  
NOTE Confidence: 0.83964592218399

00:41:20.924 --> 00:41:22.414 understand how their vulnerable to  
NOTE Confidence: 0.83964592218399

00:41:22.414 --> 00:41:24.030 development in psychiatric illness.  
NOTE Confidence: 0.83964592218399

00:41:24.030 --> 00:41:26.694 So that's sort of the main idea of

NOTE Confidence: 0.83964592218399

00:41:26.694 --> 00:41:28.700 this study, and then first passes.

NOTE Confidence: 0.83964592218399

00:41:28.700 --> 00:41:31.681 This is to design a task for fMRI and

NOTE Confidence: 0.83964592218399

00:41:31.681 --> 00:41:34.350 to look at a group of healthy adults,

NOTE Confidence: 0.83964592218399

00:41:34.350 --> 00:41:36.348 and then the circuits that we

NOTE Confidence: 0.83964592218399

00:41:36.348 --> 00:41:38.016 identified are really frontal and

NOTE Confidence: 0.83964592218399

00:41:38.016 --> 00:41:39.710 parietal circuits that are really

NOTE Confidence: 0.83964592218399

00:41:39.710 --> 00:41:41.750 in the posterior regions of those.

NOTE Confidence: 0.83964592218399

00:41:41.750 --> 00:41:43.526 Areas and meaning through their

NOTE Confidence: 0.83964592218399

00:41:43.526 --> 00:41:45.955 sort of located in the back of

NOTE Confidence: 0.83964592218399

00:41:45.955 --> 00:41:48.105 the prefrontal cortex or the back

NOTE Confidence: 0.83964592218399

00:41:48.105 --> 00:41:50.272 of the parietal cortex and are

NOTE Confidence: 0.83964592218399

00:41:50.272 --> 00:41:52.038 also integrated with visual areas.

NOTE Confidence: 0.83964592218399

00:41:52.038 --> 00:41:54.481 So there's a lot of sensory and

NOTE Confidence: 0.83964592218399

00:41:54.481 --> 00:41:55.954 cognitive integration that happens

NOTE Confidence: 0.83964592218399

00:41:55.954 --> 00:41:58.438 as well as the emotional piece in.

NOTE Confidence: 0.83964592218399

00:41:58.440 --> 00:42:00.145 Refer motivational signals to sort  
NOTE Confidence: 0.83964592218399

00:42:00.145 --> 00:42:02.281 of boost working memory and yield  
NOTE Confidence: 0.83964592218399

00:42:02.281 --> 00:42:04.116 to improvements in working memory.  
NOTE Confidence: 0.815801084041595

00:42:05.080 --> 00:42:07.120 And So what? I guess,  
NOTE Confidence: 0.815801084041595

00:42:07.120 --> 00:42:09.556 what kind of disorders is this  
NOTE Confidence: 0.815801084041595

00:42:09.560 --> 00:42:12.407 relevant to? The relevant alot of disorder?  
NOTE Confidence: 0.815801084041595

00:42:12.407 --> 00:42:14.849 So schizophrenia is Kartik is mentioned.  
NOTE Confidence: 0.815801084041595

00:42:14.850 --> 00:42:16.795 You know has clear cognitive  
NOTE Confidence: 0.815801084041595

00:42:16.795 --> 00:42:19.175 disruptions in the working memory is  
NOTE Confidence: 0.815801084041595

00:42:19.175 --> 00:42:21.359 it has been consistently reported as  
NOTE Confidence: 0.815801084041595

00:42:21.359 --> 00:42:23.400 being disrupted in schizophrenia.  
NOTE Confidence: 0.815801084041595

00:42:23.400 --> 00:42:24.972 There's also motivational disruptions.  
NOTE Confidence: 0.815801084041595

00:42:24.972 --> 00:42:27.870 It happened there with the negative symptoms.  
NOTE Confidence: 0.815801084041595

00:42:27.870 --> 00:42:29.905 Depression also comes with cognitive  
NOTE Confidence: 0.815801084041595

00:42:29.905 --> 00:42:31.540 and motivational deficit, substance  
NOTE Confidence: 0.815801084041595

00:42:31.540 --> 00:42:33.976 use disorders. ADHD all come with

NOTE Confidence: 0.815801084041595  
00:42:33.980 --> 00:42:35.198 these sort of  
NOTE Confidence: 0.818377605506352  
00:42:35.200 --> 00:42:36.331 code. Disruptions of.  
NOTE Confidence: 0.818377605506352  
00:42:36.331 --> 00:42:37.839 Cognitive and motivational symptoms.  
NOTE Confidence: 0.818377605506352  
00:42:37.840 --> 00:42:39.826 So I think that's kind of  
NOTE Confidence: 0.818377605506352  
00:42:39.826 --> 00:42:40.819 interesting and understanding  
NOTE Confidence: 0.818377605506352  
00:42:40.819 --> 00:42:42.219 better how they're linked.  
NOTE Confidence: 0.818377605506352  
00:42:42.220 --> 00:42:43.905 Independent wanna meet one another  
NOTE Confidence: 0.818377605506352  
00:42:43.905 --> 00:42:45.590 in the brain is interesting.  
NOTE Confidence: 0.852302134037018  
00:42:46.740 --> 00:42:50.460 I I guess I wish the I guess the other thing.  
NOTE Confidence: 0.852302134037018  
00:42:50.460 --> 00:42:52.748 I just want to say before we finish  
NOTE Confidence: 0.852302134037018  
00:42:52.748 --> 00:42:54.849 up is we're kind of experimenting  
NOTE Confidence: 0.852302134037018  
00:42:54.849 --> 00:42:58.150 with the format is a way to kind of  
NOTE Confidence: 0.852302134037018  
00:42:58.150 --> 00:43:00.244 update people on the research that  
NOTE Confidence: 0.852302134037018  
00:43:00.244 --> 00:43:02.628 goes on at the Child study Center.  
NOTE Confidence: 0.852302134037018  
00:43:02.630 --> 00:43:04.800 So if any anyone who's in the  
NOTE Confidence: 0.852302134037018

00:43:04.800 --> 00:43:07.246 audience has any ideas of how we  
NOTE Confidence: 0.852302134037018

00:43:07.246 --> 00:43:09.046 can present the research better.  
NOTE Confidence: 0.852302134037018

00:43:09.050 --> 00:43:10.745 Also we were thinking around  
NOTE Confidence: 0.852302134037018

00:43:10.745 --> 00:43:12.440 sending out short videos of.  
NOTE Confidence: 0.852302134037018

00:43:12.440 --> 00:43:14.486 Love of emerging research over the  
NOTE Confidence: 0.852302134037018

00:43:14.486 --> 00:43:16.532 course of the year, featuring things  
NOTE Confidence: 0.852302134037018

00:43:16.532 --> 00:43:19.260 that people do have a good sense, what?  
NOTE Confidence: 0.852302134037018

00:43:19.260 --> 00:43:22.428 What could be the first video that we share?  
NOTE Confidence: 0.852302134037018

00:43:22.428 --> 00:43:26.562 But but I guess I just wanted to thank all  
NOTE Confidence: 0.852302134037018

00:43:26.562 --> 00:43:30.266 the panelists and just as we're in this,  
NOTE Confidence: 0.852302134037018

00:43:30.270 --> 00:43:32.766 you know, emerging different world of  
NOTE Confidence: 0.852302134037018

00:43:32.766 --> 00:43:35.110 presenting things in our research.  
NOTE Confidence: 0.852302134037018

00:43:35.110 --> 00:43:38.414 Just thinking about ways that we can make  
NOTE Confidence: 0.852302134037018

00:43:38.414 --> 00:43:41.269 things more accessible in the future,  
NOTE Confidence: 0.852302134037018

00:43:41.270 --> 00:43:44.130 especially the young researcher  
NOTE Confidence: 0.852302134037018

00:43:44.130 --> 00:43:45.560 emerging investigators.

NOTE Confidence: 0.852302134037018  
00:43:45.560 --> 00:43:47.080 Thank you, thank you,  
NOTE Confidence: 0.783692359924316  
00:43:47.080 --> 00:43:50.300 thank you so much and thank you to to Emily  
NOTE Confidence: 0.783692359924316  
00:43:50.377 --> 00:43:53.149 and Karthik and Amanda Anne Youngson.  
NOTE Confidence: 0.783692359924316  
00:43:53.150 --> 00:43:55.686 Great that we can highlight this new way  
NOTE Confidence: 0.783692359924316  
00:43:55.686 --> 00:43:58.097 of trying to get the information out.  
NOTE Confidence: 0.783692359924316  
00:43:58.100 --> 00:43:59.436 And as Michael says,  
NOTE Confidence: 0.783692359924316  
00:43:59.436 --> 00:44:01.440 we're looking for we're looking for  
NOTE Confidence: 0.783692359924316  
00:44:01.502 --> 00:44:03.707 feedback on the format and also will.  
NOTE Confidence: 0.783692359924316  
00:44:03.710 --> 00:44:05.360 This has been recorded too,  
NOTE Confidence: 0.783692359924316  
00:44:05.360 --> 00:44:07.670 so we'll be able to circulate it.  
NOTE Confidence: 0.783692359924316  
00:44:07.670 --> 00:44:10.310 Now we're going to switch to the next.  
NOTE Confidence: 0.783692359924316  
00:44:10.310 --> 00:44:12.476 The next part of this afternoon's  
NOTE Confidence: 0.783692359924316  
00:44:12.476 --> 00:44:14.675 program with three panels want touching  
NOTE Confidence: 0.783692359924316  
00:44:14.675 --> 00:44:17.076 on Tele Health and what we've learned  
NOTE Confidence: 0.783692359924316  
00:44:17.076 --> 00:44:19.139 over this time with Tele Health.  
NOTE Confidence: 0.783692359924316



00:44:19.140 --> 00:44:22.248 One touching on autism and related  
NOTE Confidence: 0.783692359924316

00:44:22.248 --> 00:44:25.239 developmental disabilities and then then we  
NOTE Confidence: 0.783692359924316

00:44:25.239 --> 00:44:28.172 will have 1/3 panel on maternal depression.  
NOTE Confidence: 0.783692359924316

00:44:28.180 --> 00:44:29.562 The way will work.  
NOTE Confidence: 0.783692359924316

00:44:29.562 --> 00:44:31.984 This is that will have the panels.  
NOTE Confidence: 0.783692359924316

00:44:31.990 --> 00:44:34.750 The panelist in each of those areas present,  
NOTE Confidence: 0.783692359924316

00:44:34.750 --> 00:44:36.712 and then we'll take questions at  
NOTE Confidence: 0.783692359924316

00:44:36.712 --> 00:44:39.168 each of those times and I'll be  
NOTE Confidence: 0.783692359924316

00:44:39.168 --> 00:44:40.973 moderating the questions the same.  
NOTE Confidence: 0.783692359924316

00:44:40.980 --> 00:44:43.577 This will do the same that please  
NOTE Confidence: 0.783692359924316

00:44:43.577 --> 00:44:45.700 put your questions either in the  
NOTE Confidence: 0.783692359924316

00:44:45.700 --> 00:44:47.891 chat or just speak up an will.  
NOTE Confidence: 0.783692359924316

00:44:47.900 --> 00:44:50.066 I'll be sure that your questions  
NOTE Confidence: 0.783692359924316

00:44:50.066 --> 00:44:53.159 get to get to the proper channels.  
NOTE Confidence: 0.783692359924316

00:44:53.160 --> 00:44:56.013 So let me just be sure that we have  
NOTE Confidence: 0.783692359924316

00:44:56.013 --> 00:44:59.108 Pam Hoffman is here and I see famine,

NOTE Confidence: 0.783692359924316  
00:44:59.110 --> 00:45:00.160 Dennis and fam.  
NOTE Confidence: 0.783692359924316  
00:45:00.160 --> 00:45:02.941 Dennis Anuar joined with Jan as well, right?  
NOTE Confidence: 0.783692359924316  
00:45:02.941 --> 00:45:05.258 Yes, so we have a wonderful first  
NOTE Confidence: 0.783692359924316  
00:45:05.258 --> 00:45:06.809 panel on Tele Health.  
NOTE Confidence: 0.783692359924316  
00:45:06.810 --> 00:45:07.160 Ann.  
NOTE Confidence: 0.783692359924316  
00:45:07.160 --> 00:45:08.910 As you've heard me say.  
NOTE Confidence: 0.783692359924316  
00:45:08.910 --> 00:45:10.660 And several of these days,  
NOTE Confidence: 0.783692359924316  
00:45:10.660 --> 00:45:12.330 the Child study center transition  
NOTE Confidence: 0.783692359924316  
00:45:12.330 --> 00:45:14.510 to Tele Health really very quickly,  
NOTE Confidence: 0.783692359924316  
00:45:14.510 --> 00:45:16.260 but calls with the pandemic.  
NOTE Confidence: 0.783692359924316  
00:45:16.260 --> 00:45:18.360 And when Pam joined our faculty,  
NOTE Confidence: 0.783692359924316  
00:45:18.360 --> 00:45:21.000 we had the plan pan that it would  
NOTE Confidence: 0.783692359924316  
00:45:21.000 --> 00:45:23.269 be over an 18 month period.  
NOTE Confidence: 0.783692359924316  
00:45:23.270 --> 00:45:25.300 It basically was over a two week  
NOTE Confidence: 0.783692359924316  
00:45:25.300 --> 00:45:27.504 period and then we've been refining  
NOTE Confidence: 0.783692359924316

00:45:27.504 --> 00:45:29.196 that subsequently to follow  
NOTE Confidence: 0.783692359924316

00:45:29.196 --> 00:45:30.465 Michaels example live.  
NOTE Confidence: 0.783692359924316

00:45:30.470 --> 00:45:34.070 With that you can go on the web and see  
NOTE Confidence: 0.877692759037018

00:45:34.070 --> 00:45:35.150 see about each  
NOTE Confidence: 0.877692759037018

00:45:35.150 --> 00:45:36.230 of these individuals,  
NOTE Confidence: 0.877692759037018

00:45:36.230 --> 00:45:39.110 but I would just like to just introduce  
NOTE Confidence: 0.877692759037018

00:45:39.110 --> 00:45:41.546 them by the things that that the  
NOTE Confidence: 0.877692759037018

00:45:41.546 --> 00:45:44.148 many things in ways they stand out.  
NOTE Confidence: 0.877692759037018

00:45:44.150 --> 00:45:46.734 So one you just heard is Pam's ability  
NOTE Confidence: 0.877692759037018

00:45:46.734 --> 00:45:49.710 to make something happen really quickly.  
NOTE Confidence: 0.877692759037018

00:45:49.710 --> 00:45:51.595 Her enormous interest and capacity  
NOTE Confidence: 0.877692759037018

00:45:51.595 --> 00:45:53.480 to bridge clinical trial psychiatry  
NOTE Confidence: 0.877692759037018

00:45:53.534 --> 00:45:55.594 and complex issues of information  
NOTE Confidence: 0.877692759037018

00:45:55.594 --> 00:45:57.242 technology and leading informatics.  
NOTE Confidence: 0.877692759037018

00:45:57.250 --> 00:46:00.658 And then what you might not see from  
NOTE Confidence: 0.877692759037018

00:46:00.658 --> 00:46:03.998 her CV is she has a deep interest in

NOTE Confidence: 0.877692759037018  
00:46:04.000 --> 00:46:06.538 literature and how literature in various  
NOTE Confidence: 0.877692759037018  
00:46:06.538 --> 00:46:09.390 forms of literature and music and art  
NOTE Confidence: 0.877692759037018  
00:46:09.390 --> 00:46:11.931 inform our ways of working with children.  
NOTE Confidence: 0.877692759037018  
00:46:11.940 --> 00:46:15.286 Dennis Sadosky you've met on other other  
NOTE Confidence: 0.877692759037018  
00:46:15.286 --> 00:46:18.026 associates meetings and I'm just so glad  
NOTE Confidence: 0.877692759037018  
00:46:18.026 --> 00:46:21.140 that you get a chance to meet Dennis now.  
NOTE Confidence: 0.877692759037018  
00:46:21.140 --> 00:46:23.836 Dennis is the most upbeat person I know  
NOTE Confidence: 0.877692759037018  
00:46:23.836 --> 00:46:26.877 and had the chance to convert his lab  
NOTE Confidence: 0.877692759037018  
00:46:26.877 --> 00:46:29.290 really quickly to doing assessments over  
NOTE Confidence: 0.877692759037018  
00:46:29.290 --> 00:46:32.562 Tele format and just did it without any.  
NOTE Confidence: 0.877692759037018  
00:46:32.570 --> 00:46:33.426 Maybe Dennis,  
NOTE Confidence: 0.877692759037018  
00:46:33.426 --> 00:46:35.994 you didn't show your anxieties and  
NOTE Confidence: 0.877692759037018  
00:46:35.994 --> 00:46:38.498 worries but but my sense it was  
NOTE Confidence: 0.877692759037018  
00:46:38.498 --> 00:46:40.527 just smooth and you were always  
NOTE Confidence: 0.877692759037018  
00:46:40.527 --> 00:46:42.837 being creative and thinking of new  
NOTE Confidence: 0.877692759037018

00:46:42.837 --> 00:46:45.068 ways to help children and families.  
NOTE Confidence: 0.877692759037018

00:46:45.068 --> 00:46:48.190 And then Jan Ponson is our medical director,  
NOTE Confidence: 0.877692759037018

00:46:48.190 --> 00:46:48.944 outpatient services.  
NOTE Confidence: 0.877692759037018

00:46:48.944 --> 00:46:51.206 Jan is the most unflappable person  
NOTE Confidence: 0.877692759037018

00:46:51.206 --> 00:46:53.179 in the clinical setting I.  
NOTE Confidence: 0.877692759037018

00:46:53.180 --> 00:46:53.994 Absolutely no,  
NOTE Confidence: 0.877692759037018

00:46:53.994 --> 00:46:57.250 and he has an ability to hold complexity  
NOTE Confidence: 0.877692759037018

00:46:57.325 --> 00:46:59.629 in mind and just just go with it  
NOTE Confidence: 0.877692759037018

00:46:59.629 --> 00:47:02.769 and at the same time has a great  
NOTE Confidence: 0.877692759037018

00:47:02.769 --> 00:47:05.235 sensibility about children and families.  
NOTE Confidence: 0.877692759037018

00:47:05.235 --> 00:47:07.650 So let me.  
NOTE Confidence: 0.877692759037018

00:47:07.650 --> 00:47:11.650 3 colonies fam Dennison young.  
NOTE Confidence: 0.877692759037018

00:47:11.650 --> 00:47:12.350 Thank you  
NOTE Confidence: 0.847722053527832

00:47:12.350 --> 00:47:15.134 and I'm so excited to be talking a  
NOTE Confidence: 0.847722053527832

00:47:15.134 --> 00:47:17.222 little bit about what we've done.  
NOTE Confidence: 0.847722053527832

00:47:17.222 --> 00:47:19.310 I'm really mostly excited about talking

NOTE Confidence: 0.847722053527832  
00:47:19.310 --> 00:47:22.090 bout what more fun we have in store,  
NOTE Confidence: 0.847722053527832  
00:47:22.090 --> 00:47:25.060 and so I'd like to give a little bit of  
NOTE Confidence: 0.847722053527832  
00:47:25.138 --> 00:47:27.959 a short presentation on which is some  
NOTE Confidence: 0.847722053527832  
00:47:27.959 --> 00:47:31.542 numbers so that we can see a little bit of  
NOTE Confidence: 0.847722053527832  
00:47:31.542 --> 00:47:34.270 what child study center has done so far.  
NOTE Confidence: 0.847722053527832  
00:47:34.270 --> 00:47:36.706 So as thank you for introducing me,  
NOTE Confidence: 0.847722053527832  
00:47:36.710 --> 00:47:39.617 it's very nice. I I hold a lot of  
NOTE Confidence: 0.847722053527832  
00:47:39.617 --> 00:47:41.978 different hats in the health system.  
NOTE Confidence: 0.847722053527832  
00:47:41.980 --> 00:47:43.810 My favorite one obviously biased.  
NOTE Confidence: 0.847722053527832  
00:47:43.810 --> 00:47:45.640 Yes, is that I'm here.  
NOTE Confidence: 0.847722053527832  
00:47:45.640 --> 00:47:47.160 The Child study center.  
NOTE Confidence: 0.847722053527832  
00:47:47.160 --> 00:47:51.130 I also spend a lot of my time at why CMI,  
NOTE Confidence: 0.847722053527832  
00:47:51.130 --> 00:47:53.685 which is Yale Center for Medical Informatics,  
NOTE Confidence: 0.847722053527832  
00:47:53.690 --> 00:47:56.084 where I Amoco training director for  
NOTE Confidence: 0.847722053527832  
00:47:56.084 --> 00:47:58.033 the Health Informatics Masters degree  
NOTE Confidence: 0.847722053527832

00:47:58.033 --> 00:48:00.021 students and I run and teach their

NOTE Confidence: 0.847722053527832

00:48:00.021 --> 00:48:02.108 fall in spring capstone courses,

NOTE Confidence: 0.847722053527832

00:48:02.110 --> 00:48:04.336 so we're looking forward to the

NOTE Confidence: 0.847722053527832

00:48:04.336 --> 00:48:06.940 end of that semester in two weeks

NOTE Confidence: 0.847722053527832

00:48:06.940 --> 00:48:08.328 and as she described.

NOTE Confidence: 0.847722053527832

00:48:08.330 --> 00:48:09.794 I'm also medical director

NOTE Confidence: 0.847722053527832

00:48:09.794 --> 00:48:11.624 for Tele Health at Yale,

NOTE Confidence: 0.847722053527832

00:48:11.630 --> 00:48:13.530 New Haven Health Systems, and.

NOTE Confidence: 0.847722053527832

00:48:13.530 --> 00:48:14.194 Yellow medicine,

NOTE Confidence: 0.847722053527832

00:48:14.194 --> 00:48:16.518 so all of that integrates really nicely

NOTE Confidence: 0.847722053527832

00:48:16.518 --> 00:48:19.008 into what the Child study Center has

NOTE Confidence: 0.847722053527832

00:48:19.008 --> 00:48:22.090 done with respect to Tele health so far.

NOTE Confidence: 0.847722053527832

00:48:22.090 --> 00:48:24.256 So allow me to just shock

NOTE Confidence: 0.847722053527832

00:48:24.256 --> 00:48:26.460 you all with some numbers.

NOTE Confidence: 0.847722053527832

00:48:26.460 --> 00:48:28.842 We have almost done a half

NOTE Confidence: 0.847722053527832

00:48:28.842 --> 00:48:30.430 a million video visits.

NOTE Confidence: 0.847722053527832

00:48:30.430 --> 00:48:33.310 I have a feeling given that we we

NOTE Confidence: 0.847722053527832

00:48:33.310 --> 00:48:35.906 started out before the pandemic doing

NOTE Confidence: 0.847722053527832

00:48:35.906 --> 00:48:39.159 between 30 and 40 video visits a day.

NOTE Confidence: 0.847722053527832

00:48:39.160 --> 00:48:41.150 There were mainly pilot programs,

NOTE Confidence: 0.847722053527832

00:48:41.150 --> 00:48:42.734 Tele, ICU, Tele stroke.

NOTE Confidence: 0.847722053527832

00:48:42.734 --> 00:48:44.318 We had Tele neuro.

NOTE Confidence: 0.847722053527832

00:48:44.320 --> 00:48:46.642 We were talking about a business

NOTE Confidence: 0.847722053527832

00:48:46.642 --> 00:48:48.651 plan for telepsychiatry knowing that

NOTE Confidence: 0.847722053527832

00:48:48.651 --> 00:48:50.616 telepsychiatry is beautiful and easy

NOTE Confidence: 0.847722053527832

00:48:50.616 --> 00:48:52.680 way of integrating Tele health.

NOTE Confidence: 0.847722053527832

00:48:52.680 --> 00:48:53.958 Into general practice,

NOTE Confidence: 0.847722053527832

00:48:53.958 --> 00:48:56.088 especially given other limitations and

NOTE Confidence: 0.847722053527832

00:48:56.088 --> 00:48:58.068 physical examinations and things like that.

NOTE Confidence: 0.847722053527832

00:48:58.070 --> 00:49:00.744 So everybody knew that Tele Psych was

NOTE Confidence: 0.847722053527832

00:49:00.744 --> 00:49:04.225 going to be a nice fit for Tele medicine,

NOTE Confidence: 0.847722053527832



00:49:04.230 --> 00:49:06.160 but I can tell you,  
NOTE Confidence: 0.847722053527832

00:49:06.160 --> 00:49:08.470 after the public health emergency hit,  
NOTE Confidence: 0.847722053527832

00:49:08.470 --> 00:49:10.780 as you can see, in March,  
NOTE Confidence: 0.847722053527832

00:49:10.780 --> 00:49:13.377 we jumped to end up seeing between  
NOTE Confidence: 0.847722053527832

00:49:13.377 --> 00:49:15.399 2400 and we're having now.  
NOTE Confidence: 0.847722053527832

00:49:15.400 --> 00:49:17.710 Around 4000 video visits a day  
NOTE Confidence: 0.847722053527832

00:49:17.710 --> 00:49:19.250 for the health system,  
NOTE Confidence: 0.847722053527832

00:49:19.250 --> 00:49:21.596 and this is across all ambulatory  
NOTE Confidence: 0.847722053527832

00:49:21.596 --> 00:49:22.769 programs in YM.  
NOTE Confidence: 0.847722053527832

00:49:22.770 --> 00:49:24.218 Any MTR outpatient services?  
NOTE Confidence: 0.847722053527832

00:49:24.218 --> 00:49:25.304 Why NHHS services.  
NOTE Confidence: 0.847722053527832

00:49:25.310 --> 00:49:26.818 Another delivery network locations.  
NOTE Confidence: 0.847722053527832

00:49:26.818 --> 00:49:29.477 What I really want to focus your  
NOTE Confidence: 0.847722053527832

00:49:29.477 --> 00:49:31.475 attention on is this other number.  
NOTE Confidence: 0.847722053527832

00:49:31.480 --> 00:49:34.288 We don't look at it as often and I  
NOTE Confidence: 0.847722053527832

00:49:34.288 --> 00:49:36.848 really believe we should 289 thousand

NOTE Confidence: 0.847722053527832

00:49:36.848 --> 00:49:39.749 phone consoles now we know that a

NOTE Confidence: 0.847722053527832

00:49:39.749 --> 00:49:42.038 lot of these are our patients and

NOTE Confidence: 0.847722053527832

00:49:42.038 --> 00:49:44.841 we know that because a lot of our

NOTE Confidence: 0.847722053527832

00:49:44.841 --> 00:49:47.074 patients don't have the access to

NOTE Confidence: 0.847722053527832

00:49:47.074 --> 00:49:48.909 the technology or the broadband

NOTE Confidence: 0.847722053527832

00:49:48.909 --> 00:49:51.877 or the access to be able to have

NOTE Confidence: 0.847722053527832

00:49:51.877 --> 00:49:53.317 a successful video visit.

NOTE Confidence: 0.847722053527832

00:49:53.320 --> 00:49:55.343 So right now we are completing over

NOTE Confidence: 0.847722053527832

00:49:55.343 --> 00:49:57.109 half a million video or telephone

NOTE Confidence: 0.847722053527832

00:49:57.109 --> 00:49:59.381 console so far and we need to be

NOTE Confidence: 0.847722053527832

00:49:59.381 --> 00:50:00.977 thinking about the two of them

NOTE Confidence: 0.847722053527832

00:50:00.977 --> 00:50:02.582 and how they interact together.

NOTE Confidence: 0.847722053527832

00:50:02.582 --> 00:50:05.389 So I also really wanted to tout

NOTE Confidence: 0.847722053527832

00:50:05.389 --> 00:50:08.089 the amazing options that have been

NOTE Confidence: 0.847722053527832

00:50:08.089 --> 00:50:11.359 possible because of the child study center.

NOTE Confidence: 0.847722053527832

00:50:11.360 --> 00:50:14.648 We are truly Trail Blazers and Tele health,  
NOTE Confidence: 0.847722053527832

00:50:14.650 --> 00:50:16.474 mainly because because different  
NOTE Confidence: 0.847722053527832

00:50:16.474 --> 00:50:18.298 departments and different services  
NOTE Confidence: 0.847722053527832

00:50:18.298 --> 00:50:19.210 in different  
NOTE Confidence: 0.870120823383331

00:50:19.268 --> 00:50:21.038 teams have found gaps where  
NOTE Confidence: 0.870120823383331

00:50:21.038 --> 00:50:22.454 patients wanted to continue.  
NOTE Confidence: 0.870120823383331

00:50:22.460 --> 00:50:24.782 For example, to have their group  
NOTE Confidence: 0.870120823383331

00:50:24.782 --> 00:50:27.772 therapy and so we could set up a  
NOTE Confidence: 0.870120823383331

00:50:27.772 --> 00:50:30.453 pilot for proof of concept to allow  
NOTE Confidence: 0.870120823383331

00:50:30.453 --> 00:50:33.228 specific therapies happening on zoom.  
NOTE Confidence: 0.870120823383331

00:50:33.230 --> 00:50:35.288 Even though it wasn't our preferred video  
NOTE Confidence: 0.870120823383331

00:50:35.288 --> 00:50:37.479 client and then to have it actually  
NOTE Confidence: 0.870120823383331

00:50:37.479 --> 00:50:39.363 transfer into our preferred video client.  
NOTE Confidence: 0.870120823383331

00:50:39.370 --> 00:50:41.316 So it was really incredible to be  
NOTE Confidence: 0.870120823383331

00:50:41.316 --> 00:50:43.343 able to work with clinicians an  
NOTE Confidence: 0.870120823383331

00:50:43.343 --> 00:50:45.593 operations leads and the entire child

NOTE Confidence: 0.870120823383331  
00:50:45.593 --> 00:50:47.813 study center to be able to say there  
NOTE Confidence: 0.870120823383331  
00:50:47.813 --> 00:50:50.120 needs to be more that can be done.  
NOTE Confidence: 0.870120823383331  
00:50:50.120 --> 00:50:51.336 We know it's possible.  
NOTE Confidence: 0.870120823383331  
00:50:51.336 --> 00:50:53.160 Let's show that it can get  
NOTE Confidence: 0.870120823383331  
00:50:53.229 --> 00:50:54.409 that it can happen,  
NOTE Confidence: 0.870120823383331  
00:50:54.410 --> 00:50:56.650 and so there's been a lot of really  
NOTE Confidence: 0.870120823383331  
00:50:56.650 --> 00:50:58.589 good work back and forth between  
NOTE Confidence: 0.870120823383331  
00:50:58.589 --> 00:51:00.563 IT and between the child study  
NOTE Confidence: 0.870120823383331  
00:51:00.633 --> 00:51:03.017 center to be able to make all of  
NOTE Confidence: 0.870120823383331  
00:51:03.017 --> 00:51:04.276 these different projects possible.  
NOTE Confidence: 0.870120823383331  
00:51:04.276 --> 00:51:05.260 We started out.  
NOTE Confidence: 0.870120823383331  
00:51:05.260 --> 00:51:07.458 Let's see if we can use an  
NOTE Confidence: 0.870120823383331  
00:51:07.458 --> 00:51:08.086 alternative platform.  
NOTE Confidence: 0.870120823383331  
00:51:08.090 --> 00:51:10.015 Let's see if we can use something  
NOTE Confidence: 0.870120823383331  
00:51:10.015 --> 00:51:12.300 special that can last for hours and  
NOTE Confidence: 0.870120823383331

00:51:12.300 --> 00:51:14.045 hours for neuro psychological testing.  
NOTE Confidence: 0.870120823383331

00:51:14.050 --> 00:51:16.434 Let's see if we can use a new  
NOTE Confidence: 0.870120823383331

00:51:16.434 --> 00:51:18.138 software that was coming out.  
NOTE Confidence: 0.870120823383331

00:51:18.140 --> 00:51:20.644 Our video visits 2.0 as we called it,  
NOTE Confidence: 0.870120823383331

00:51:20.650 --> 00:51:22.516 which was using a different type  
NOTE Confidence: 0.870120823383331

00:51:22.516 --> 00:51:24.446 of the software that would have  
NOTE Confidence: 0.870120823383331

00:51:24.446 --> 00:51:26.300 had to be integrated into epic.  
NOTE Confidence: 0.870120823383331

00:51:26.300 --> 00:51:28.178 Our electronic health record as it  
NOTE Confidence: 0.870120823383331

00:51:28.178 --> 00:51:30.105 upgraded in September and the Child  
NOTE Confidence: 0.870120823383331

00:51:30.105 --> 00:51:31.947 Study Center were were Trail Blazers.  
NOTE Confidence: 0.870120823383331

00:51:31.950 --> 00:51:34.510 In being able to test out in pilot.  
NOTE Confidence: 0.870120823383331

00:51:34.510 --> 00:51:37.254 That that new software I will also say  
NOTE Confidence: 0.870120823383331

00:51:37.254 --> 00:51:39.615 that the child consultation liaison  
NOTE Confidence: 0.870120823383331

00:51:39.615 --> 00:51:42.280 service were actually champions that  
NOTE Confidence: 0.870120823383331

00:51:42.280 --> 00:51:45.100 they used as reason for an entire  
NOTE Confidence: 0.870120823383331

00:51:45.100 --> 00:51:47.580 pilot to be started on the pediatric

NOTE Confidence: 0.870120823383331  
00:51:47.580 --> 00:51:49.980 inpatient service that would allow for  
NOTE Confidence: 0.870120823383331  
00:51:49.980 --> 00:51:52.079 consoles across three different units  
NOTE Confidence: 0.870120823383331  
00:51:52.079 --> 00:51:54.139 in the Pediatrics inpatient world.  
NOTE Confidence: 0.870120823383331  
00:51:54.140 --> 00:51:56.648 They thought that because we were  
NOTE Confidence: 0.870120823383331  
00:51:56.648 --> 00:52:00.276 able to do it when no one else was,  
NOTE Confidence: 0.870120823383331  
00:52:00.280 --> 00:52:03.136 it means that others could use this,  
NOTE Confidence: 0.870120823383331  
00:52:03.140 --> 00:52:06.017 and so so far they've used the.  
NOTE Confidence: 0.870120823383331  
00:52:06.020 --> 00:52:08.138 Experience of our amazing CL psychiatry  
NOTE Confidence: 0.870120823383331  
00:52:08.138 --> 00:52:10.483 staff to then build and transform  
NOTE Confidence: 0.870120823383331  
00:52:10.483 --> 00:52:13.087 inpatient consoles for the Pediatrics teams.  
NOTE Confidence: 0.870120823383331  
00:52:13.090 --> 00:52:15.055 We also are now attempting  
NOTE Confidence: 0.870120823383331  
00:52:15.055 --> 00:52:17.020 to pivot and change again.  
NOTE Confidence: 0.870120823383331  
00:52:17.020 --> 00:52:19.528 What kind of software you're using  
NOTE Confidence: 0.870120823383331  
00:52:19.528 --> 00:52:21.708 because we are constantly responding  
NOTE Confidence: 0.870120823383331  
00:52:21.708 --> 00:52:24.300 to feedback and suggestions and so  
NOTE Confidence: 0.870120823383331

00:52:24.300 --> 00:52:26.923 there is another special pilot to try  
NOTE Confidence: 0.870120823383331

00:52:26.923 --> 00:52:29.690 to see if zoom should be our primary  
NOTE Confidence: 0.870120823383331

00:52:29.690 --> 00:52:32.330 instead of an art alternative software  
NOTE Confidence: 0.870120823383331

00:52:32.330 --> 00:52:34.732 platform and child study center again  
NOTE Confidence: 0.870120823383331

00:52:34.732 --> 00:52:37.888 stepped up to the plate and agreed to do.  
NOTE Confidence: 0.870120823383331

00:52:37.890 --> 00:52:39.072 Pilots for that.  
NOTE Confidence: 0.870120823383331

00:52:39.072 --> 00:52:41.830 So the other the next part is,  
NOTE Confidence: 0.870120823383331

00:52:41.830 --> 00:52:42.384 you know,  
NOTE Confidence: 0.870120823383331

00:52:42.384 --> 00:52:43.769 our journey is just beginning.  
NOTE Confidence: 0.870120823383331

00:52:43.770 --> 00:52:45.709 We need to continue to be champions.  
NOTE Confidence: 0.870120823383331

00:52:45.710 --> 00:52:47.204 We're going to continue to be  
NOTE Confidence: 0.870120823383331

00:52:47.204 --> 00:52:48.563 early adopters and we're looking  
NOTE Confidence: 0.870120823383331

00:52:48.563 --> 00:52:50.138 not just at patient satisfaction,  
NOTE Confidence: 0.870120823383331

00:52:50.140 --> 00:52:51.796 but we're looking at outcomes improvement.  
NOTE Confidence: 0.870120823383331

00:52:51.800 --> 00:52:53.732 It's not just about that our patients  
NOTE Confidence: 0.870120823383331

00:52:53.732 --> 00:52:55.680 want this, we know they want this.

NOTE Confidence: 0.870120823383331  
00:52:55.680 --> 00:52:57.065 It's that they're going to  
NOTE Confidence: 0.870120823383331  
00:52:57.065 --> 00:52:58.450 do better because of it.  
NOTE Confidence: 0.870120823383331  
00:52:58.450 --> 00:52:59.534 That's really the idea.  
NOTE Confidence: 0.870120823383331  
00:52:59.534 --> 00:53:01.500 How can we best care for them?  
NOTE Confidence: 0.870120823383331  
00:53:01.500 --> 00:53:03.708 How can we reach them where they're at,  
NOTE Confidence: 0.870120823383331  
00:53:03.710 --> 00:53:05.324 and how can we make sure  
NOTE Confidence: 0.870120823383331  
00:53:05.324 --> 00:53:06.760 that they are staying well,  
NOTE Confidence: 0.870120823383331  
00:53:06.760 --> 00:53:08.422 it's not just that we can't  
NOTE Confidence: 0.870120823383331  
00:53:08.422 --> 00:53:09.530 just help our patients.  
NOTE Confidence: 0.870282828807831  
00:53:09.530 --> 00:53:11.528 We can't just help our families.  
NOTE Confidence: 0.870282828807831  
00:53:11.530 --> 00:53:12.631 To expand that,  
NOTE Confidence: 0.870282828807831  
00:53:12.631 --> 00:53:14.833 reach to our community and beyond.  
NOTE Confidence: 0.870282828807831  
00:53:14.840 --> 00:53:17.048 So how are we rethinking where  
NOTE Confidence: 0.870282828807831  
00:53:17.048 --> 00:53:18.520 remote patient monitoring goes?  
NOTE Confidence: 0.870282828807831  
00:53:18.520 --> 00:53:20.728 Are we looking this as a  
NOTE Confidence: 0.870282828807831



00:53:20.728 --> 00:53:22.200 form of digital checkins?  
NOTE Confidence: 0.870282828807831

00:53:22.200 --> 00:53:24.065 Are we considering rating scales  
NOTE Confidence: 0.870282828807831

00:53:24.065 --> 00:53:26.300 both in between and during sessions  
NOTE Confidence: 0.870282828807831

00:53:26.300 --> 00:53:28.421 to be done remotely so that you  
NOTE Confidence: 0.870282828807831

00:53:28.421 --> 00:53:30.300 can get additional andmore,  
NOTE Confidence: 0.870282828807831

00:53:30.300 --> 00:53:31.404 andmore comprehensive data?  
NOTE Confidence: 0.870282828807831

00:53:31.404 --> 00:53:33.980 Are we thinking about mobile health apps?  
NOTE Confidence: 0.870282828807831

00:53:33.980 --> 00:53:35.084 Are we collaborating?  
NOTE Confidence: 0.870282828807831

00:53:35.084 --> 00:53:35.820 We are.  
NOTE Confidence: 0.870282828807831

00:53:35.820 --> 00:53:38.160 I'm working with a with a  
NOTE Confidence: 0.870282828807831

00:53:38.160 --> 00:53:39.720 postdoctoral fellow in Informatics  
NOTE Confidence: 0.870282828807831

00:53:39.788 --> 00:53:41.738 who has a special interest in.  
NOTE Confidence: 0.870282828807831

00:53:41.740 --> 00:53:44.659 Um, in the mental health of black  
NOTE Confidence: 0.870282828807831

00:53:44.659 --> 00:53:47.339 women she was able to do her.  
NOTE Confidence: 0.870282828807831

00:53:47.340 --> 00:53:50.524 Her PhD research was on how they have  
NOTE Confidence: 0.870282828807831

00:53:50.524 --> 00:53:52.987 limited resources and they don't go

NOTE Confidence: 0.870282828807831

00:53:52.987 --> 00:53:55.740 through getting resources in the same way.

NOTE Confidence: 0.870282828807831

00:53:55.740 --> 00:53:57.575 So she's developed several mobile

NOTE Confidence: 0.870282828807831

00:53:57.575 --> 00:53:59.894 health apps in order to increase

NOTE Confidence: 0.870282828807831

00:53:59.894 --> 00:54:01.954 engagement and in treatment for

NOTE Confidence: 0.870282828807831

00:54:01.954 --> 00:54:04.487 for patients who really need it

NOTE Confidence: 0.870282828807831

00:54:04.487 --> 00:54:06.517 and then continuing to collaborate

NOTE Confidence: 0.870282828807831

00:54:06.517 --> 00:54:08.140 within the Community Schools,

NOTE Confidence: 0.870282828807831

00:54:08.140 --> 00:54:10.540 churches everywhere where our families are,

NOTE Confidence: 0.870282828807831

00:54:10.540 --> 00:54:13.006 we need to continue that collaboration.

NOTE Confidence: 0.870282828807831

00:54:13.010 --> 00:54:14.434 And then of course,

NOTE Confidence: 0.870282828807831

00:54:14.434 --> 00:54:16.214 it's not just our community,

NOTE Confidence: 0.870282828807831

00:54:16.220 --> 00:54:18.326 it's working for making the changes

NOTE Confidence: 0.870282828807831

00:54:18.326 --> 00:54:20.150 that made this possible stick.

NOTE Confidence: 0.870282828807831

00:54:20.150 --> 00:54:22.286 So we talked about telephone visits.

NOTE Confidence: 0.870282828807831

00:54:22.290 --> 00:54:24.614 They need to keep going at least

NOTE Confidence: 0.870282828807831

00:54:24.614 --> 00:54:26.928 for some subset of our population.  
NOTE Confidence: 0.870282828807831

00:54:26.930 --> 00:54:30.143 We still need to talk about parity right now.  
NOTE Confidence: 0.870282828807831

00:54:30.150 --> 00:54:32.292 It's not just parity from mental  
NOTE Confidence: 0.870282828807831

00:54:32.292 --> 00:54:33.720 health to physical health,  
NOTE Confidence: 0.870282828807831

00:54:33.720 --> 00:54:36.219 it's parity for treatment for Tele health,  
NOTE Confidence: 0.870282828807831

00:54:36.220 --> 00:54:37.640 for mental health care,  
NOTE Confidence: 0.870282828807831

00:54:37.640 --> 00:54:38.705 and Tele health,  
NOTE Confidence: 0.870282828807831

00:54:38.710 --> 00:54:40.582 for for physical health care really  
NOTE Confidence: 0.870282828807831

00:54:40.582 --> 00:54:42.316 becomes that much more impressive  
NOTE Confidence: 0.870282828807831

00:54:42.316 --> 00:54:44.466 when people start questioning parity.  
NOTE Confidence: 0.870282828807831

00:54:44.470 --> 00:54:46.360 For care for the patients,  
NOTE Confidence: 0.870282828807831

00:54:46.360 --> 00:54:49.367 because we can truly show that 100% of  
NOTE Confidence: 0.870282828807831

00:54:49.367 --> 00:54:52.383 the shares the same virtually is in person,  
NOTE Confidence: 0.870282828807831

00:54:52.390 --> 00:54:54.275 and yet the reimbursements do  
NOTE Confidence: 0.870282828807831

00:54:54.275 --> 00:54:56.160 not end up reflecting that.  
NOTE Confidence: 0.870282828807831

00:54:56.160 --> 00:54:57.664 And then of course,

NOTE Confidence: 0.870282828807831  
00:54:57.664 --> 00:54:59.168 it's access to care.  
NOTE Confidence: 0.870282828807831  
00:54:59.170 --> 00:55:01.809 And I think this is really an  
NOTE Confidence: 0.870282828807831  
00:55:01.809 --> 00:55:02.563 amazing opportunity.  
NOTE Confidence: 0.870282828807831  
00:55:02.570 --> 00:55:04.440 We're looking at federal and  
NOTE Confidence: 0.870282828807831  
00:55:04.440 --> 00:55:05.562 different organizational grants  
NOTE Confidence: 0.870282828807831  
00:55:05.562 --> 00:55:07.470 to look at broadband access,  
NOTE Confidence: 0.870282828807831  
00:55:07.470 --> 00:55:09.186 increased access and devices  
NOTE Confidence: 0.870282828807831  
00:55:09.186 --> 00:55:11.331 while continuing to remember that  
NOTE Confidence: 0.870282828807831  
00:55:11.331 --> 00:55:13.294 privacy needs to be where we're  
NOTE Confidence: 0.870282828807831  
00:55:13.294 --> 00:55:15.380 thinking for each of our patients,  
NOTE Confidence: 0.870282828807831  
00:55:15.380 --> 00:55:16.060 wherever we.  
NOTE Confidence: 0.870282828807831  
00:55:16.060 --> 00:55:18.440 Access them that we need to be  
NOTE Confidence: 0.870282828807831  
00:55:18.440 --> 00:55:20.128 thinking about their privacy  
NOTE Confidence: 0.870282828807831  
00:55:20.128 --> 00:55:22.253 because oftentimes they are not.  
NOTE Confidence: 0.870282828807831  
00:55:22.260 --> 00:55:25.151 So this is where I think our  
NOTE Confidence: 0.870282828807831

00:55:25.151 --> 00:55:27.449 our journey is going and.  
NOTE Confidence: 0.870282828807831

00:55:27.450 --> 00:55:29.454 To enclose the future of Tele  
NOTE Confidence: 0.870282828807831

00:55:29.454 --> 00:55:30.456 Health was yesterday.  
NOTE Confidence: 0.870282828807831

00:55:30.460 --> 00:55:33.070 We are now in a whole new world where  
NOTE Confidence: 0.870282828807831

00:55:33.070 --> 00:55:35.844 Tele health is going to just be yet  
NOTE Confidence: 0.870282828807831

00:55:35.844 --> 00:55:38.467 another modality of care for our patients.  
NOTE Confidence: 0.870282828807831

00:55:38.470 --> 00:55:41.368 And I am so pleased to say that our  
NOTE Confidence: 0.870282828807831

00:55:41.368 --> 00:55:44.146 clinicians here have stepped up to the plate.  
NOTE Confidence: 0.870282828807831

00:55:44.150 --> 00:55:45.962 They've really made this part of  
NOTE Confidence: 0.870282828807831

00:55:45.962 --> 00:55:47.820 their of their care signature,  
NOTE Confidence: 0.870282828807831

00:55:47.820 --> 00:55:49.728 and they've made this part of  
NOTE Confidence: 0.870282828807831

00:55:49.728 --> 00:55:51.416 the treatment that they give  
NOTE Confidence: 0.870282828807831

00:55:51.416 --> 00:55:53.166 for our patients and families,  
NOTE Confidence: 0.870282828807831

00:55:53.170 --> 00:55:55.508 and it's really wonderful to see that.  
NOTE Confidence: 0.870282828807831

00:55:55.510 --> 00:55:57.918 So that is a general overview of.  
NOTE Confidence: 0.870282828807831

00:55:57.920 --> 00:55:59.028 Of Tele health here,

NOTE Confidence: 0.870282828807831

00:55:59.028 --> 00:56:01.330 and I'm happy to answer any questions.

NOTE Confidence: 0.870282828807831

00:56:01.330 --> 00:56:03.353 I'm happy to give additional data if

NOTE Confidence: 0.870282828807831

00:56:03.353 --> 00:56:05.905 you'd like to know from a global or

NOTE Confidence: 0.870282828807831

00:56:05.905 --> 00:56:07.525 from the Health Center standpoint,

NOTE Confidence: 0.870282828807831

00:56:07.530 --> 00:56:09.756 and I'm happy just to talk about

NOTE Confidence: 0.870282828807831

00:56:09.756 --> 00:56:11.869 Donald all all day if you want.

NOTE Confidence: 0.83776843547821

00:56:12.650 --> 00:56:14.890 Thank you Pam. Why don't we

NOTE Confidence: 0.83776843547821

00:56:14.890 --> 00:56:17.110 go to dentist and then we'll

NOTE Confidence: 0.83776843547821

00:56:17.200 --> 00:56:19.474 take questions at the end of

NOTE Confidence: 0.83776843547821

00:56:19.474 --> 00:56:21.750 the panel as well. So Dennis.

NOTE Confidence: 0.790373742580414

00:56:25.690 --> 00:56:28.670 So I learned to unmute myself, so

NOTE Confidence: 0.790373742580414

00:56:28.670 --> 00:56:31.484 thank you and I know I also

NOTE Confidence: 0.790373742580414

00:56:31.484 --> 00:56:33.779 have a couple of slides.

NOTE Confidence: 0.790373742580414

00:56:33.780 --> 00:56:37.567 Will they pop up or should I?

NOTE Confidence: 0.790373742580414

00:56:37.570 --> 00:56:38.800 Share my screen.

NOTE Confidence: 0.792246878147125

00:56:39.420 --> 00:56:43.109 Kyle, can you give Dennis sharing privileges?

NOTE Confidence: 0.792246878147125

00:56:43.110 --> 00:56:45.840 You should have sharing privileges.

NOTE Confidence: 0.792246878147125

00:56:45.840 --> 00:56:50.200 Now there you go and thank you again

NOTE Confidence: 0.820177555084229

00:56:50.200 --> 00:56:53.464 for inviting me to comment about

NOTE Confidence: 0.820177555084229

00:56:53.464 --> 00:56:56.190 it will work and transition

NOTE Confidence: 0.820177555084229

00:56:56.190 --> 00:56:59.460 on this work to Tele Health.

NOTE Confidence: 0.820177555084229

00:56:59.460 --> 00:57:02.610 My lab does clinical trials on

NOTE Confidence: 0.820177555084229

00:57:02.610 --> 00:57:05.460 behavioral therapy and of course,

NOTE Confidence: 0.820177555084229

00:57:05.460 --> 00:57:08.185 this therapy has been historically

NOTE Confidence: 0.820177555084229

00:57:08.185 --> 00:57:11.464 conducted as one one face to

NOTE Confidence: 0.820177555084229

00:57:11.464 --> 00:57:13.680 face psychotherapy with children.

NOTE Confidence: 0.820177555084229

00:57:13.680 --> 00:57:17.000 We will spend quite a bit of effort

NOTE Confidence: 0.820177555084229

00:57:17.000 --> 00:57:19.434 trying to engage children with autism

NOTE Confidence: 0.820177555084229

00:57:19.434 --> 00:57:21.756 spectrum disorder in one on ones

NOTE Confidence: 0.820177555084229

00:57:21.756 --> 00:57:24.543 like a therapy which is in itself

NOTE Confidence: 0.820177555084229

00:57:24.543 --> 00:57:27.465 is quite a challenge and we've been

NOTE Confidence: 0.820177555084229

00:57:27.465 --> 00:57:30.195 running a study of behavioral therapy

NOTE Confidence: 0.820177555084229

00:57:30.195 --> 00:57:32.770 for anxiety in children with autism.

NOTE Confidence: 0.820177555084229

00:57:32.770 --> 00:57:35.260 Have them as you can imagine,

NOTE Confidence: 0.820177555084229

00:57:35.260 --> 00:57:37.750 with the onset of the pandemic

NOTE Confidence: 0.820177555084229

00:57:37.750 --> 00:57:39.410 in with social isolation,

NOTE Confidence: 0.820177555084229

00:57:39.410 --> 00:57:41.486 having both orders and anxiety

NOTE Confidence: 0.820177555084229

00:57:41.486 --> 00:57:44.030 was was really hard for children.

NOTE Confidence: 0.820177555084229

00:57:44.030 --> 00:57:48.510 With their families so that and I will work,

NOTE Confidence: 0.820177555084229

00:57:48.510 --> 00:57:52.492 we did what we could to do help

NOTE Confidence: 0.820177555084229

00:57:52.492 --> 00:57:55.466 children remain in the study and

NOTE Confidence: 0.820177555084229

00:57:55.466 --> 00:57:58.798 to stay engaged and to benefit as

NOTE Confidence: 0.820177555084229

00:57:58.798 --> 00:58:02.210 much as possible from the treatment

NOTE Confidence: 0.820177555084229

00:58:02.210 --> 00:58:05.150 that we have to offer.

NOTE Confidence: 0.820177555084229

00:58:05.150 --> 00:58:07.831 This is a study that was funded

NOTE Confidence: 0.820177555084229

00:58:07.831 --> 00:58:10.998 by NCH D and as a researcher.

NOTE Confidence: 0.820177555084229



00:58:11.000 --> 00:58:13.688 I'm very concerned was doing things  
NOTE Confidence: 0.820177555084229

00:58:13.688 --> 00:58:16.700 by the protocol because things need to  
NOTE Confidence: 0.820177555084229

00:58:16.700 --> 00:58:19.360 be structured and done by the book,  
NOTE Confidence: 0.820177555084229

00:58:19.360 --> 00:58:22.202 and of course with the closures and  
NOTE Confidence: 0.820177555084229

00:58:22.202 --> 00:58:24.380 was transitioned to Tele Health.  
NOTE Confidence: 0.820177555084229

00:58:24.380 --> 00:58:27.176 We really needed to change everything  
NOTE Confidence: 0.820177555084229

00:58:27.176 --> 00:58:29.836 and the studies for children in  
NOTE Confidence: 0.820177555084229

00:58:29.836 --> 00:58:32.314 the age range from 8 to 14.  
NOTE Confidence: 0.820177555084229

00:58:32.320 --> 00:58:34.420 They have to meet criteria  
NOTE Confidence: 0.820177555084229

00:58:34.420 --> 00:58:36.520 for both order on anxiety.  
NOTE Confidence: 0.820177555084229

00:58:36.520 --> 00:58:38.435 They participate in blinded ratings  
NOTE Confidence: 0.820177555084229

00:58:38.435 --> 00:58:40.722 conducted by a clinician who is  
NOTE Confidence: 0.820177555084229

00:58:40.722 --> 00:58:42.570 not involved in in the treatment.  
NOTE Confidence: 0.820177555084229

00:58:42.570 --> 00:58:44.616 Everybody is randomized hand on top  
NOTE Confidence: 0.820177555084229

00:58:44.616 --> 00:58:47.144 of all that children need to complete  
NOTE Confidence: 0.820177555084229

00:58:47.144 --> 00:58:49.340 FMR right before and after treatment.

NOTE Confidence: 0.820177555084229

00:58:49.340 --> 00:58:51.840 So there is a lot.

NOTE Confidence: 0.820177555084229

00:58:51.840 --> 00:58:56.236 So with the beginning of kovit we

NOTE Confidence: 0.820177555084229

00:58:56.236 --> 00:59:00.589 transitioned to online Tele health delivery.

NOTE Confidence: 0.820177555084229

00:59:00.590 --> 00:59:02.830 On this treatment we.

NOTE Confidence: 0.820177555084229

00:59:02.830 --> 00:59:06.190 Were surprised how committed children and

NOTE Confidence: 0.820177555084229

00:59:06.287 --> 00:59:09.668 families were to remain in this study,

NOTE Confidence: 0.820177555084229

00:59:09.670 --> 00:59:12.166 but with what was equally surprising

NOTE Confidence: 0.820177555084229

00:59:12.166 --> 00:59:15.470 is how much the symptoms of anxiety

NOTE Confidence: 0.820177555084229

00:59:15.470 --> 00:59:19.040 change so that kids who were in the

NOTE Confidence: 0.820177555084229

00:59:19.040 --> 00:59:21.747 study requestor of fears of birds

NOTE Confidence: 0.820177555084229

00:59:21.747 --> 00:59:25.030 and high places and going to school.

NOTE Confidence: 0.820177555084229

00:59:25.030 --> 00:59:27.928 So essentially they can go outside

NOTE Confidence: 0.820177555084229

00:59:27.928 --> 00:59:31.357 and they didn't have to go to school.

NOTE Confidence: 0.820177555084229

00:59:31.360 --> 00:59:34.096 But new fears emerged, of course.

NOTE Confidence: 0.820177555084229

00:59:34.100 --> 00:59:36.956 And the treatment approaches that we had,

NOTE Confidence: 0.820177555084229

00:59:36.960 --> 00:59:39.420 such as exposure in response prevention,  
NOTE Confidence: 0.820177555084229

00:59:39.420 --> 00:59:42.196 where you take a child in a community  
NOTE Confidence: 0.820177555084229

00:59:42.196 --> 00:59:45.091 and you slowly expose them to things  
NOTE Confidence: 0.820177555084229

00:59:45.091 --> 00:59:47.747 that they are reluctant to participate  
NOTE Confidence: 0.820177555084229

00:59:47.747 --> 00:59:50.459 are we couldn't do it either.  
NOTE Confidence: 0.820177555084229

00:59:50.460 --> 00:59:53.393 So we needed to re calibrate our  
NOTE Confidence: 0.820177555084229

00:59:53.393 --> 00:59:55.370 treatment targets and our treatment  
NOTE Confidence: 0.820177555084229

00:59:55.370 --> 00:59:57.438 techniques in addition to the  
NOTE Confidence: 0.820177555084229

00:59:57.438 --> 00:59:58.270 delivery method.  
NOTE Confidence: 0.820177555084229

00:59:58.270 --> 01:00:01.119 So this is the result from a  
NOTE Confidence: 0.820177555084229

01:00:01.119 --> 01:00:03.493 children who started the treatment  
NOTE Confidence: 0.820177555084229

01:00:03.493 --> 01:00:06.153 before the pandemic and continued  
NOTE Confidence: 0.820177555084229

01:00:06.153 --> 01:00:09.083 and we collected their outcome  
NOTE Confidence: 0.820177555084229

01:00:09.083 --> 01:00:11.575 assessments after the pandemic,  
NOTE Confidence: 0.820177555084229

01:00:11.580 --> 01:00:14.676 so the blue lines are children  
NOTE Confidence: 0.820177555084229

01:00:14.676 --> 01:00:17.210 who received our targeted CBG.

NOTE Confidence: 0.820177555084229

01:00:17.210 --> 01:00:20.282 An red lines that children who

NOTE Confidence: 0.820177555084229

01:00:20.282 --> 01:00:21.818 receive supportive psychotherapy.

NOTE Confidence: 0.820177555084229

01:00:21.820 --> 01:00:24.850 There was a control condition so

NOTE Confidence: 0.820177555084229

01:00:24.850 --> 01:00:26.365 strikingly everybody participated

NOTE Confidence: 0.820177555084229

01:00:26.365 --> 01:00:28.997 in all outcome assessments and.

NOTE Confidence: 0.820177555084229

01:00:29.000 --> 01:00:31.760 Children who were in active treatment

NOTE Confidence: 0.820177555084229

01:00:31.760 --> 01:00:34.085 and whose assessments were collected

NOTE Confidence: 0.820177555084229

01:00:34.085 --> 01:00:36.920 at around the time of the pandemic.

NOTE Confidence: 0.820177555084229

01:00:36.920 --> 01:00:40.035 They didn't show as much improvement as.

NOTE Confidence: 0.84703928232193

01:00:40.040 --> 01:00:42.230 As we would have predicted,

NOTE Confidence: 0.84703928232193

01:00:42.230 --> 01:00:44.375 but Fortunately from March through

NOTE Confidence: 0.84703928232193

01:00:44.375 --> 01:00:47.488 August we we started to see improvement

NOTE Confidence: 0.84703928232193

01:00:47.488 --> 01:00:50.596 in systems in symptoms an we've learned

NOTE Confidence: 0.84703928232193

01:00:50.596 --> 01:00:53.650 from kids how to make our treatment

NOTE Confidence: 0.84703928232193

01:00:53.650 --> 01:00:55.756 enjoyable and exciting for that.

NOTE Confidence: 0.84703928232193

01:00:55.756 --> 01:00:59.084 The other area of research in the Sadosky  
NOTE Confidence: 0.84703928232193

01:00:59.084 --> 01:01:02.860 lab is disruptive behavior and irritability,  
NOTE Confidence: 0.84703928232193

01:01:02.860 --> 01:01:05.120 so that we were really  
NOTE Confidence: 0.84703928232193

01:01:05.120 --> 01:01:06.928 worried that was quarantine.  
NOTE Confidence: 0.84703928232193

01:01:06.930 --> 01:01:09.642 As lockdowns there was lack of  
NOTE Confidence: 0.84703928232193

01:01:09.642 --> 01:01:11.450 access to enjoyable activities,  
NOTE Confidence: 0.84703928232193

01:01:11.450 --> 01:01:13.254 kids would deteriorate with  
NOTE Confidence: 0.84703928232193

01:01:13.254 --> 01:01:15.058 respect to behavioral problems,  
NOTE Confidence: 0.84703928232193

01:01:15.060 --> 01:01:17.320 so we track very carefully  
NOTE Confidence: 0.84703928232193

01:01:17.320 --> 01:01:18.224 disruptive behaviors.  
NOTE Confidence: 0.84703928232193

01:01:18.230 --> 01:01:21.387 Only one kid really had hard time,  
NOTE Confidence: 0.84703928232193

01:01:21.390 --> 01:01:24.870 and because he used to go to McDonald's  
NOTE Confidence: 0.84703928232193

01:01:24.870 --> 01:01:27.749 pretty often for his favorite meals.  
NOTE Confidence: 0.84703928232193

01:01:27.750 --> 01:01:30.641 Don't do it anymore so that it  
NOTE Confidence: 0.84703928232193

01:01:30.641 --> 01:01:33.287 really created a lot of hardships  
NOTE Confidence: 0.84703928232193

01:01:33.287 --> 01:01:36.360 with the family in terms of being

NOTE Confidence: 0.84703928232193  
01:01:36.454 --> 01:01:39.614 able to help this boy to to find  
NOTE Confidence: 0.84703928232193  
01:01:39.614 --> 01:01:41.862 other things to enjoy and do.  
NOTE Confidence: 0.84703928232193  
01:01:41.862 --> 01:01:45.433 And we were able to kind of guide this  
NOTE Confidence: 0.84703928232193  
01:01:45.433 --> 01:01:49.270 family through the study of CBD for anxiety,  
NOTE Confidence: 0.84703928232193  
01:01:49.270 --> 01:01:50.878 and Fortunately for us,  
NOTE Confidence: 0.84703928232193  
01:01:50.878 --> 01:01:53.290 we're also starting a new studies  
NOTE Confidence: 0.84703928232193  
01:01:53.361 --> 01:01:56.322 that will be targeted on CBT for  
NOTE Confidence: 0.84703928232193  
01:01:56.322 --> 01:01:58.579 irritability and disruptive behaviors so.  
NOTE Confidence: 0.84703928232193  
01:01:58.580 --> 01:02:00.815 For this particular project that  
NOTE Confidence: 0.84703928232193  
01:02:00.815 --> 01:02:03.780 were also designed for face to face  
NOTE Confidence: 0.84703928232193  
01:02:03.780 --> 01:02:06.069 or face to face and delivering so  
NOTE Confidence: 0.84703928232193  
01:02:06.069 --> 01:02:08.455 we are developing Tele health tools  
NOTE Confidence: 0.84703928232193  
01:02:08.455 --> 01:02:11.537 that we are ready to deploy and I'm  
NOTE Confidence: 0.84703928232193  
01:02:11.537 --> 01:02:13.751 happy to report that yesterday were  
NOTE Confidence: 0.84703928232193  
01:02:13.751 --> 01:02:15.568 included our first participant.  
NOTE Confidence: 0.84703928232193

01:02:15.570 --> 01:02:18.706 So we will start this study by Tele  
NOTE Confidence: 0.84703928232193

01:02:18.706 --> 01:02:21.828 Health and hope that it will be useful  
NOTE Confidence: 0.84703928232193

01:02:21.828 --> 01:02:25.800 for the kids and that we can carry it  
NOTE Confidence: 0.84703928232193

01:02:25.800 --> 01:02:28.185 out with sufficient research rigor.  
NOTE Confidence: 0.84703928232193

01:02:28.190 --> 01:02:29.558 Thank you so much.  
NOTE Confidence: 0.844158470630646

01:02:32.020 --> 01:02:35.580 Thank you, thank you Dennis.  
NOTE Confidence: 0.844158470630646

01:02:35.580 --> 01:02:39.410 Yeah take it over. So I think  
NOTE Confidence: 0.774529576301575

01:02:39.410 --> 01:02:41.366 what what, what I'll talk about  
NOTE Confidence: 0.774529576301575

01:02:41.366 --> 01:02:43.617 briefly is just an overview and I  
NOTE Confidence: 0.774529576301575

01:02:43.617 --> 01:02:46.484 don't have slides to put up is as as  
NOTE Confidence: 0.774529576301575

01:02:46.484 --> 01:02:48.344 Pam Doctor Hoffman was mentioning.  
NOTE Confidence: 0.774529576301575

01:02:48.350 --> 01:02:50.570 We had a huge conversion.  
NOTE Confidence: 0.774529576301575

01:02:50.570 --> 01:02:52.150 The Tele health very fast,  
NOTE Confidence: 0.774529576301575

01:02:52.150 --> 01:02:54.985 and it reminds me of a little of evolution.  
NOTE Confidence: 0.774529576301575

01:02:54.990 --> 01:02:56.886 Sometimes evolution is slow and meandering,  
NOTE Confidence: 0.774529576301575

01:02:56.890 --> 01:02:59.562 and other times they are wrapped is more

NOTE Confidence: 0.774529576301575  
01:02:59.562 --> 01:03:01.908 rapid evolution because of Seminole events.  
NOTE Confidence: 0.774529576301575  
01:03:01.910 --> 01:03:03.526 I think we were.  
NOTE Confidence: 0.774529576301575  
01:03:03.526 --> 01:03:05.546 We were moving along towards  
NOTE Confidence: 0.774529576301575  
01:03:05.546 --> 01:03:08.325 Tele Health and this forced it  
NOTE Confidence: 0.774529576301575  
01:03:08.325 --> 01:03:10.560 upon US code essentially. The  
NOTE Confidence: 0.865441381931305  
01:03:10.560 --> 01:03:12.550 conversion was was a bit  
NOTE Confidence: 0.865441381931305  
01:03:12.550 --> 01:03:13.738 frightening because these  
NOTE Confidence: 0.865441381931305  
01:03:13.740 --> 01:03:15.735 decisions were made in the  
NOTE Confidence: 0.865441381931305  
01:03:15.735 --> 01:03:17.730 context of people feeling unsafe.  
NOTE Confidence: 0.865441381931305  
01:03:17.730 --> 01:03:19.656 Wanting to continue to provide care,  
NOTE Confidence: 0.865441381931305  
01:03:19.660 --> 01:03:21.790 but concerned about their safety.  
NOTE Confidence: 0.865441381931305  
01:03:21.790 --> 01:03:23.460 So needing to think creatively  
NOTE Confidence: 0.865441381931305  
01:03:23.460 --> 01:03:25.130 under the context of stress,  
NOTE Confidence: 0.865441381931305  
01:03:25.130 --> 01:03:27.370 I think, was was difficult.  
NOTE Confidence: 0.865441381931305  
01:03:27.370 --> 01:03:28.738 The the outpatient clinic  
NOTE Confidence: 0.865441381931305



01:03:28.738 --> 01:03:29.764 certainly converted many,  
NOTE Confidence: 0.865441381931305

01:03:29.770 --> 01:03:31.166 many to Tele Health,  
NOTE Confidence: 0.865441381931305

01:03:31.166 --> 01:03:33.260 and that's been the primary delivery  
NOTE Confidence: 0.865441381931305

01:03:33.325 --> 01:03:35.917 and there's many people in front of the  
NOTE Confidence: 0.865441381931305

01:03:35.917 --> 01:03:38.349 scenes behind the scenes who are involved.  
NOTE Confidence: 0.865441381931305

01:03:38.350 --> 01:03:40.282 And I'm just a person speaking  
NOTE Confidence: 0.865441381931305

01:03:40.282 --> 01:03:42.354 about it in the Children's Day  
NOTE Confidence: 0.865441381931305

01:03:42.354 --> 01:03:45.210 Hospital where we have kids 6 to 12,  
NOTE Confidence: 0.865441381931305

01:03:45.210 --> 01:03:47.826 which is a group based format.  
NOTE Confidence: 0.865441381931305

01:03:47.830 --> 01:03:50.357 This is a little bit more complicated  
NOTE Confidence: 0.865441381931305

01:03:50.357 --> 01:03:51.787 because younger children don't  
NOTE Confidence: 0.865441381931305

01:03:51.787 --> 01:03:53.747 tend to do as well for extended  
NOTE Confidence: 0.865441381931305

01:03:53.747 --> 01:03:55.707 periods of time on on Tele health.  
NOTE Confidence: 0.865441381931305

01:03:55.710 --> 01:03:57.334 And we were converting.  
NOTE Confidence: 0.865441381931305

01:03:57.334 --> 01:04:00.350 We converted our program to Tele Health.  
NOTE Confidence: 0.865441381931305

01:04:00.350 --> 01:04:01.910 Which had not been done.

NOTE Confidence: 0.865441381931305  
01:04:01.910 --> 01:04:03.770 I wasn't aware of any intensive  
NOTE Confidence: 0.865441381931305  
01:04:03.770 --> 01:04:04.700 group based program.  
NOTE Confidence: 0.865441381931305  
01:04:04.700 --> 01:04:06.877 This is a 3 hour a day,  
NOTE Confidence: 0.865441381931305  
01:04:06.880 --> 01:04:08.987 four days a week program and so  
NOTE Confidence: 0.865441381931305  
01:04:08.987 --> 01:04:10.918 we converted to to Tele Health.  
NOTE Confidence: 0.865441381931305  
01:04:10.920 --> 01:04:12.786 And then we're not able to  
NOTE Confidence: 0.865441381931305  
01:04:12.786 --> 01:04:14.030 do the full program,  
NOTE Confidence: 0.865441381931305  
01:04:14.030 --> 01:04:16.536 so we reduced the kid time and  
NOTE Confidence: 0.865441381931305  
01:04:16.536 --> 01:04:18.880 spent more family and parent time.  
NOTE Confidence: 0.865441381931305  
01:04:18.880 --> 01:04:21.075 And the lessons that we learned our  
NOTE Confidence: 0.865441381931305  
01:04:21.075 --> 01:04:23.275 that we were doing things not so  
NOTE Confidence: 0.865441381931305  
01:04:23.275 --> 01:04:25.402 well before covid in some areas and  
NOTE Confidence: 0.865441381931305  
01:04:25.402 --> 01:04:27.359 doing them better with Tele health.  
NOTE Confidence: 0.865441381931305  
01:04:27.360 --> 01:04:29.496 So so some of the learning that we  
NOTE Confidence: 0.865441381931305  
01:04:29.496 --> 01:04:31.770 were all doing together now and further  
NOTE Confidence: 0.865441381931305

01:04:31.770 --> 01:04:33.950 is where is Tele health useful?  
NOTE Confidence: 0.865441381931305

01:04:33.950 --> 01:04:36.080 Where is it not useful?  
NOTE Confidence: 0.865441381931305

01:04:36.080 --> 01:04:37.705 Which families and kids benefit  
NOTE Confidence: 0.865441381931305

01:04:37.705 --> 01:04:38.680 from Tele help?  
NOTE Confidence: 0.865441381931305

01:04:38.680 --> 01:04:40.955 Which kids don't younger kids older kids?  
NOTE Confidence: 0.865441381931305

01:04:40.960 --> 01:04:42.836 Who are the kids that should be  
NOTE Confidence: 0.865441381931305

01:04:42.836 --> 01:04:44.548 identified for in person visits  
NOTE Confidence: 0.865441381931305

01:04:44.548 --> 01:04:45.826 versus telehealth visits?  
NOTE Confidence: 0.865441381931305

01:04:45.830 --> 01:04:48.002 This is a struggle for developmental  
NOTE Confidence: 0.865441381931305

01:04:48.002 --> 01:04:49.764 assessments where we need to  
NOTE Confidence: 0.865441381931305

01:04:49.764 --> 01:04:51.029 see the kids in person.  
NOTE Confidence: 0.865441381931305

01:04:51.030 --> 01:04:54.254 But how do we keep each other safe?  
NOTE Confidence: 0.865441381931305

01:04:54.260 --> 01:04:55.644 And in the future,  
NOTE Confidence: 0.865441381931305

01:04:55.644 --> 01:04:58.400 how do we Blend Blend Blend the two?  
NOTE Confidence: 0.865441381931305

01:04:58.400 --> 01:05:00.794 So I think the story hasn't been  
NOTE Confidence: 0.865441381931305

01:05:00.794 --> 01:05:03.228 hasn't hasn't been finished the way Dr.

NOTE Confidence: 0.865441381931305  
01:05:03.230 --> 01:05:03.920 Hoffman described,  
NOTE Confidence: 0.865441381931305  
01:05:03.920 --> 01:05:06.680 but but we're moving in the right direction.  
NOTE Confidence: 0.865441381931305  
01:05:06.680 --> 01:05:09.095 So next steps for us would include,  
NOTE Confidence: 0.865441381931305  
01:05:09.100 --> 01:05:09.784 for example,  
NOTE Confidence: 0.865441381931305  
01:05:09.784 --> 01:05:11.836 which we've gone back to is  
NOTE Confidence: 0.865441381931305  
01:05:11.836 --> 01:05:13.579 giving live groups to kids.  
NOTE Confidence: 0.865441381931305  
01:05:13.580 --> 01:05:15.854 But parents and family sessions are  
NOTE Confidence: 0.865441381931305  
01:05:15.854 --> 01:05:17.960 all virtual intakes or virtual.  
NOTE Confidence: 0.865441381931305  
01:05:17.960 --> 01:05:19.580 We were talking about having  
NOTE Confidence: 0.865441381931305  
01:05:19.580 --> 01:05:21.552 parents joined a group rather than  
NOTE Confidence: 0.865441381931305  
01:05:21.552 --> 01:05:23.280 coming in person by video help.  
NOTE Confidence: 0.865441381931305  
01:05:23.280 --> 01:05:25.440 So it's a way to have a group  
NOTE Confidence: 0.865441381931305  
01:05:25.440 --> 01:05:27.491 session with all the kids in Group  
NOTE Confidence: 0.865441381931305  
01:05:27.491 --> 01:05:29.736 with all the parents of the kids  
NOTE Confidence: 0.865441381931305  
01:05:29.736 --> 01:05:31.566 in Group joining together without  
NOTE Confidence: 0.865441381931305

01:05:31.566 --> 01:05:33.609 all the safety concerns but also  
NOTE Confidence: 0.865441381931305

01:05:33.609 --> 01:05:35.174 the work and life concerns.  
NOTE Confidence: 0.865441381931305

01:05:35.180 --> 01:05:36.820 Even post covid about being  
NOTE Confidence: 0.865441381931305

01:05:36.820 --> 01:05:39.160 able to all make it together.  
NOTE Confidence: 0.865441381931305

01:05:39.160 --> 01:05:41.435 So I think that's the next step,  
NOTE Confidence: 0.865441381931305

01:05:41.440 --> 01:05:43.378 and then creativity is how we  
NOTE Confidence: 0.865441381931305

01:05:43.378 --> 01:05:45.805 can take what's the best of Tele  
NOTE Confidence: 0.865441381931305

01:05:45.805 --> 01:05:47.229 health and incorporated into  
NOTE Confidence: 0.865441381931305

01:05:47.229 --> 01:05:49.549 our into our regular practices.  
NOTE Confidence: 0.865441381931305

01:05:49.550 --> 01:05:50.498 And I think  
NOTE Confidence: 0.846055030822754

01:05:50.500 --> 01:05:51.448 I'll stop there.  
NOTE Confidence: 0.846055030822754

01:05:51.448 --> 01:05:53.028 Yeah, thank you very much.  
NOTE Confidence: 0.846055030822754

01:05:53.030 --> 01:05:55.541 So we're now open for we have a few  
NOTE Confidence: 0.846055030822754

01:05:55.541 --> 01:05:57.767 minutes for questions for this panel.  
NOTE Confidence: 0.846055030822754

01:05:57.770 --> 01:05:59.330 Pam, I see you've already  
NOTE Confidence: 0.846055030822754

01:05:59.330 --> 01:06:01.240 answered one question in the chat.

NOTE Confidence: 0.846055030822754  
01:06:01.240 --> 01:06:02.424 I've got video fatigue.  
NOTE Confidence: 0.846055030822754  
01:06:02.424 --> 01:06:03.904 Do we have other questions  
NOTE Confidence: 0.846055030822754  
01:06:03.904 --> 01:06:05.029 for our panelists?  
NOTE Confidence: 0.835792779922485  
01:06:08.180 --> 01:06:10.980 I think the video 15 question is 1  
NOTE Confidence: 0.835792779922485  
01:06:10.980 --> 01:06:12.730 where a perfect example of  
NOTE Confidence: 0.835792779922485  
01:06:12.730 --> 01:06:14.480 theirs Tele health during Covid.  
NOTE Confidence: 0.835792779922485  
01:06:14.480 --> 01:06:16.580 And then there's a use of  
NOTE Confidence: 0.835792779922485  
01:06:16.580 --> 01:06:17.980 Tele health post covid.  
NOTE Confidence: 0.835792779922485  
01:06:17.980 --> 01:06:20.628 So when a child and family at work  
NOTE Confidence: 0.835792779922485  
01:06:20.628 --> 01:06:23.580 all day rather than on zoom all day,  
NOTE Confidence: 0.835792779922485  
01:06:23.580 --> 01:06:25.686 that Tele health session is going  
NOTE Confidence: 0.835792779922485  
01:06:25.686 --> 01:06:27.779 to feel very different than then.  
NOTE Confidence: 0.835792779922485  
01:06:27.780 --> 01:06:29.530 Then then it would otherwise.  
NOTE Confidence: 0.835792779922485  
01:06:29.530 --> 01:06:32.450 So I think the question is, is context.  
NOTE Confidence: 0.835792779922485  
01:06:32.450 --> 01:06:34.500 Operating right now I would  
NOTE Confidence: 0.853270292282104

01:06:34.500 --> 01:06:35.379 also add you  
NOTE Confidence: 0.853270292282104

01:06:35.380 --> 01:06:37.819 know I I don't know if any of the  
NOTE Confidence: 0.853270292282104

01:06:37.819 --> 01:06:39.771 providers here could I think most  
NOTE Confidence: 0.853270292282104

01:06:39.771 --> 01:06:41.727 of the providers here would say  
NOTE Confidence: 0.853270292282104

01:06:41.727 --> 01:06:43.673 exactly what I'm saying and that it  
NOTE Confidence: 0.853270292282104

01:06:43.673 --> 01:06:45.354 is a different level of intensity  
NOTE Confidence: 0.853270292282104

01:06:45.354 --> 01:06:47.401 for the same amount of time when  
NOTE Confidence: 0.853270292282104

01:06:47.401 --> 01:06:48.946 you're seeing someone were over.  
NOTE Confidence: 0.853270292282104

01:06:48.950 --> 01:06:50.644 Video is when you're seeing them in  
NOTE Confidence: 0.853270292282104

01:06:50.644 --> 01:06:52.307 the room and people have described  
NOTE Confidence: 0.853270292282104

01:06:52.307 --> 01:06:54.358 this that the half hour doesn't feel  
NOTE Confidence: 0.853270292282104

01:06:54.412 --> 01:06:56.102 like 1/2 hour because frequently  
NOTE Confidence: 0.853270292282104

01:06:56.102 --> 01:06:57.792 we found with patients psychiatric  
NOTE Confidence: 0.853270292282104

01:06:57.800 --> 01:06:59.636 and otherwise is they come prepared  
NOTE Confidence: 0.853270292282104

01:06:59.636 --> 01:07:01.748 with questions a little more there a  
NOTE Confidence: 0.853270292282104

01:07:01.748 --> 01:07:03.410 bit more concrete about their time.

NOTE Confidence: 0.853270292282104

01:07:03.410 --> 01:07:06.065 They spend a little less time on small talk.

NOTE Confidence: 0.853270292282104

01:07:06.070 --> 01:07:08.240 Because they know they have a limited

NOTE Confidence: 0.853270292282104

01:07:08.240 --> 01:07:10.400 time over video with their provider,

NOTE Confidence: 0.853270292282104

01:07:10.400 --> 01:07:11.990 and they're actually much more

NOTE Confidence: 0.853270292282104

01:07:11.990 --> 01:07:14.400 engaged in very real and specific way.

NOTE Confidence: 0.853270292282104

01:07:14.400 --> 01:07:16.664 So it is a more intensive time and

NOTE Confidence: 0.853270292282104

01:07:16.664 --> 01:07:19.325 so some of the changes that need to

NOTE Confidence: 0.853270292282104

01:07:19.325 --> 01:07:21.109 happen from a provider standpoint

NOTE Confidence: 0.853270292282104

01:07:21.109 --> 01:07:24.021 is to be mindful of that level of

NOTE Confidence: 0.853270292282104

01:07:24.021 --> 01:07:26.030 intensity that you're going to be

NOTE Confidence: 0.853270292282104

01:07:26.030 --> 01:07:28.380 feeling all day and prepare around it.

NOTE Confidence: 0.853270292282104

01:07:28.380 --> 01:07:30.045 We didn't properly prepare our

NOTE Confidence: 0.853270292282104

01:07:30.045 --> 01:07:31.377 clinicians for that Ann,

NOTE Confidence: 0.853270292282104

01:07:31.380 --> 01:07:34.028 and that was my mistake and we will

NOTE Confidence: 0.853270292282104

01:07:34.028 --> 01:07:36.097 continue to try to educate and.

NOTE Confidence: 0.853270292282104



01:07:36.100 --> 01:07:38.254 Help support so that when when  
NOTE Confidence: 0.853270292282104

01:07:38.254 --> 01:07:40.076 clinicians are pulled into this  
NOTE Confidence: 0.853270292282104

01:07:40.076 --> 01:07:41.966 it's not the exact same thing.  
NOTE Confidence: 0.853270292282104

01:07:41.970 --> 01:07:44.040 It is different how we're looking  
NOTE Confidence: 0.853270292282104

01:07:44.040 --> 01:07:44.730 at patients,  
NOTE Confidence: 0.853270292282104

01:07:44.730 --> 01:07:46.644 has to be different how we're  
NOTE Confidence: 0.853270292282104

01:07:46.644 --> 01:07:48.725 treating patients and how we treat  
NOTE Confidence: 0.853270292282104

01:07:48.725 --> 01:07:50.590 ourselves as providers have changed.  
NOTE Confidence: 0.853270292282104

01:07:50.590 --> 01:07:53.005 I think in the last six months.  
NOTE Confidence: 0.853270292282104

01:07:53.010 --> 01:07:56.106 So I do believe that as we go on,  
NOTE Confidence: 0.853270292282104

01:07:56.110 --> 01:07:58.539 it's it's going to be seen that.  
NOTE Confidence: 0.853270292282104

01:07:58.540 --> 01:08:00.900 When people were allowed out of their homes,  
NOTE Confidence: 0.853270292282104

01:08:00.900 --> 01:08:02.670 everybody wanted an in person appointment,  
NOTE Confidence: 0.853270292282104

01:08:02.670 --> 01:08:03.914 not from behavioral health,  
NOTE Confidence: 0.853270292282104

01:08:03.914 --> 01:08:05.780 but everybody wanted to see their  
NOTE Confidence: 0.853270292282104

01:08:05.838 --> 01:08:07.338 doctors because I just can't stay

NOTE Confidence: 0.853270292282104  
01:08:07.338 --> 01:08:09.159 at home with my family anymore.  
NOTE Confidence: 0.853270292282104  
01:08:09.160 --> 01:08:11.225 Doc, please let me go see you.  
NOTE Confidence: 0.853270292282104  
01:08:11.230 --> 01:08:13.288 And so we're going to see that.  
NOTE Confidence: 0.853270292282104  
01:08:13.290 --> 01:08:15.945 And we started to see a little re balance.  
NOTE Confidence: 0.853270292282104  
01:08:15.950 --> 01:08:18.605 Now with the search and I think at some  
NOTE Confidence: 0.853270292282104  
01:08:18.605 --> 01:08:21.254 point we're going to end in a nice place.  
NOTE Confidence: 0.853270292282104  
01:08:21.260 --> 01:08:22.735 The health system is looking  
NOTE Confidence: 0.853270292282104  
01:08:22.735 --> 01:08:24.484 at a 33% video visit average,  
NOTE Confidence: 0.853270292282104  
01:08:24.484 --> 01:08:26.212 so that's what we're looking at  
NOTE Confidence: 0.853270292282104  
01:08:26.212 --> 01:08:27.449 as our optimal goal.  
NOTE Confidence: 0.853270292282104  
01:08:27.450 --> 01:08:29.250 Child Study Center has been around.  
NOTE Confidence: 0.853270292282104  
01:08:29.250 --> 01:08:30.195 90 or so.  
NOTE Confidence: 0.853270292282104  
01:08:30.195 --> 01:08:31.455 So we're above average,  
NOTE Confidence: 0.853270292282104  
01:08:31.460 --> 01:08:33.780 but I I do believe that that will  
NOTE Confidence: 0.853270292282104  
01:08:33.780 --> 01:08:35.249 shift depending on Department.  
NOTE Confidence: 0.853270292282104

01:08:35.250 --> 01:08:35.890 I think  
NOTE Confidence: 0.839023530483246

01:08:35.890 --> 01:08:38.394 we have time for one more question for  
NOTE Confidence: 0.839023530483246

01:08:38.394 --> 01:08:40.628 this panel so question in the chat,  
NOTE Confidence: 0.839023530483246

01:08:40.630 --> 01:08:41.890 it's about the reimbursement  
NOTE Confidence: 0.839023530483246

01:08:41.890 --> 01:08:43.150 for telehealth. I mean,  
NOTE Confidence: 0.839023530483246

01:08:43.150 --> 01:08:45.678 I think I could answer that in him.  
NOTE Confidence: 0.839023530483246

01:08:45.680 --> 01:08:46.945 You can chime in.  
NOTE Confidence: 0.839023530483246

01:08:46.945 --> 01:08:49.786 I think this is still a work in progress.  
NOTE Confidence: 0.839023530483246

01:08:49.790 --> 01:08:50.738 There's been, yes,  
NOTE Confidence: 0.839023530483246

01:08:50.738 --> 01:08:52.318 lots of bypass right now.  
NOTE Confidence: 0.839023530483246

01:08:52.320 --> 01:08:53.800 There was some insurance companies  
NOTE Confidence: 0.839023530483246

01:08:53.800 --> 01:08:55.790 planning to eliminate this in September,  
NOTE Confidence: 0.839023530483246

01:08:55.790 --> 01:08:57.395 and they've learned that this  
NOTE Confidence: 0.839023530483246

01:08:57.395 --> 01:08:59.360 was poor timing on their part.  
NOTE Confidence: 0.839023530483246

01:08:59.360 --> 01:09:02.030 This question is going to be  
NOTE Confidence: 0.839023530483246

01:09:02.030 --> 01:09:05.120 through a number of stakeholders.

NOTE Confidence: 0.839023530483246  
01:09:05.120 --> 01:09:07.052 Insurance companies have customers.  
NOTE Confidence: 0.839023530483246  
01:09:07.052 --> 01:09:09.467 Those customers are going to  
NOTE Confidence: 0.839023530483246  
01:09:09.467 --> 01:09:11.410 start increasingly expect,  
NOTE Confidence: 0.839023530483246  
01:09:11.410 --> 01:09:12.919 especially millennials too.  
NOTE Confidence: 0.839023530483246  
01:09:12.919 --> 01:09:15.937 Have to have Tele health access.  
NOTE Confidence: 0.839023530483246  
01:09:15.940 --> 01:09:18.154 There's some data coming out that  
NOTE Confidence: 0.839023530483246  
01:09:18.154 --> 01:09:20.418 Tele Health one large data set  
NOTE Confidence: 0.839023530483246  
01:09:20.418 --> 01:09:22.554 of millions showed that that that  
NOTE Confidence: 0.839023530483246  
01:09:22.554 --> 01:09:25.217 scores for physician for liking your  
NOTE Confidence: 0.839023530483246  
01:09:25.217 --> 01:09:27.250 physician the chance of referring  
NOTE Confidence: 0.839023530483246  
01:09:27.250 --> 01:09:29.200 your hospital referring your clinic  
NOTE Confidence: 0.839023530483246  
01:09:29.200 --> 01:09:30.760 increases through Tele Health.  
NOTE Confidence: 0.839023530483246  
01:09:30.760 --> 01:09:32.710 There's better customer care service,  
NOTE Confidence: 0.839023530483246  
01:09:32.710 --> 01:09:34.660 patient service through Tele health.  
NOTE Confidence: 0.839023530483246  
01:09:34.660 --> 01:09:37.108 So I think all these all these factors  
NOTE Confidence: 0.839023530483246

01:09:37.108 --> 01:09:39.284 will come together and providing  
NOTE Confidence: 0.839023530483246

01:09:39.284 --> 01:09:41.284 access providing medical access,  
NOTE Confidence: 0.839023530483246

01:09:41.290 --> 01:09:44.020 which is a Medicaid interest as well,  
NOTE Confidence: 0.839023530483246

01:09:44.020 --> 01:09:44.318 Medicare?  
NOTE Confidence: 0.839023530483246

01:09:44.318 --> 01:09:46.932 So I think the book is not written yet.  
NOTE Confidence: 0.839023530483246

01:09:46.932 --> 01:09:48.580 I think companies will try to  
NOTE Confidence: 0.839023530483246

01:09:48.580 --> 01:09:50.548 move back in order to prevent to  
NOTE Confidence: 0.839023530483246

01:09:50.548 --> 01:09:52.396 make that a lower height and the  
NOTE Confidence: 0.839023530483246

01:09:52.396 --> 01:09:53.788 threshold for access to care,  
NOTE Confidence: 0.839023530483246

01:09:53.790 --> 01:09:55.422 because there are obviously incentives to  
NOTE Confidence: 0.839023530483246

01:09:55.422 --> 01:09:57.619 deny care in some respects in our system.  
NOTE Confidence: 0.839023530483246

01:09:57.620 --> 01:09:59.282 But there are many stakeholders who  
NOTE Confidence: 0.839023530483246

01:09:59.282 --> 01:10:01.457 have an interest in Tele Health as well.  
NOTE Confidence: 0.839023530483246

01:10:01.460 --> 01:10:03.378 I think it remains to be written.  
NOTE Confidence: 0.839023530483246

01:10:03.378 --> 01:10:04.200 I would also  
NOTE Confidence: 0.800310492515564

01:10:04.200 --> 01:10:06.150 add that I'm working specifically with

NOTE Confidence: 0.800310492515564  
01:10:06.150 --> 01:10:08.298 contract ING and payers for their neck.  
NOTE Confidence: 0.800310492515564  
01:10:08.300 --> 01:10:10.406 Text contracts to ensure that whether  
NOTE Confidence: 0.800310492515564  
01:10:10.406 --> 01:10:12.447 or not our government decides to  
NOTE Confidence: 0.800310492515564  
01:10:12.447 --> 01:10:14.262 make it at parity, that we're  
NOTE Confidence: 0.800310492515564  
01:10:14.262 --> 01:10:16.579 trying to put it in our government.  
NOTE Confidence: 0.800310492515564  
01:10:16.580 --> 01:10:18.350 Our contracts with commercial payers  
NOTE Confidence: 0.800310492515564  
01:10:18.350 --> 01:10:21.385 that they see this as a service that is  
NOTE Confidence: 0.800310492515564  
01:10:21.385 --> 01:10:23.860 provided at the same quality as in person.  
NOTE Confidence: 0.800310492515564  
01:10:23.860 --> 01:10:25.840 And to answer the second one,  
NOTE Confidence: 0.800310492515564  
01:10:25.840 --> 01:10:27.802 would you have research that shows  
NOTE Confidence: 0.800310492515564  
01:10:27.802 --> 01:10:29.915 that the same quality for diagnostic  
NOTE Confidence: 0.800310492515564  
01:10:29.915 --> 01:10:31.780 for treatment and for clinical  
NOTE Confidence: 0.800310492515564  
01:10:31.780 --> 01:10:33.806 outcomes have been shown both for  
NOTE Confidence: 0.800310492515564  
01:10:33.806 --> 01:10:35.766 for in person an video visits and  
NOTE Confidence: 0.800310492515564  
01:10:35.770 --> 01:10:37.430 that's for adults and children.  
NOTE Confidence: 0.800310492515564

01:10:37.430 --> 01:10:39.135 Adolescents and I can give  
NOTE Confidence: 0.800310492515564

01:10:39.135 --> 01:10:40.840 you references if you want.  
NOTE Confidence: 0.800310492515564

01:10:40.840 --> 01:10:41.800 Next email,  
NOTE Confidence: 0.746742904186249

01:10:41.800 --> 01:10:43.564 thank you very much.  
NOTE Confidence: 0.746742904186249

01:10:43.564 --> 01:10:47.529 So let's let's move to our second panel.  
NOTE Confidence: 0.746742904186249

01:10:47.530 --> 01:10:49.920 This is our autism colleagues,  
NOTE Confidence: 0.746742904186249

01:10:49.920 --> 01:10:51.360 Doctor, McCartin, Doctor,  
NOTE Confidence: 0.746742904186249

01:10:51.360 --> 01:10:53.280 Barska and Doctor Ventola.  
NOTE Confidence: 0.746742904186249

01:10:53.280 --> 01:10:55.284 Are autism team is so familiar  
NOTE Confidence: 0.746742904186249

01:10:55.284 --> 01:10:57.739 to many of our associates but  
NOTE Confidence: 0.746742904186249

01:10:57.740 --> 01:11:00.176 just to say that as you know,  
NOTE Confidence: 0.746742904186249

01:11:00.176 --> 01:11:02.150 Doctor Mcpartland is not only a  
NOTE Confidence: 0.746742904186249

01:11:02.221 --> 01:11:04.436 remarkable communicator but has a  
NOTE Confidence: 0.746742904186249

01:11:04.440 --> 01:11:06.888 great vision for how to do studies  
NOTE Confidence: 0.746742904186249

01:11:06.888 --> 01:11:08.880 that are collaborative and bring so  
NOTE Confidence: 0.746742904186249

01:11:08.946 --> 01:11:11.136 many people together around autism,

NOTE Confidence: 0.746742904186249

01:11:11.140 --> 01:11:13.372 autism not Ripper Harsco has an

NOTE Confidence: 0.746742904186249

01:11:13.372 --> 01:11:14.860 enormous sense of playfulness.

NOTE Confidence: 0.746742904186249

01:11:14.860 --> 01:11:17.016 You may not know as much about

NOTE Confidence: 0.746742904186249

01:11:17.016 --> 01:11:19.703 her puppet work in her ability to

NOTE Confidence: 0.746742904186249

01:11:19.703 --> 01:11:21.391 integrate normal developmental ideas

NOTE Confidence: 0.746742904186249

01:11:21.391 --> 01:11:24.186 into her work with autism in infants.

NOTE Confidence: 0.746742904186249

01:11:24.190 --> 01:11:26.140 And she will introduce her

NOTE Confidence: 0.746742904186249

01:11:26.140 --> 01:11:27.310 colleague Suzanne Mcquarrie,

NOTE Confidence: 0.746742904186249

01:11:27.310 --> 01:11:29.878 and Doctor Ventola brings a focus

NOTE Confidence: 0.746742904186249

01:11:29.878 --> 01:11:32.660 on on young adults with autism.

NOTE Confidence: 0.746742904186249

01:11:32.660 --> 01:11:35.204 And how we help those individuals

NOTE Confidence: 0.746742904186249

01:11:35.204 --> 01:11:38.117 continue to live full lives and get

NOTE Confidence: 0.746742904186249

01:11:38.117 --> 01:11:40.763 the best services we can provide in

NOTE Confidence: 0.746742904186249

01:11:40.842 --> 01:11:44.184 addition to her real interest in

NOTE Confidence: 0.746742904186249

01:11:44.184 --> 01:11:45.855 training people internationally.

NOTE Confidence: 0.746742904186249



01:11:45.860 --> 01:11:46.766 So Jamie,  
NOTE Confidence: 0.746742904186249

01:11:46.766 --> 01:11:47.219 may  
NOTE Confidence: 0.883863925933838

01:11:47.220 --> 01:11:49.950 I turn it over to you,  
NOTE Confidence: 0.883863925933838

01:11:49.950 --> 01:11:51.770 that sounds great man.  
NOTE Confidence: 0.883863925933838

01:11:51.770 --> 01:11:54.045 Let me share my screen.  
NOTE Confidence: 0.883863925933838

01:11:54.050 --> 01:11:57.714 It is so nice to see so many  
NOTE Confidence: 0.883863925933838

01:11:57.714 --> 01:12:00.078 familiar faces and I look  
NOTE Confidence: 0.883863925933838

01:12:00.078 --> 01:12:03.207 forward to the time when I can.  
NOTE Confidence: 0.883863925933838

01:12:03.210 --> 01:12:05.297 See them not on a computer screen  
NOTE Confidence: 0.883863925933838

01:12:05.297 --> 01:12:07.678 and share a meal and maybe a  
NOTE Confidence: 0.883863925933838

01:12:07.678 --> 01:12:10.260 glass of wine with you and so.  
NOTE Confidence: 0.883863925933838

01:12:10.260 --> 01:12:12.030 How does one sum up progress  
NOTE Confidence: 0.883863925933838

01:12:12.030 --> 01:12:13.810 in 2020 in three minutes?  
NOTE Confidence: 0.883863925933838

01:12:13.810 --> 01:12:16.090 And so I'm going to talk a little  
NOTE Confidence: 0.883863925933838

01:12:16.090 --> 01:12:18.255 bit about a topic we've heard about  
NOTE Confidence: 0.883863925933838

01:12:18.255 --> 01:12:20.945 it from a little bit of a different

NOTE Confidence: 0.883863925933838

01:12:20.945 --> 01:12:23.135 perspective and and the how we

NOTE Confidence: 0.883863925933838

01:12:23.135 --> 01:12:25.754 responded to the pandemic in in many ways,

NOTE Confidence: 0.883863925933838

01:12:25.760 --> 01:12:27.958 how we've reinvented a lot of the

NOTE Confidence: 0.883863925933838

01:12:27.958 --> 01:12:30.303 work that we do both in the clinic

NOTE Confidence: 0.883863925933838

01:12:30.303 --> 01:12:32.870 and in the in our research program,

NOTE Confidence: 0.883863925933838

01:12:32.870 --> 01:12:35.124 we heard a lot about Tele medicine.

NOTE Confidence: 0.883863925933838

01:12:35.130 --> 01:12:36.358 We've adopted Tele medicine,

NOTE Confidence: 0.883863925933838

01:12:36.358 --> 01:12:38.680 and in many ways in the clinic,

NOTE Confidence: 0.883863925933838

01:12:38.680 --> 01:12:40.310 many of the parent interviews.

NOTE Confidence: 0.883863925933838

01:12:40.310 --> 01:12:42.608 That we do, we now do.

NOTE Confidence: 0.883863925933838

01:12:42.610 --> 01:12:43.711 Using Tele health.

NOTE Confidence: 0.883863925933838

01:12:43.711 --> 01:12:44.078 However,

NOTE Confidence: 0.883863925933838

01:12:44.078 --> 01:12:47.136 there are some of the things that are

NOTE Confidence: 0.883863925933838

01:12:47.136 --> 01:12:49.494 so critical to understand about autism.

NOTE Confidence: 0.883863925933838

01:12:49.500 --> 01:12:51.036 The interpersonal human connection,

NOTE Confidence: 0.883863925933838

01:12:51.036 --> 01:12:52.186 the nonverbal signals,  
NOTE Confidence: 0.883863925933838

01:12:52.186 --> 01:12:54.018 the facial expressions that are  
NOTE Confidence: 0.883863925933838

01:12:54.018 --> 01:12:56.780 so hard to do via Tele health,  
NOTE Confidence: 0.883863925933838

01:12:56.780 --> 01:12:58.982 and are frankly so hard to  
NOTE Confidence: 0.883863925933838

01:12:58.982 --> 01:13:00.990 do even with a mask.  
NOTE Confidence: 0.883863925933838

01:13:00.990 --> 01:13:04.830 And when the pandemic hit an many families.  
NOTE Confidence: 0.883863925933838

01:13:04.830 --> 01:13:06.906 Experienced really an incredible crisis  
NOTE Confidence: 0.883863925933838

01:13:06.906 --> 01:13:09.395 and people who rely on specialized  
NOTE Confidence: 0.883863925933838

01:13:09.395 --> 01:13:11.470 services who rely on routine.  
NOTE Confidence: 0.883863925933838

01:13:11.470 --> 01:13:13.130 Many clinicians around the  
NOTE Confidence: 0.883863925933838

01:13:13.130 --> 01:13:15.205 world truly around the world,  
NOTE Confidence: 0.883863925933838

01:13:15.210 --> 01:13:18.108 thought, felt at a loss to help,  
NOTE Confidence: 0.883863925933838

01:13:18.110 --> 01:13:21.098 and went back to the drawing  
NOTE Confidence: 0.883863925933838

01:13:21.098 --> 01:13:22.592 board and clinicians.  
NOTE Confidence: 0.883863925933838

01:13:22.600 --> 01:13:24.274 Around the world got together formed  
NOTE Confidence: 0.883863925933838

01:13:24.274 --> 01:13:25.854 this group called the International

NOTE Confidence: 0.883863925933838  
01:13:25.854 --> 01:13:27.490 Collaboration for Diagnostic Evaluation  
NOTE Confidence: 0.883863925933838  
01:13:27.490 --> 01:13:29.930 of Autism and Really Reinvented Things.  
NOTE Confidence: 0.883863925933838  
01:13:29.930 --> 01:13:32.018 New diagnostic tools that didn't exist.  
NOTE Confidence: 0.883863925933838  
01:13:32.020 --> 01:13:33.420 Two months new approaches,  
NOTE Confidence: 0.883863925933838  
01:13:33.420 --> 01:13:34.470 you see here.  
NOTE Confidence: 0.883863925933838  
01:13:34.470 --> 01:13:35.862 Images from the clinic,  
NOTE Confidence: 0.883863925933838  
01:13:35.862 --> 01:13:36.558 simple things,  
NOTE Confidence: 0.883863925933838  
01:13:36.560 --> 01:13:37.700 some very simple,  
NOTE Confidence: 0.883863925933838  
01:13:37.700 --> 01:13:39.980 like sneeze guards that make it  
NOTE Confidence: 0.883863925933838  
01:13:39.980 --> 01:13:42.450 safe for two people to be in a  
NOTE Confidence: 0.883863925933838  
01:13:42.450 --> 01:13:44.590 room and engage with one another.  
NOTE Confidence: 0.883863925933838  
01:13:44.590 --> 01:13:47.294 iPads to let us minimize the amount of  
NOTE Confidence: 0.883863925933838  
01:13:47.294 --> 01:13:49.820 materials that were handing back and forth,  
NOTE Confidence: 0.883863925933838  
01:13:49.820 --> 01:13:51.590 but then also really clever  
NOTE Confidence: 0.883863925933838  
01:13:51.590 --> 01:13:53.365 things like using a window.  
NOTE Confidence: 0.883863925933838

01:13:53.370 --> 01:13:55.470 To have a face to face interaction  
NOTE Confidence: 0.883863925933838

01:13:55.470 --> 01:13:57.213 with a person unmasked while  
NOTE Confidence: 0.883863925933838

01:13:57.213 --> 01:13:58.757 both parties are safe.  
NOTE Confidence: 0.883863925933838

01:13:58.760 --> 01:13:59.968 If that doesn't work,  
NOTE Confidence: 0.883863925933838

01:13:59.968 --> 01:14:02.810 it's hard to do that with young children.  
NOTE Confidence: 0.883863925933838

01:14:02.810 --> 01:14:04.959 We could use one of our observation  
NOTE Confidence: 0.883863925933838

01:14:04.959 --> 01:14:06.979 mayors to have a child interact  
NOTE Confidence: 0.883863925933838

01:14:06.979 --> 01:14:08.699 with the apparent without masks  
NOTE Confidence: 0.883863925933838

01:14:08.699 --> 01:14:10.560 with us behind the mirror.  
NOTE Confidence: 0.883863925933838

01:14:10.560 --> 01:14:12.578 And so with a really rapid  
NOTE Confidence: 0.883863925933838

01:14:12.578 --> 01:14:13.930 and steep learning curve,  
NOTE Confidence: 0.883863925933838

01:14:13.930 --> 01:14:15.916 we're up and running where working  
NOTE Confidence: 0.883863925933838

01:14:15.916 --> 01:14:17.969 with families at our usual pace,  
NOTE Confidence: 0.883863925933838

01:14:17.970 --> 01:14:20.666 two per week and and since the pandemic,  
NOTE Confidence: 0.883863925933838

01:14:20.670 --> 01:14:23.374 we've seen 21 families in the clinic and.  
NOTE Confidence: 0.883863925933838

01:14:23.380 --> 01:14:25.440 It's incredibly satisfying to be

NOTE Confidence: 0.883863925933838  
01:14:25.440 --> 01:14:28.679 able to help again at a time when  
NOTE Confidence: 0.883863925933838  
01:14:28.679 --> 01:14:30.869 help is so desperately need it.  
NOTE Confidence: 0.883863925933838  
01:14:30.870 --> 01:14:32.874 The lab is really a different  
NOTE Confidence: 0.883863925933838  
01:14:32.874 --> 01:14:34.967 set of challenges and trying to  
NOTE Confidence: 0.883863925933838  
01:14:34.967 --> 01:14:37.354 get running again and here we put  
NOTE Confidence: 0.883863925933838  
01:14:37.354 --> 01:14:39.700 together a different team that the  
NOTE Confidence: 0.883863925933838  
01:14:39.700 --> 01:14:41.635 consortium that I directly Autism  
NOTE Confidence: 0.883863925933838  
01:14:41.640 --> 01:14:43.064 Biomarkers Consortium for clinical  
NOTE Confidence: 0.883863925933838  
01:14:43.064 --> 01:14:44.844 trials work together to develop  
NOTE Confidence: 0.883863925933838  
01:14:44.844 --> 01:14:47.392 a new set of protocols for really  
NOTE Confidence: 0.883863925933838  
01:14:47.392 --> 01:14:48.816 collecting neuroscience data safely.  
NOTE Confidence: 0.883863925933838  
01:14:48.820 --> 01:14:50.968 Here involved a lot of building,  
NOTE Confidence: 0.822732388973236  
01:14:50.970 --> 01:14:54.210 so our labs look different than they used to.  
NOTE Confidence: 0.822732388973236  
01:14:54.210 --> 01:14:56.534 We now have partitions so that experimentals  
NOTE Confidence: 0.822732388973236  
01:14:56.534 --> 01:14:58.509 are nowhere near the participants.  
NOTE Confidence: 0.822732388973236

01:14:58.510 --> 01:14:59.978 All the sensitive equipment  
NOTE Confidence: 0.822732388973236

01:14:59.978 --> 01:15:02.180 that we have is encased in.  
NOTE Confidence: 0.822732388973236

01:15:02.180 --> 01:15:05.288 Taxi glass so that we can clean  
NOTE Confidence: 0.822732388973236

01:15:05.288 --> 01:15:06.620 it thoroughly afterwards.  
NOTE Confidence: 0.822732388973236

01:15:06.620 --> 01:15:08.360 Then standard things like PPE.  
NOTE Confidence: 0.822732388973236

01:15:08.360 --> 01:15:11.474 The good news is that we're up we're running.  
NOTE Confidence: 0.822732388973236

01:15:11.480 --> 01:15:12.900 We've seen 23 participants.  
NOTE Confidence: 0.822732388973236

01:15:12.900 --> 01:15:15.756 We actually we wondered if people would be  
NOTE Confidence: 0.822732388973236

01:15:15.756 --> 01:15:18.066 interested in coming in during a pandemic.  
NOTE Confidence: 0.822732388973236

01:15:18.070 --> 01:15:21.454 And as context we have 12 families that are  
NOTE Confidence: 0.822732388973236

01:15:21.454 --> 01:15:23.967 scheduled to come in in the next month.  
NOTE Confidence: 0.822732388973236

01:15:23.970 --> 01:15:25.011 They're very interested.  
NOTE Confidence: 0.822732388973236

01:15:25.011 --> 01:15:26.399 They are very eager,  
NOTE Confidence: 0.822732388973236

01:15:26.400 --> 01:15:27.772 and the data work.  
NOTE Confidence: 0.822732388973236

01:15:27.772 --> 01:15:30.912 I'll say one of the things that I didn't  
NOTE Confidence: 0.822732388973236

01:15:30.912 --> 01:15:33.132 anticipate is how some of the doors

NOTE Confidence: 0.822732388973236  
01:15:33.132 --> 01:15:35.769 that would open in terms of research,  
NOTE Confidence: 0.822732388973236  
01:15:35.770 --> 01:15:36.892 so domic Trevisan.  
NOTE Confidence: 0.822732388973236  
01:15:36.892 --> 01:15:39.136 Who is actually a Hillebrand poster  
NOTE Confidence: 0.822732388973236  
01:15:39.136 --> 01:15:40.569 postdoctoral fellow in the lab,  
NOTE Confidence: 0.822732388973236  
01:15:40.570 --> 01:15:42.280 has moved his research online,  
NOTE Confidence: 0.822732388973236  
01:15:42.280 --> 01:15:43.980 and it's been a boon.  
NOTE Confidence: 0.822732388973236  
01:15:43.980 --> 01:15:45.084 He has seen 327.  
NOTE Confidence: 0.822732388973236  
01:15:45.084 --> 01:15:47.205 He's able to do 327 research visits  
NOTE Confidence: 0.822732388973236  
01:15:47.205 --> 01:15:49.200 on line because the constraints  
NOTE Confidence: 0.822732388973236  
01:15:49.200 --> 01:15:50.796 just aren't there anymore,  
NOTE Confidence: 0.822732388973236  
01:15:50.800 --> 01:15:52.846 and so it's been a challenge.  
NOTE Confidence: 0.822732388973236  
01:15:52.850 --> 01:15:54.102 We've learned so much,  
NOTE Confidence: 0.822732388973236  
01:15:54.102 --> 01:15:57.188 and I want to echo a sentiment that I  
NOTE Confidence: 0.822732388973236  
01:15:57.188 --> 01:16:00.349 think Pam made earlier is that none of us.  
NOTE Confidence: 0.822732388973236  
01:16:00.350 --> 01:16:03.078 None of us are glad that this happened.  
NOTE Confidence: 0.822732388973236



01:16:03.080 --> 01:16:05.285 None of us would have wished for  
NOTE Confidence: 0.822732388973236

01:16:05.285 --> 01:16:06.830 this opportunity for learning.  
NOTE Confidence: 0.822732388973236

01:16:06.830 --> 01:16:08.730 But it's an opportunity for  
NOTE Confidence: 0.822732388973236

01:16:08.730 --> 01:16:09.490 learning nonetheless,  
NOTE Confidence: 0.822732388973236

01:16:09.490 --> 01:16:12.338 and when we come out of this clinical  
NOTE Confidence: 0.822732388973236

01:16:12.338 --> 01:16:14.721 service and clinical research in autism  
NOTE Confidence: 0.822732388973236

01:16:14.721 --> 01:16:17.850 will be better than it ever has been,  
NOTE Confidence: 0.822732388973236

01:16:17.850 --> 01:16:20.890 and more accessible than it ever has been.  
NOTE Confidence: 0.822732388973236

01:16:20.890 --> 01:16:22.410 Because of this crisis.  
NOTE Confidence: 0.822732388973236

01:16:22.410 --> 01:16:24.690 And I'll stop there and share.  
NOTE Confidence: 0.822732388973236

01:16:24.690 --> 01:16:29.510 Unshare my screen so my colleagues can go.  
NOTE Confidence: 0.822732388973236

01:16:29.510 --> 01:16:31.508 And I just want to acknowledge  
NOTE Confidence: 0.822732388973236

01:16:31.508 --> 01:16:33.400 all the people we really,  
NOTE Confidence: 0.822732388973236

01:16:33.400 --> 01:16:34.820 really, really, really fast.  
NOTE Confidence: 0.847750246524811

01:16:37.970 --> 01:16:38.670 Thank you.  
NOTE Confidence: 0.7794389128685

01:16:39.890 --> 01:16:41.460 Thank you so much Jamie.

NOTE Confidence: 0.7794389128685

01:16:41.460 --> 01:16:43.658 It's really great, but thank you Kasha.

NOTE Confidence: 0.7794389128685

01:16:43.660 --> 01:16:46.756 May I turn to you to introduce Suzanne?

NOTE Confidence: 0.7794389128685

01:16:46.760 --> 01:16:49.490 Yes, it will be my pleasure.

NOTE Confidence: 0.797646641731262

01:16:49.490 --> 01:16:50.858 Suzanne Mccurry is

NOTE Confidence: 0.797646641731262

01:16:50.860 --> 01:16:52.222 the governmental scientists

NOTE Confidence: 0.797646641731262

01:16:52.222 --> 01:16:54.038 and research scientists here.

NOTE Confidence: 0.797646641731262

01:16:54.040 --> 01:16:55.632 The Child study center.

NOTE Confidence: 0.797646641731262

01:16:55.632 --> 01:16:57.622 She corrects with me the

NOTE Confidence: 0.797646641731262

01:16:57.622 --> 01:16:59.831 social effort in affective

NOTE Confidence: 0.797646641731262

01:16:59.831 --> 01:17:01.775 neuroscience about design program,

NOTE Confidence: 0.797646641731262

01:17:01.775 --> 01:17:04.050 and it's went up there.

NOTE Confidence: 0.797646641731262

01:17:04.050 --> 01:17:05.418 She's one of

NOTE Confidence: 0.797646641731262

01:17:05.420 --> 01:17:08.332 the pillars of our autism Center of

NOTE Confidence: 0.797646641731262

01:17:08.332 --> 01:17:10.181 Excellence and international baby

NOTE Confidence: 0.797646641731262

01:17:10.181 --> 01:17:12.700 Sibling Research Consortium, so he

NOTE Confidence: 0.797646641731262

01:17:12.700 --> 01:17:15.880 said he's going to talk about some  
NOTE Confidence: 0.751327991485595

01:17:15.880 --> 01:17:17.580 of the. Work that  
NOTE Confidence: 0.705009341239929

01:17:17.580 --> 01:17:19.285 we've done to exceed pandemic  
NOTE Confidence: 0.705009341239929

01:17:19.285 --> 01:17:21.610 and ways in which we adapted.  
NOTE Confidence: 0.473441272974014

01:17:25.560 --> 01:17:28.950 Thank you kasha.  
NOTE Confidence: 0.851135492324829

01:17:28.950 --> 01:17:30.816 That's my screen. Can everyone see  
NOTE Confidence: 0.843716907501221

01:17:30.820 --> 01:17:33.620 it? Looks great, OK, thank  
NOTE Confidence: 0.841862261295319

01:17:33.620 --> 01:17:35.972 you. Thank you for the opportunity  
NOTE Confidence: 0.841862261295319

01:17:35.972 --> 01:17:38.380 to speak with you all today.  
NOTE Confidence: 0.841862261295319

01:17:38.380 --> 01:17:41.166 On behalf of coffee in the lab.  
NOTE Confidence: 0.841862261295319

01:17:41.170 --> 01:17:42.830 So like everyone else,  
NOTE Confidence: 0.841862261295319

01:17:42.830 --> 01:17:44.905 we have definitely experienced challenges,  
NOTE Confidence: 0.841862261295319

01:17:44.910 --> 01:17:47.095 but also some opportunities during  
NOTE Confidence: 0.841862261295319

01:17:47.095 --> 01:17:49.738 the pandemic we discovered a lot  
NOTE Confidence: 0.841862261295319

01:17:49.738 --> 01:17:52.454 of things that can be done without  
NOTE Confidence: 0.841862261295319

01:17:52.454 --> 01:17:54.900 necessarily being all together in person.

NOTE Confidence: 0.841862261295319  
01:17:54.900 --> 01:17:56.560 We submitted to grants.  
NOTE Confidence: 0.841862261295319  
01:17:56.560 --> 01:17:58.224 We published three papers.  
NOTE Confidence: 0.841862261295319  
01:17:58.224 --> 01:18:01.700 We have several others in the works and  
NOTE Confidence: 0.841862261295319  
01:18:01.700 --> 01:18:04.850 continue training our new research fellows.  
NOTE Confidence: 0.841862261295319  
01:18:04.850 --> 01:18:05.942 During the pandemic,  
NOTE Confidence: 0.841862261295319  
01:18:05.942 --> 01:18:07.762 we also quickly converted our  
NOTE Confidence: 0.841862261295319  
01:18:07.762 --> 01:18:09.749 lab visits into virtual visits,  
NOTE Confidence: 0.841862261295319  
01:18:09.750 --> 01:18:12.389 but as soon as that it was  
NOTE Confidence: 0.841862261295319  
01:18:12.389 --> 01:18:13.520 permitted in September,  
NOTE Confidence: 0.841862261295319  
01:18:13.520 --> 01:18:15.495 we began inviting participants and  
NOTE Confidence: 0.841862261295319  
01:18:15.495 --> 01:18:17.876 patience and since then we have  
NOTE Confidence: 0.841862261295319  
01:18:17.876 --> 01:18:19.928 seen over 35 families in person.  
NOTE Confidence: 0.841862261295319  
01:18:19.930 --> 01:18:21.855 You know this is important  
NOTE Confidence: 0.841862261295319  
01:18:21.855 --> 01:18:24.080 because all the things we do,  
NOTE Confidence: 0.841862261295319  
01:18:24.080 --> 01:18:25.965 whether it's clinically to help  
NOTE Confidence: 0.841862261295319

01:18:25.965 --> 01:18:27.850 families or to conduct studies,  
NOTE Confidence: 0.841862261295319

01:18:27.850 --> 01:18:30.858 we can't do everything in a virtual format.  
NOTE Confidence: 0.841862261295319

01:18:30.860 --> 01:18:33.983 We really do have to see them on the  
NOTE Confidence: 0.841862261295319

01:18:33.983 --> 01:18:36.056 precision of diagnosis, you know.  
NOTE Confidence: 0.841862261295319

01:18:36.056 --> 01:18:38.387 Depends a lot on the ability to  
NOTE Confidence: 0.841862261295319

01:18:38.387 --> 01:18:40.318 interact directly with children,  
NOTE Confidence: 0.841862261295319

01:18:40.320 --> 01:18:42.558 and the way that we can  
NOTE Confidence: 0.841862261295319

01:18:42.558 --> 01:18:43.677 better understand emotional,  
NOTE Confidence: 0.841862261295319

01:18:43.680 --> 01:18:44.044 functioning,  
NOTE Confidence: 0.841862261295319

01:18:44.044 --> 01:18:45.500 attentional functioning also depends  
NOTE Confidence: 0.841862261295319

01:18:45.500 --> 01:18:48.134 on us being able to study them  
NOTE Confidence: 0.841862261295319

01:18:48.134 --> 01:18:49.646 in very controlled environments,  
NOTE Confidence: 0.841862261295319

01:18:49.650 --> 01:18:51.889 so this was really an tremendous  
NOTE Confidence: 0.841862261295319

01:18:51.890 --> 01:18:54.333 achievement of our team to be able  
NOTE Confidence: 0.841862261295319

01:18:54.333 --> 01:18:56.740 to carry these visits out safely.  
NOTE Confidence: 0.841862261295319

01:18:56.740 --> 01:18:58.208 So on that note,

NOTE Confidence: 0.841862261295319  
01:18:58.208 --> 01:19:00.043 one very important thing that  
NOTE Confidence: 0.841862261295319  
01:19:00.043 --> 01:19:02.598 we were able to do during this  
NOTE Confidence: 0.841862261295319  
01:19:02.598 --> 01:19:05.262 time that answer is one of the  
NOTE Confidence: 0.841862261295319  
01:19:05.262 --> 01:19:07.227 biggest questions in the field.  
NOTE Confidence: 0.841862261295319  
01:19:07.230 --> 01:19:09.366 Not only here at the center,  
NOTE Confidence: 0.841862261295319  
01:19:09.370 --> 01:19:11.860 but it's really in the whole field  
NOTE Confidence: 0.841862261295319  
01:19:11.860 --> 01:19:14.610 of autism is how do you mask affect  
NOTE Confidence: 0.841862261295319  
01:19:14.610 --> 01:19:15.970 children's perception and behavior  
NOTE Confidence: 0.841862261295319  
01:19:16.035 --> 01:19:17.910 during face to face interactions.  
NOTE Confidence: 0.841862261295319  
01:19:17.910 --> 01:19:20.066 And Fortunately we were able to conduct  
NOTE Confidence: 0.841862261295319  
01:19:20.066 --> 01:19:22.179 sort of this natural experiment.  
NOTE Confidence: 0.841862261295319  
01:19:22.180 --> 01:19:24.665 We had been using lie by tracking,  
NOTE Confidence: 0.841862261295319  
01:19:24.670 --> 01:19:26.826 which is a way of studying attention  
NOTE Confidence: 0.841862261295319  
01:19:26.826 --> 01:19:29.039 during face to face interactions in  
NOTE Confidence: 0.841862261295319  
01:19:29.039 --> 01:19:31.079 toddlers with and without autism.  
NOTE Confidence: 0.841862261295319

01:19:31.080 --> 01:19:33.495 And we started this work before Covid  
NOTE Confidence: 0.841862261295319

01:19:33.495 --> 01:19:36.067 and we continued it during the pandemic,  
NOTE Confidence: 0.841862261295319

01:19:36.070 --> 01:19:38.569 at which point we added a plexiglass.  
NOTE Confidence: 0.841862261295319

01:19:38.570 --> 01:19:41.072 Divider shown here and masks and  
NOTE Confidence: 0.841862261295319

01:19:41.072 --> 01:19:43.566 the question was will the kids  
NOTE Confidence: 0.841862261295319

01:19:43.566 --> 01:19:45.897 be really upset when having to  
NOTE Confidence: 0.841862261295319

01:19:45.897 --> 01:19:48.339 interact with someone wearing a mask?  
NOTE Confidence: 0.841862261295319

01:19:48.340 --> 01:19:50.370 Maybe they don't want to.  
NOTE Confidence: 0.841862261295319

01:19:50.370 --> 01:19:52.770 Maybe they will not pay attention  
NOTE Confidence: 0.841862261295319

01:19:52.770 --> 01:19:55.259 to someone who looks so strange,  
NOTE Confidence: 0.841862261295319

01:19:55.260 --> 01:19:57.295 but our results showed something  
NOTE Confidence: 0.841862261295319

01:19:57.295 --> 01:19:58.106 really different.  
NOTE Confidence: 0.841862261295319

01:19:58.106 --> 01:19:59.730 They suggested that emotionally  
NOTE Confidence: 0.841862261295319

01:19:59.730 --> 01:20:01.358 children are responding quite  
NOTE Confidence: 0.841862261295319

01:20:01.360 --> 01:20:03.806 normally in the presence of masks.  
NOTE Confidence: 0.841862261295319

01:20:03.806 --> 01:20:06.250 We didn't see any changes from

NOTE Confidence: 0.841862261295319  
01:20:06.250 --> 01:20:08.653 pre covid to now kids are.  
NOTE Confidence: 0.841862261295319  
01:20:08.653 --> 01:20:10.082 Typically pretty neutral during  
NOTE Confidence: 0.841862261295319  
01:20:10.082 --> 01:20:11.446 this kind of engagement,  
NOTE Confidence: 0.841862261295319  
01:20:11.450 --> 01:20:12.810 and they remain so,  
NOTE Confidence: 0.841862261295319  
01:20:12.810 --> 01:20:14.544 and if anything they tended to  
NOTE Confidence: 0.841862261295319  
01:20:14.544 --> 01:20:16.633 look more at the person who's  
NOTE Confidence: 0.841862261295319  
01:20:16.633 --> 01:20:17.926 interacting with them,  
NOTE Confidence: 0.841862261295319  
01:20:17.930 --> 01:20:19.928 which may have been caused by  
NOTE Confidence: 0.841862261295319  
01:20:19.928 --> 01:20:22.035 the novelty of the mask, but.  
NOTE Confidence: 0.841862261295319  
01:20:22.035 --> 01:20:24.165 It might also be that they're  
NOTE Confidence: 0.841862261295319  
01:20:24.165 --> 01:20:26.837 working a little bit harder to try  
NOTE Confidence: 0.841862261295319  
01:20:26.837 --> 01:20:28.752 to decode communication cues from  
NOTE Confidence: 0.841862261295319  
01:20:28.752 --> 01:20:31.299 the person who's speaking to them,  
NOTE Confidence: 0.841862261295319  
01:20:31.300 --> 01:20:34.204 so this is all fantastic work and we  
NOTE Confidence: 0.841862261295319  
01:20:34.204 --> 01:20:37.139 just submitted it to to our major conference,  
NOTE Confidence: 0.841862261295319



01:20:37.140 --> 01:20:38.910 the International Society  
NOTE Confidence: 0.841862261295319  
01:20:38.910 --> 01:20:40.680 for Autism Research.  
NOTE Confidence: 0.841862261295319  
01:20:40.680 --> 01:20:41.100 OK,  
NOTE Confidence: 0.841862261295319  
01:20:41.100 --> 01:20:44.040 so a crisis like covid an existential  
NOTE Confidence: 0.841862261295319  
01:20:44.040 --> 01:20:46.751 crisis really pushes us all to  
NOTE Confidence: 0.841862261295319  
01:20:46.751 --> 01:20:48.543 really rethink our priorities.  
NOTE Confidence: 0.861366331577301  
01:20:48.550 --> 01:20:51.196 So we've thought much more about  
NOTE Confidence: 0.861366331577301  
01:20:51.196 --> 01:20:53.350 not only what's happening now,  
NOTE Confidence: 0.861366331577301  
01:20:53.350 --> 01:20:55.915 but what will happen when  
NOTE Confidence: 0.861366331577301  
01:20:55.915 --> 01:20:57.454 things stabilize again.  
NOTE Confidence: 0.861366331577301  
01:20:57.460 --> 01:20:59.854 What have we been learning and how  
NOTE Confidence: 0.861366331577301  
01:20:59.854 --> 01:21:02.819 can we take things to the next level?  
NOTE Confidence: 0.861366331577301  
01:21:02.820 --> 01:21:05.935 So in terms of our current priorities,  
NOTE Confidence: 0.861366331577301  
01:21:05.940 --> 01:21:07.275 diagnostics are something  
NOTE Confidence: 0.861366331577301  
01:21:07.275 --> 01:21:09.055 we're known very well.  
NOTE Confidence: 0.861366331577301  
01:21:09.060 --> 01:21:10.844 For we're continuing to

NOTE Confidence: 0.861366331577301  
01:21:10.844 --> 01:21:12.628 expand the these services,  
NOTE Confidence: 0.861366331577301  
01:21:12.630 --> 01:21:15.492 so we just hired an excellent  
NOTE Confidence: 0.861366331577301  
01:21:15.492 --> 01:21:17.908 clinician who is bilingual Mariana  
NOTE Confidence: 0.861366331577301  
01:21:17.908 --> 01:21:20.827 Torres be so who will help us  
NOTE Confidence: 0.861366331577301  
01:21:20.827 --> 01:21:23.119 augment our diagnostic work?  
NOTE Confidence: 0.861366331577301  
01:21:23.120 --> 01:21:25.352 Um, we've committed to studying Co  
NOTE Confidence: 0.861366331577301  
01:21:25.352 --> 01:21:26.840 occurring conditions like emotional  
NOTE Confidence: 0.861366331577301  
01:21:26.898 --> 01:21:28.758 and behavioral problems and autism,  
NOTE Confidence: 0.861366331577301  
01:21:28.760 --> 01:21:30.496 which are highly debilitating  
NOTE Confidence: 0.861366331577301  
01:21:30.496 --> 01:21:32.666 and trying to understand their  
NOTE Confidence: 0.861366331577301  
01:21:32.666 --> 01:21:34.948 roots in infancy and toddlerhood.  
NOTE Confidence: 0.861366331577301  
01:21:34.950 --> 01:21:37.267 And we've always done a lot of  
NOTE Confidence: 0.861366331577301  
01:21:37.267 --> 01:21:39.155 work in supporting parents who  
NOTE Confidence: 0.861366331577301  
01:21:39.155 --> 01:21:41.215 are receiving a first diagnosis  
NOTE Confidence: 0.861366331577301  
01:21:41.215 --> 01:21:43.200 of autism through individual  
NOTE Confidence: 0.861366331577301

01:21:43.200 --> 01:21:45.235 support or through parent groups.  
NOTE Confidence: 0.861366331577301

01:21:45.235 --> 01:21:47.310 After Kelly Powell has been  
NOTE Confidence: 0.861366331577301

01:21:47.310 --> 01:21:49.292 running a parent support group  
NOTE Confidence: 0.861366331577301

01:21:49.292 --> 01:21:51.458 for a number of years now,  
NOTE Confidence: 0.861366331577301

01:21:51.460 --> 01:21:53.420 and we've added some more  
NOTE Confidence: 0.861366331577301

01:21:53.420 --> 01:21:54.988 targeted messaging for parents.  
NOTE Confidence: 0.861366331577301

01:21:54.990 --> 01:21:57.814 Thanks to Meghan Lions and Amy Jugar Carney  
NOTE Confidence: 0.861366331577301

01:21:57.814 --> 01:22:00.098 that answers more specific questions.  
NOTE Confidence: 0.861366331577301

01:22:00.100 --> 01:22:00.494 Really,  
NOTE Confidence: 0.861366331577301

01:22:00.494 --> 01:22:02.858 timely questions taking care of yourself  
NOTE Confidence: 0.861366331577301

01:22:02.858 --> 01:22:04.492 during the pandemic transitioning  
NOTE Confidence: 0.861366331577301

01:22:04.492 --> 01:22:06.826 to this very unusual school year.  
NOTE Confidence: 0.861366331577301

01:22:06.830 --> 01:22:07.988 And so forth,  
NOTE Confidence: 0.861366331577301

01:22:07.990 --> 01:22:10.727 but I think the most important new  
NOTE Confidence: 0.861366331577301

01:22:10.727 --> 01:22:12.678 and exciting direction that we're  
NOTE Confidence: 0.861366331577301

01:22:12.678 --> 01:22:15.128 taking now is to start to translate

NOTE Confidence: 0.861366331577301  
01:22:15.128 --> 01:22:17.543 what we've learned from our basic  
NOTE Confidence: 0.861366331577301  
01:22:17.543 --> 01:22:20.016 research into things that can improve  
NOTE Confidence: 0.861366331577301  
01:22:20.016 --> 01:22:22.396 intervention for children with autism.  
NOTE Confidence: 0.861366331577301  
01:22:22.400 --> 01:22:24.386 One Direction and we won't have  
NOTE Confidence: 0.861366331577301  
01:22:24.386 --> 01:22:27.257 time to go into these in any detail  
NOTE Confidence: 0.861366331577301  
01:22:27.257 --> 01:22:29.459 and we will have an opportunity.  
NOTE Confidence: 0.861366331577301  
01:22:29.460 --> 01:22:31.924 I think in January to do this,  
NOTE Confidence: 0.861366331577301  
01:22:31.930 --> 01:22:34.442 but one of them has to do with  
NOTE Confidence: 0.861366331577301  
01:22:34.442 --> 01:22:36.868 improving a core symptom of autism.  
NOTE Confidence: 0.861366331577301  
01:22:36.870 --> 01:22:38.495 8 typical social attention and  
NOTE Confidence: 0.861366331577301  
01:22:38.495 --> 01:22:41.321 based on some of the work we've done  
NOTE Confidence: 0.861366331577301  
01:22:41.321 --> 01:22:43.577 that's been funded by the associates,  
NOTE Confidence: 0.861366331577301  
01:22:43.580 --> 01:22:45.390 we've developed a protocol that  
NOTE Confidence: 0.861366331577301  
01:22:45.390 --> 01:22:47.937 may help us address some of these  
NOTE Confidence: 0.861366331577301  
01:22:47.937 --> 01:22:49.929 deficits are very early in life,  
NOTE Confidence: 0.861366331577301

01:22:49.930 --> 01:22:52.210 even as early as infancy.  
NOTE Confidence: 0.861366331577301

01:22:52.210 --> 01:22:54.530 And there's a second area,  
NOTE Confidence: 0.861366331577301

01:22:54.530 --> 01:22:57.194 although there are some very well  
NOTE Confidence: 0.861366331577301

01:22:57.194 --> 01:22:58.970 designed an empirically validated  
NOTE Confidence: 0.861366331577301

01:22:59.039 --> 01:23:01.454 interventions like Jasper which is  
NOTE Confidence: 0.861366331577301

01:23:01.454 --> 01:23:03.620 joint attention, symbolic play,  
NOTE Confidence: 0.861366331577301

01:23:03.620 --> 01:23:05.420 engagement and regulation.  
NOTE Confidence: 0.861366331577301

01:23:05.420 --> 01:23:07.850 Children respond to these interventions very,  
NOTE Confidence: 0.861366331577301

01:23:07.850 --> 01:23:08.660 very differently.  
NOTE Confidence: 0.861366331577301

01:23:08.660 --> 01:23:10.280 Some children respond immediately,  
NOTE Confidence: 0.861366331577301

01:23:10.280 --> 01:23:11.090 some don't.  
NOTE Confidence: 0.861366331577301

01:23:11.090 --> 01:23:14.330 Some need a lot of hours of intervention,  
NOTE Confidence: 0.861366331577301

01:23:14.330 --> 01:23:15.509 some need less,  
NOTE Confidence: 0.861366331577301

01:23:15.509 --> 01:23:17.867 and we want to better understand  
NOTE Confidence: 0.861366331577301

01:23:17.867 --> 01:23:20.409 what the predictors are early on.  
NOTE Confidence: 0.861366331577301

01:23:20.410 --> 01:23:22.840 Who will respond to this intervention?

NOTE Confidence: 0.861366331577301  
01:23:22.840 --> 01:23:26.320 How do we need to adjust the intervention  
NOTE Confidence: 0.861366331577301  
01:23:26.320 --> 01:23:29.289 for those who don't respond in order  
NOTE Confidence: 0.861366331577301  
01:23:29.289 --> 01:23:32.240 to make it more most effective?  
NOTE Confidence: 0.861366331577301  
01:23:32.240 --> 01:23:37.130 OK so I will stop here.  
NOTE Confidence: 0.861366331577301  
01:23:37.130 --> 01:23:39.983 And I'm trying to get to my next slide.  
NOTE Confidence: 0.861366331577301  
01:23:39.990 --> 01:23:42.790 Once there we are just to give thanks  
NOTE Confidence: 0.861366331577301  
01:23:42.790 --> 01:23:45.728 to the entire team without whom this  
NOTE Confidence: 0.861366331577301  
01:23:45.728 --> 01:23:48.680 work would really not be possible.  
NOTE Confidence: 0.861366331577301  
01:23:48.680 --> 01:23:51.008 We have a totally amazing stellar  
NOTE Confidence: 0.861366331577301  
01:23:51.008 --> 01:23:53.796 clinical team who are in the trenches  
NOTE Confidence: 0.861366331577301  
01:23:53.796 --> 01:23:56.512 with our families who are so incredibly  
NOTE Confidence: 0.861366331577301  
01:23:56.584 --> 01:23:58.839 dedicated to seeing the families  
NOTE Confidence: 0.861366331577301  
01:23:58.839 --> 01:24:01.515 during the pandemic of research team.  
NOTE Confidence: 0.861366331577301  
01:24:01.515 --> 01:24:04.003 Of course an are wonderful fellows  
NOTE Confidence: 0.861366331577301  
01:24:04.003 --> 01:24:06.550 also so dedicated to seeing our  
NOTE Confidence: 0.861366331577301

01:24:06.550 --> 01:24:09.130 kids and our staff and thank  
NOTE Confidence: 0.861366331577301

01:24:09.215 --> 01:24:11.200 you also to our funders.  
NOTE Confidence: 0.861366331577301

01:24:11.200 --> 01:24:12.726 And thank you all for your attention.  
NOTE Confidence: 0.848767638206482

01:24:14.110 --> 01:24:17.022 Then thank you very much and I should  
NOTE Confidence: 0.848767638206482

01:24:17.022 --> 01:24:20.129 just say before I turn it over to Pam.  
NOTE Confidence: 0.848767638206482

01:24:20.130 --> 01:24:22.086 Suzanne's mentioning in January because we  
NOTE Confidence: 0.848767638206482

01:24:22.086 --> 01:24:24.379 have this wonderful new virtual technology.  
NOTE Confidence: 0.848767638206482

01:24:24.380 --> 01:24:26.660 We will be actually having some  
NOTE Confidence: 0.848767638206482

01:24:26.660 --> 01:24:28.580 special sessions in December and  
NOTE Confidence: 0.848767638206482

01:24:28.580 --> 01:24:30.590 January to highlight in greater depth  
NOTE Confidence: 0.848767638206482

01:24:30.590 --> 01:24:32.870 on the work of our autism team.  
NOTE Confidence: 0.848767638206482

01:24:32.870 --> 01:24:35.348 So stay tuned for announcements about that.  
NOTE Confidence: 0.848767638206482

01:24:35.350 --> 01:24:38.574 So now let me turn it over to  
NOTE Confidence: 0.848767638206482

01:24:38.574 --> 01:24:41.310 Doctor Ventola Pam. Thank you.  
NOTE Confidence: 0.468042433261871

01:24:41.990 --> 01:24:51.130 Here. Great.  
NOTE Confidence: 0.181790679693222

01:24:53.010 --> 01:24:57.490 Down. Right, looks like there are

NOTE Confidence: 0.181790679693222

01:24:57.490 --> 01:24:59.999 excellent fantastic. Well thank you

NOTE Confidence: 0.861852407455444

01:25:00.000 --> 01:25:03.516 all for for coming in and listening

NOTE Confidence: 0.861852407455444

01:25:03.516 --> 01:25:07.530 to the the work that we're doing so

NOTE Confidence: 0.861852407455444

01:25:07.530 --> 01:25:10.592 my work has is all about clinical

NOTE Confidence: 0.861852407455444

01:25:10.592 --> 01:25:12.967 trials and both running clinical

NOTE Confidence: 0.861852407455444

01:25:12.967 --> 01:25:16.435 trials in autism and in supporting

NOTE Confidence: 0.861852407455444

01:25:16.435 --> 01:25:19.075 international clinical trials that are

NOTE Confidence: 0.861852407455444

01:25:19.075 --> 01:25:22.085 done after my industry sponsors their

NOTE Confidence: 0.861852407455444

01:25:22.085 --> 01:25:25.258 large scale academic groups and in.

NOTE Confidence: 0.861852407455444

01:25:25.260 --> 01:25:26.713 Prior meetings and meetings

NOTE Confidence: 0.861852407455444

01:25:26.713 --> 01:25:28.528 with the associates in toxic.

NOTE Confidence: 0.861852407455444

01:25:28.530 --> 01:25:31.064 Focused on what we've done in our

NOTE Confidence: 0.861852407455444

01:25:31.064 --> 01:25:32.516 lab with behavioral treatments.

NOTE Confidence: 0.861852407455444

01:25:32.516 --> 01:25:34.333 An that's still going on.

NOTE Confidence: 0.861852407455444

01:25:34.333 --> 01:25:37.238 And as you've heard from my my colleagues,

NOTE Confidence: 0.861852407455444



01:25:37.240 --> 01:25:39.780 alot of this move to Tele medicine  
NOTE Confidence: 0.861852407455444

01:25:39.780 --> 01:25:42.692 and our work has as well we're doing  
NOTE Confidence: 0.861852407455444

01:25:42.692 --> 01:25:44.888 a lot of video consultations and  
NOTE Confidence: 0.861852407455444

01:25:44.888 --> 01:25:46.733 parent training with young children  
NOTE Confidence: 0.861852407455444

01:25:46.733 --> 01:25:49.219 have autism and that is going very,  
NOTE Confidence: 0.861852407455444

01:25:49.220 --> 01:25:49.772 very well.  
NOTE Confidence: 0.861852407455444

01:25:49.772 --> 01:25:51.980 But we also are doing a lot of  
NOTE Confidence: 0.861852407455444

01:25:52.054 --> 01:25:54.796 work right now with the pandemic  
NOTE Confidence: 0.861852407455444

01:25:54.796 --> 01:25:56.167 in supporting international.  
NOTE Confidence: 0.861852407455444

01:25:56.170 --> 01:25:58.529 Industry sponsored or pharmaceutical trials.  
NOTE Confidence: 0.861852407455444

01:25:58.530 --> 01:26:03.250 And that's a big focus of my lab as well,  
NOTE Confidence: 0.861852407455444

01:26:03.250 --> 01:26:05.610 and that's been growing and  
NOTE Confidence: 0.861852407455444

01:26:05.610 --> 01:26:07.968 just really exciting and new.  
NOTE Confidence: 0.861852407455444

01:26:07.968 --> 01:26:11.750 And I wanted to to share that piece  
NOTE Confidence: 0.844515264034271

01:26:11.750 --> 01:26:13.630 of things with you  
NOTE Confidence: 0.844515264034271

01:26:13.630 --> 01:26:16.468 today. So when the pandemic hit,

NOTE Confidence: 0.844515264034271

01:26:16.470 --> 01:26:19.767 there's lots of clinical trials that are

NOTE Confidence: 0.844515264034271

01:26:19.770 --> 01:26:23.070 ongoing and that are planned in this

NOTE Confidence: 0.844515264034271

01:26:23.070 --> 01:26:24.958 space of developmental disabilities,

NOTE Confidence: 0.844515264034271

01:26:24.960 --> 01:26:26.836 rare diseases, genetic conditions.

NOTE Confidence: 0.844515264034271

01:26:26.836 --> 01:26:29.181 That are absolutely debilitating and

NOTE Confidence: 0.844515264034271

01:26:29.181 --> 01:26:32.165 for many of these conditions there's the

NOTE Confidence: 0.844515264034271

01:26:32.165 --> 01:26:34.820 children are very impaired or shortened.

NOTE Confidence: 0.844515264034271

01:26:34.820 --> 01:26:37.394 Life expectancies and the families are

NOTE Confidence: 0.844515264034271

01:26:37.394 --> 01:26:39.680 really desperate for treatment options,

NOTE Confidence: 0.844515264034271

01:26:39.680 --> 01:26:42.326 and there are often no no

NOTE Confidence: 0.844515264034271

01:26:42.326 --> 01:26:44.540 effective treatments, so you know,

NOTE Confidence: 0.844515264034271

01:26:44.540 --> 01:26:47.186 even in the face of covid,

NOTE Confidence: 0.844515264034271

01:26:47.190 --> 01:26:50.284 these trials needed continue both for safety,

NOTE Confidence: 0.844515264034271

01:26:50.284 --> 01:26:52.941 because these children were already on

NOTE Confidence: 0.844515264034271

01:26:52.941 --> 01:26:55.146 drugs or starting different therapies,

NOTE Confidence: 0.844515264034271

01:26:55.150 --> 01:26:59.353 but also because the need is just so great.

NOTE Confidence: 0.844515264034271

01:26:59.360 --> 01:27:02.835 So our lab was leaned on quite a

NOTE Confidence: 0.844515264034271

01:27:02.835 --> 01:27:05.869 bit to help come up with solutions,

NOTE Confidence: 0.844515264034271

01:27:05.870 --> 01:27:08.906 so lot of which you've heard already,

NOTE Confidence: 0.844515264034271

01:27:08.906 --> 01:27:11.075 but on a large scale.

NOTE Confidence: 0.844515264034271

01:27:11.075 --> 01:27:13.250 So things trials that are

NOTE Confidence: 0.844515264034271

01:27:13.250 --> 01:27:14.120 going internationally.

NOTE Confidence: 0.844515264034271

01:27:14.120 --> 01:27:17.144 So how can you continue a trial?

NOTE Confidence: 0.844515264034271

01:27:17.150 --> 01:27:18.452 Not just it?

NOTE Confidence: 0.844515264034271

01:27:18.452 --> 01:27:21.490 Major academic Medical Center in the US,

NOTE Confidence: 0.844515264034271

01:27:21.490 --> 01:27:24.094 but trials that are on going

NOTE Confidence: 0.844515264034271

01:27:24.094 --> 01:27:25.396 around the world.

NOTE Confidence: 0.844515264034271

01:27:25.400 --> 01:27:29.369 So we had to figure out how to move.

NOTE Confidence: 0.844515264034271

01:27:29.370 --> 01:27:30.165 These visits,

NOTE Confidence: 0.844515264034271

01:27:30.165 --> 01:27:31.751 when their their families

NOTE Confidence: 0.844515264034271

01:27:31.751 --> 01:27:33.736 and children came to clinic,

NOTE Confidence: 0.844515264034271  
01:27:33.740 --> 01:27:35.720 how traditionally to assess their,  
NOTE Confidence: 0.844515264034271  
01:27:35.720 --> 01:27:37.308 you know their outcome,  
NOTE Confidence: 0.844515264034271  
01:27:37.308 --> 01:27:39.293 how their development was progressing,  
NOTE Confidence: 0.844515264034271  
01:27:39.300 --> 01:27:41.484 language motor skills and how to  
NOTE Confidence: 0.844515264034271  
01:27:41.484 --> 01:27:44.059 take that and do that remotely.  
NOTE Confidence: 0.844515264034271  
01:27:44.060 --> 01:27:46.442 And that's what we have spent  
NOTE Confidence: 0.844515264034271  
01:27:46.442 --> 01:27:47.236 tremendous effort.  
NOTE Confidence: 0.844515264034271  
01:27:47.240 --> 01:27:49.616 We have do it very quickly,  
NOTE Confidence: 0.844515264034271  
01:27:49.616 --> 01:27:51.596 so we had to pivot.  
NOTE Confidence: 0.844515264034271  
01:27:51.600 --> 01:27:53.976 Help these trials pivot very quickly,  
NOTE Confidence: 0.844515264034271  
01:27:53.980 --> 01:27:57.020 so in one way that we worked a lot on  
NOTE Confidence: 0.844515264034271  
01:27:57.103 --> 01:28:00.385 doing this is developing creative means.  
NOTE Confidence: 0.844515264034271  
01:28:00.390 --> 01:28:02.988 So as Jamie was describing what  
NOTE Confidence: 0.844515264034271  
01:28:02.988 --> 01:28:04.720 we did and clinic,  
NOTE Confidence: 0.844515264034271  
01:28:04.720 --> 01:28:06.815 we're doing very similar things  
NOTE Confidence: 0.844515264034271

01:28:06.815 --> 01:28:09.480 just on a very large scale.  
NOTE Confidence: 0.844515264034271

01:28:09.480 --> 01:28:12.270 So how to creatively assess?  
NOTE Confidence: 0.844515264034271

01:28:12.270 --> 01:28:14.170 Children who might be very,  
NOTE Confidence: 0.844515264034271

01:28:14.170 --> 01:28:16.330 very impaired and talk with their  
NOTE Confidence: 0.844515264034271

01:28:16.330 --> 01:28:19.048 families and how to get that data  
NOTE Confidence: 0.844515264034271

01:28:19.048 --> 01:28:21.454 about their their skills in their  
NOTE Confidence: 0.844515264034271

01:28:21.454 --> 01:28:23.289 functioning in a remote context.  
NOTE Confidence: 0.844515264034271

01:28:23.290 --> 01:28:25.537 So things like sharing your screen so  
NOTE Confidence: 0.844515264034271

01:28:25.537 --> 01:28:27.784 to having a video conference having  
NOTE Confidence: 0.844515264034271

01:28:27.784 --> 01:28:30.626 lots of zoom meetings or meetings over  
NOTE Confidence: 0.844515264034271

01:28:30.693 --> 01:28:32.688 you know different video platforms  
NOTE Confidence: 0.844515264034271

01:28:32.688 --> 01:28:35.070 an sharing your screen and being  
NOTE Confidence: 0.844515264034271

01:28:35.070 --> 01:28:38.110 able to ask them a lot of questions,  
NOTE Confidence: 0.844515264034271

01:28:38.110 --> 01:28:40.384 but the parents could also see  
NOTE Confidence: 0.844515264034271

01:28:40.384 --> 01:28:42.390 them through this screen share.  
NOTE Confidence: 0.844515264034271

01:28:42.390 --> 01:28:45.162 We're doing video visits where you're

NOTE Confidence: 0.844515264034271  
01:28:45.162 --> 01:28:47.957 showing them things able to observe  
NOTE Confidence: 0.844515264034271  
01:28:47.957 --> 01:28:50.137 the children through video and  
NOTE Confidence: 0.844175159931183  
01:28:50.140 --> 01:28:53.790 just to you, it sounds so simple and  
NOTE Confidence: 0.844175159931183  
01:28:53.790 --> 01:28:56.074 in a way it is.  
NOTE Confidence: 0.844175159931183  
01:28:56.074 --> 01:28:57.466 But we're implementing  
NOTE Confidence: 0.844175159931183  
01:28:57.466 --> 01:29:00.630 this in not only in the US,  
NOTE Confidence: 0.844175159931183  
01:29:00.630 --> 01:29:02.910 in North America and Europe,  
NOTE Confidence: 0.844175159931183  
01:29:02.910 --> 01:29:05.646 but in South America and in  
NOTE Confidence: 0.844175159931183  
01:29:05.646 --> 01:29:07.470 Asian countries like China,  
NOTE Confidence: 0.844175159931183  
01:29:07.470 --> 01:29:09.750 where there's different access and  
NOTE Confidence: 0.844175159931183  
01:29:09.750 --> 01:29:11.575 different broadband capacities and  
NOTE Confidence: 0.844175159931183  
01:29:11.575 --> 01:29:14.790 different kinds of devices and rules around.  
NOTE Confidence: 0.844175159931183  
01:29:14.790 --> 01:29:16.970 Privacy, so there was a  
NOTE Confidence: 0.844175159931183  
01:29:16.970 --> 01:29:19.530 lot to figure out that we,  
NOTE Confidence: 0.844175159931183  
01:29:19.530 --> 01:29:22.116 but we've done it successfully there.  
NOTE Confidence: 0.844175159931183

01:29:22.120 --> 01:29:25.130 These trials are keeping are still going.  
NOTE Confidence: 0.844175159931183

01:29:25.130 --> 01:29:26.573 We're also validating,  
NOTE Confidence: 0.844175159931183

01:29:26.573 --> 01:29:29.459 so I have many collaborative papers  
NOTE Confidence: 0.844175159931183

01:29:29.459 --> 01:29:32.460 that are going to be coming out soon.  
NOTE Confidence: 0.844175159931183

01:29:32.460 --> 01:29:35.050 Looking at the validation of different  
NOTE Confidence: 0.844175159931183

01:29:35.050 --> 01:29:37.200 assessment measures done in person  
NOTE Confidence: 0.844175159931183

01:29:37.200 --> 01:29:40.220 versus on video or over the phone.  
NOTE Confidence: 0.844175159931183

01:29:40.220 --> 01:29:42.376 'cause that's an important question.  
NOTE Confidence: 0.844175159931183

01:29:42.376 --> 01:29:45.890 When I say if I'm doing this measure.  
NOTE Confidence: 0.844175159931183

01:29:45.890 --> 01:29:47.830 I'm doing this in trivial.  
NOTE Confidence: 0.844175159931183

01:29:47.830 --> 01:29:50.921 Are we sure it's the same if it's  
NOTE Confidence: 0.844175159931183

01:29:50.921 --> 01:29:53.630 in person or over a video platform,  
NOTE Confidence: 0.844175159931183

01:29:53.630 --> 01:29:55.182 we think it is,  
NOTE Confidence: 0.844175159931183

01:29:55.182 --> 01:29:57.729 but we need data and we need  
NOTE Confidence: 0.844175159931183

01:29:57.729 --> 01:30:01.059 to be able to show if it is the  
NOTE Confidence: 0.844175159931183

01:30:01.059 --> 01:30:03.309 same or how it's different.

NOTE Confidence: 0.844175159931183  
01:30:03.310 --> 01:30:04.582 As an example,  
NOTE Confidence: 0.844175159931183  
01:30:04.582 --> 01:30:06.702 families may feel more comfortable  
NOTE Confidence: 0.844175159931183  
01:30:06.702 --> 01:30:09.108 endorsing symptoms when it's just on paper.  
NOTE Confidence: 0.844175159931183  
01:30:09.110 --> 01:30:12.200 You know they might feel shy or quiet  
NOTE Confidence: 0.844175159931183  
01:30:12.200 --> 01:30:14.530 about telling their clinician about that,  
NOTE Confidence: 0.844175159931183  
01:30:14.530 --> 01:30:17.410 but feel more comfortable.  
NOTE Confidence: 0.844175159931183  
01:30:17.410 --> 01:30:18.850 Writing it,  
NOTE Confidence: 0.859443366527557  
01:30:16.900 --> 01:30:18.850 or vice versa when they  
NOTE Confidence: 0.859443366527557  
01:30:18.850 --> 01:30:21.190 get their clinician on the line  
NOTE Confidence: 0.859443366527557  
01:30:21.190 --> 01:30:23.920 and feel like they can talk more.  
NOTE Confidence: 0.859443366527557  
01:30:23.920 --> 01:30:27.040 Do they endorse more and are their response  
NOTE Confidence: 0.859443366527557  
01:30:27.040 --> 01:30:29.472 is different and that's just important  
NOTE Confidence: 0.859443366527557  
01:30:29.472 --> 01:30:32.706 information for us to know as we move  
NOTE Confidence: 0.859443366527557  
01:30:32.706 --> 01:30:35.230 into this new world of more virtual.  
NOTE Confidence: 0.859443366527557  
01:30:35.230 --> 01:30:37.180 Collect your virtual clinical trials.  
NOTE Confidence: 0.859443366527557



01:30:37.180 --> 01:30:39.016 More virtual clinical visits.  
NOTE Confidence: 0.859443366527557

01:30:39.016 --> 01:30:41.691 I'm also developing is also  
NOTE Confidence: 0.859443366527557

01:30:41.691 --> 01:30:43.926 Jamie alluded to different tools,  
NOTE Confidence: 0.859443366527557

01:30:43.930 --> 01:30:46.828 but tools that can be used and  
NOTE Confidence: 0.859443366527557

01:30:46.828 --> 01:30:50.095 there are designed to be used to  
NOTE Confidence: 0.859443366527557

01:30:50.095 --> 01:30:51.544 measure skills completely,  
NOTE Confidence: 0.859443366527557

01:30:51.550 --> 01:30:52.446 remotely, completely,  
NOTE Confidence: 0.859443366527557

01:30:52.446 --> 01:30:54.238 virtually through structured observations  
NOTE Confidence: 0.859443366527557

01:30:54.238 --> 01:30:56.030 and interviews with parents,  
NOTE Confidence: 0.859443366527557

01:30:56.030 --> 01:30:58.478 we can gain really granular information  
NOTE Confidence: 0.859443366527557

01:30:58.478 --> 01:31:00.950 about the child symptoms development,  
NOTE Confidence: 0.859443366527557

01:31:00.950 --> 01:31:02.294 functioning without actually  
NOTE Confidence: 0.859443366527557

01:31:02.294 --> 01:31:05.866 being in the room with the child.  
NOTE Confidence: 0.859443366527557

01:31:05.866 --> 01:31:09.290 And Lastly, towards this end of just,  
NOTE Confidence: 0.859443366527557

01:31:09.290 --> 01:31:12.422 you know, this remote visits and assessing  
NOTE Confidence: 0.859443366527557

01:31:12.422 --> 01:31:14.211 symptoms and functioning remotely,

NOTE Confidence: 0.859443366527557  
01:31:14.211 --> 01:31:16.446 doing a lot of work.  
NOTE Confidence: 0.859443366527557  
01:31:16.450 --> 01:31:19.138 Also on implementing web based cognitive  
NOTE Confidence: 0.859443366527557  
01:31:19.138 --> 01:31:20.930 assessments with new populations.  
NOTE Confidence: 0.859443366527557  
01:31:20.930 --> 01:31:23.618 So in certain areas that are  
NOTE Confidence: 0.859443366527557  
01:31:23.618 --> 01:31:26.306 not diseases that I work in,  
NOTE Confidence: 0.859443366527557  
01:31:26.310 --> 01:31:28.992 it's not not typically in autism  
NOTE Confidence: 0.859443366527557  
01:31:28.992 --> 01:31:30.333 or developmental disorders.  
NOTE Confidence: 0.859443366527557  
01:31:30.340 --> 01:31:32.415 These cognitive tests are used  
NOTE Confidence: 0.859443366527557  
01:31:32.415 --> 01:31:35.095 a lot in dementia research and  
NOTE Confidence: 0.859443366527557  
01:31:35.095 --> 01:31:36.679 and psychiatric research.  
NOTE Confidence: 0.859443366527557  
01:31:36.680 --> 01:31:37.510 Other indications  
NOTE Confidence: 0.870213329792023  
01:31:37.510 --> 01:31:39.570 it's really knew this isn't  
NOTE Confidence: 0.870213329792023  
01:31:39.570 --> 01:31:42.048 something that we've done in autism  
NOTE Confidence: 0.870213329792023  
01:31:42.048 --> 01:31:43.287 or developmental disabilities,  
NOTE Confidence: 0.870213329792023  
01:31:43.290 --> 01:31:45.498 but now we're starting to where  
NOTE Confidence: 0.870213329792023

01:31:45.498 --> 01:31:48.059 someone can log into a website and  
NOTE Confidence: 0.870213329792023

01:31:48.059 --> 01:31:50.432 launch an app to that will collect  
NOTE Confidence: 0.870213329792023

01:31:50.512 --> 01:31:53.608 really high quality and sensitive data  
NOTE Confidence: 0.870213329792023

01:31:53.608 --> 01:31:55.672 about their cognitive functioning.  
NOTE Confidence: 0.870213329792023

01:31:55.680 --> 01:31:58.976 So we're piloting that with a lot of  
NOTE Confidence: 0.870213329792023

01:31:58.976 --> 01:32:01.866 different kinds of disorders now as well,  
NOTE Confidence: 0.870213329792023

01:32:01.870 --> 01:32:04.607 and this work is just so exciting  
NOTE Confidence: 0.870213329792023

01:32:04.607 --> 01:32:07.300 and it's really meaningful for me.  
NOTE Confidence: 0.870213329792023

01:32:07.300 --> 01:32:08.536 Because you know,  
NOTE Confidence: 0.870213329792023

01:32:08.536 --> 01:32:11.013 I see these families with both  
NOTE Confidence: 0.870213329792023

01:32:11.013 --> 01:32:13.416 with autism and other kinds of  
NOTE Confidence: 0.870213329792023

01:32:13.416 --> 01:32:14.992 disabilities and their struggling  
NOTE Confidence: 0.870213329792023

01:32:14.992 --> 01:32:17.210 and they they need treatments,  
NOTE Confidence: 0.870213329792023

01:32:17.210 --> 01:32:20.519 but it's hard so it's hard getting to.  
NOTE Confidence: 0.870213329792023

01:32:20.520 --> 01:32:22.240 The clinic is hard.  
NOTE Confidence: 0.870213329792023

01:32:22.240 --> 01:32:24.390 Bringing your child who can't

NOTE Confidence: 0.870213329792023  
01:32:24.390 --> 01:32:26.299 walk or who can't talk.  
NOTE Confidence: 0.870213329792023  
01:32:26.300 --> 01:32:28.778 You know who's 12 years old  
NOTE Confidence: 0.870213329792023  
01:32:28.778 --> 01:32:30.430 and is functioning very,  
NOTE Confidence: 0.870213329792023  
01:32:30.430 --> 01:32:31.210 very low.  
NOTE Confidence: 0.870213329792023  
01:32:31.210 --> 01:32:33.940 It's hard to get to these the  
NOTE Confidence: 0.870213329792023  
01:32:33.940 --> 01:32:36.616 doctor's office and sometimes it's a  
NOTE Confidence: 0.870213329792023  
01:32:36.620 --> 01:32:38.594 far distance there traveling there.  
NOTE Confidence: 0.870213329792023  
01:32:38.594 --> 01:32:41.163 In parts of the world that don't  
NOTE Confidence: 0.870213329792023  
01:32:41.163 --> 01:32:42.781 have major academic medical  
NOTE Confidence: 0.870213329792023  
01:32:42.781 --> 01:32:45.139 centers so they can get care,  
NOTE Confidence: 0.870213329792023  
01:32:45.140 --> 01:32:47.402 so being able to offer these  
NOTE Confidence: 0.870213329792023  
01:32:47.402 --> 01:32:48.910 services and these opportunities,  
NOTE Confidence: 0.870213329792023  
01:32:48.910 --> 01:32:51.058 being families at a level they  
NOTE Confidence: 0.870213329792023  
01:32:51.058 --> 01:32:53.060 can access much more easily,  
NOTE Confidence: 0.870213329792023  
01:32:53.060 --> 01:32:54.308 I think is huge.  
NOTE Confidence: 0.870213329792023

01:32:54.308 --> 01:32:57.154 So I think this was it's amazing and  
NOTE Confidence: 0.870213329792023

01:32:57.154 --> 01:32:59.836 he started because of the pandemic,  
NOTE Confidence: 0.870213329792023

01:32:59.840 --> 01:33:02.276 but because of that I think the  
NOTE Confidence: 0.870213329792023

01:33:02.276 --> 01:33:04.193 world of clinical trials is  
NOTE Confidence: 0.870213329792023

01:33:04.193 --> 01:33:06.183 absolutely shifting and we're going  
NOTE Confidence: 0.870213329792023

01:33:06.183 --> 01:33:08.900 to be able to see greater access.  
NOTE Confidence: 0.870213329792023

01:33:08.900 --> 01:33:11.342 To these opportunities that for the  
NOTE Confidence: 0.870213329792023

01:33:11.342 --> 01:33:13.560 families who are interested in them,  
NOTE Confidence: 0.870213329792023

01:33:13.560 --> 01:33:15.108 even beyond the pandemic.  
NOTE Confidence: 0.716939449310303

01:33:16.940 --> 01:33:18.858 Thank you Pam. Very much  
NOTE Confidence: 0.716939449310303

01:33:18.858 --> 01:33:21.330 so we have time for just  
NOTE Confidence: 0.834994825033041

01:33:21.427 --> 01:33:24.620 a few questions. Anybody want to ask  
NOTE Confidence: 0.834994825033041

01:33:24.620 --> 01:33:27.909 questions into the chat or speak them out?  
NOTE Confidence: 0.902941703796387

01:33:31.890 --> 01:33:40.680 No questions.  
NOTE Confidence: 0.901011645793915

01:33:42.690 --> 01:33:45.957 Well, I'm just very grateful to all the work.  
NOTE Confidence: 0.901011645793915

01:33:45.960 --> 01:33:48.392 I think you can see the creativity of

NOTE Confidence: 0.901011645793915  
01:33:48.392 --> 01:33:51.202 our autism team and how they have adapted  
NOTE Confidence: 0.901011645793915  
01:33:51.202 --> 01:33:53.580 in these very challenging circumstances.  
NOTE Confidence: 0.901011645793915  
01:33:53.580 --> 01:33:55.782 They've adapted to continue their research  
NOTE Confidence: 0.901011645793915  
01:33:55.782 --> 01:33:57.570 and continue their clinical care,  
NOTE Confidence: 0.901011645793915  
01:33:57.570 --> 01:34:00.104 and so we're very proud of that.  
NOTE Confidence: 0.901011645793915  
01:34:00.110 --> 01:34:02.686 And please do stay tuned for for the  
NOTE Confidence: 0.901011645793915  
01:34:02.686 --> 01:34:04.875 more in depth sessions that will  
NOTE Confidence: 0.901011645793915  
01:34:04.875 --> 01:34:07.740 have one in December 1 in January.  
NOTE Confidence: 0.901011645793915  
01:34:07.740 --> 01:34:10.800 I'm about this work.  
NOTE Confidence: 0.901011645793915  
01:34:10.800 --> 01:34:12.984 I want to turn them an if you  
NOTE Confidence: 0.901011645793915  
01:34:12.984 --> 01:34:15.178 have quite you think of questions,  
NOTE Confidence: 0.901011645793915  
01:34:15.180 --> 01:34:17.476 put them in the chat and I would  
NOTE Confidence: 0.901011645793915  
01:34:17.476 --> 01:34:20.121 ask that Jamie Anne Pam and Susanna  
NOTE Confidence: 0.901011645793915  
01:34:20.121 --> 01:34:22.116 Kasha just monitor the Shannon  
NOTE Confidence: 0.901011645793915  
01:34:22.195 --> 01:34:24.370 and answer questions even then.  
NOTE Confidence: 0.901011645793915

01:34:24.370 --> 01:34:27.122 So let me turn them to our third  
NOTE Confidence: 0.901011645793915

01:34:27.122 --> 01:34:29.633 panelist and this is on maternal  
NOTE Confidence: 0.901011645793915

01:34:29.633 --> 01:34:32.249 depression at the Child Study Center,  
NOTE Confidence: 0.901011645793915

01:34:32.250 --> 01:34:34.917 we take a two and three generation  
NOTE Confidence: 0.901011645793915

01:34:34.917 --> 01:34:36.914 perspective and think about what  
NOTE Confidence: 0.901011645793915

01:34:36.914 --> 01:34:39.630 happens in utero and what happens in  
NOTE Confidence: 0.901011645793915

01:34:39.630 --> 01:34:42.001 parenting environment as direct effects  
NOTE Confidence: 0.901011645793915

01:34:42.001 --> 01:34:44.386 on children in child development.  
NOTE Confidence: 0.901011645793915

01:34:44.390 --> 01:34:46.766 And so for this last session,  
NOTE Confidence: 0.901011645793915

01:34:46.770 --> 01:34:49.930 and it's my pleasure to have Jenny Dwyer,  
NOTE Confidence: 0.901011645793915

01:34:49.930 --> 01:34:53.098 221 faculty member, who joined us last year.  
NOTE Confidence: 0.901011645793915

01:34:53.100 --> 01:34:55.536 Danny Dwyer and a second faculty  
NOTE Confidence: 0.901011645793915

01:34:55.536 --> 01:34:57.460 member who just joined us,  
NOTE Confidence: 0.901011645793915

01:34:57.460 --> 01:34:58.498 secure and O'Donnell.  
NOTE Confidence: 0.901011645793915

01:34:58.498 --> 01:35:00.920 And what I would say about Jenny  
NOTE Confidence: 0.901011645793915

01:35:00.993 --> 01:35:02.469 is remarkably creative,

NOTE Confidence: 0.901011645793915  
01:35:02.470 --> 01:35:03.554 as she will hear.  
NOTE Confidence: 0.901011645793915  
01:35:03.554 --> 01:35:06.163 But Jennie is also in her own maternal  
NOTE Confidence: 0.901011645793915  
01:35:06.163 --> 01:35:07.077 transition time,  
NOTE Confidence: 0.901011645793915  
01:35:07.080 --> 01:35:10.200 so I'm just very glad that she could join us  
NOTE Confidence: 0.901011645793915  
01:35:10.276 --> 01:35:13.327 in person and will want to hear about that,  
NOTE Confidence: 0.901011645793915  
01:35:13.330 --> 01:35:13.758 Jenny.  
NOTE Confidence: 0.901011645793915  
01:35:13.758 --> 01:35:15.042 And then Kieran,  
NOTE Confidence: 0.901011645793915  
01:35:15.042 --> 01:35:17.182 who has as I said,  
NOTE Confidence: 0.901011645793915  
01:35:17.190 --> 01:35:18.734 just recently joined us,  
NOTE Confidence: 0.901011645793915  
01:35:18.734 --> 01:35:20.664 certainly had a dramatic effect  
NOTE Confidence: 0.901011645793915  
01:35:20.664 --> 01:35:23.280 of the pandemic on his ability to  
NOTE Confidence: 0.901011645793915  
01:35:23.280 --> 01:35:25.121 actually get to American embassies  
NOTE Confidence: 0.901011645793915  
01:35:25.121 --> 01:35:27.793 and be able to get into the country.  
NOTE Confidence: 0.901011645793915  
01:35:27.800 --> 01:35:30.422 So he has already remarkable persistence  
NOTE Confidence: 0.901011645793915  
01:35:30.422 --> 01:35:33.188 before he even came to New Haven.  
NOTE Confidence: 0.901011645793915



01:35:33.190 --> 01:35:37.236 So Jennifer, we first play your video.  
NOTE Confidence: 0.901011645793915

01:35:37.240 --> 01:35:38.432 Sure, that's fine.  
NOTE Confidence: 0.901011645793915

01:35:38.432 --> 01:35:39.626 OK, well Kyle,  
NOTE Confidence: 0.901011645793915

01:35:39.626 --> 01:35:42.810 can you put the video up for me?  
NOTE Confidence: 0.665671229362488

01:35:45.950 --> 01:35:51.086 Resume do we still have Kyle with us?  
NOTE Confidence: 0.691146612167358

01:35:55.510 --> 01:35:58.230 Let me locate him.  
NOTE Confidence: 0.619276940822601

01:36:00.290 --> 01:36:05.618 Jenny D. Message I have a copy of it also so  
NOTE Confidence: 0.833759129047394

01:36:05.620 --> 01:36:07.588 I don't know. Do you want  
NOTE Confidence: 0.833759129047394

01:36:07.590 --> 01:36:10.528 me to go first or Kiran? Did you want  
NOTE Confidence: 0.833759129047394

01:36:10.530 --> 01:36:12.486 to? Do you have a copy?  
NOTE Confidence: 0.833759129047394

01:36:12.490 --> 01:36:14.446 I'll tell you what I will.  
NOTE Confidence: 0.833759129047394

01:36:14.450 --> 01:36:16.082 I will give you screen  
NOTE Confidence: 0.833759129047394

01:36:16.082 --> 01:36:17.400 sharing privileges so okey  
NOTE Confidence: 0.833759129047394

01:36:17.400 --> 01:36:20.010 Dokey. Alright look at us adapting. I think  
NOTE Confidence: 0.833759129047394

01:36:20.010 --> 01:36:22.130 that's the theme today. OK, should  
NOTE Confidence: 0.833759129047394

01:36:22.130 --> 01:36:27.770 be able to screen share. Folks, let

NOTE Confidence: 0.814613282680511  
01:36:27.770 --> 01:36:31.278 me know if you  
NOTE Confidence: 0.814613282680511  
01:36:31.280 --> 01:36:33.908 can't hear. Hopefully  
NOTE Confidence: 0.814613282680511  
01:36:33.910 --> 01:36:39.298 the audio should play.  
NOTE Confidence: 0.814613282680511  
01:36:39.300 --> 01:36:41.185 Hi everybody is talking to  
NOTE Confidence: 0.814613282680511  
01:36:41.185 --> 01:36:42.693 the 2020 associates meeting.  
NOTE Confidence: 0.814613282680511  
01:36:42.700 --> 01:36:44.370 I'm setting fire and excited  
NOTE Confidence: 0.814613282680511  
01:36:44.370 --> 01:36:46.566 to talk to you about our  
NOTE Confidence: 0.814613282680511  
01:36:46.566 --> 01:36:48.366 depression program for today.  
NOTE Confidence: 0.814613282680511  
01:36:48.370 --> 01:36:50.275 You might notice that this  
NOTE Confidence: 0.814613282680511  
01:36:50.275 --> 01:36:52.150 is a recording. Jenny,  
NOTE Confidence: 0.826341450214386  
01:36:52.150 --> 01:36:57.950 can you turn it up a bit volume  
NOTE Confidence: 0.863373547792435  
01:36:57.950 --> 01:37:00.990 wise? This is a picture of our son.  
NOTE Confidence: 0.863373547792435  
01:37:00.990 --> 01:37:02.640 This is Jules Michael Dwyer,  
NOTE Confidence: 0.863373547792435  
01:37:02.640 --> 01:37:04.966 three weeks old today and I am  
NOTE Confidence: 0.863373547792435  
01:37:04.966 --> 01:37:06.970 hopeful that he will cooperate with  
NOTE Confidence: 0.863373547792435

01:37:07.041 --> 01:37:09.449 an app around the time that will be  
NOTE Confidence: 0.863373547792435

01:37:09.449 --> 01:37:11.483 doing the panel discussion and I'll  
NOTE Confidence: 0.863373547792435

01:37:11.483 --> 01:37:14.190 be able to talk more with you then,  
NOTE Confidence: 0.863373547792435

01:37:14.190 --> 01:37:16.830 but I'm going to tell you right now,  
NOTE Confidence: 0.863373547792435

01:37:16.830 --> 01:37:19.140 but my other baby from this year,  
NOTE Confidence: 0.863373547792435

01:37:19.140 --> 01:37:20.790 which is the pediatric treatment  
NOTE Confidence: 0.863373547792435

01:37:20.790 --> 01:37:21.850 resistant depression program.  
NOTE Confidence: 0.863373547792435

01:37:21.850 --> 01:37:24.040 You might notice from combining Doctor  
NOTE Confidence: 0.863373547792435

01:37:24.040 --> 01:37:25.996 O'donnell's work with my own that we're  
NOTE Confidence: 0.863373547792435

01:37:25.996 --> 01:37:27.654 really trying to take the lifespan  
NOTE Confidence: 0.863373547792435

01:37:27.654 --> 01:37:29.406 perspective on depression treatment.  
NOTE Confidence: 0.863373547792435

01:37:29.410 --> 01:37:31.780 Maternal depression is a huge risk  
NOTE Confidence: 0.863373547792435

01:37:31.780 --> 01:37:33.360 factor for teenage depression,  
NOTE Confidence: 0.863373547792435

01:37:33.360 --> 01:37:35.520 nearly doubling the risk depression is  
NOTE Confidence: 0.863373547792435

01:37:35.520 --> 01:37:37.710 already pretty common in adolescents.  
NOTE Confidence: 0.863373547792435

01:37:37.710 --> 01:37:41.028 So up to one in five teens

NOTE Confidence: 0.863373547792435  
01:37:41.028 --> 01:37:41.976 experiencing depression.  
NOTE Confidence: 0.863373547792435  
01:37:41.980 --> 01:37:44.716 And we know that this can be deadly,  
NOTE Confidence: 0.863373547792435  
01:37:44.720 --> 01:37:46.944 so increasing the risk of suicide by 30  
NOTE Confidence: 0.863373547792435  
01:37:46.944 --> 01:37:49.528 fold the depression diagnosis and suicides.  
NOTE Confidence: 0.863373547792435  
01:37:49.530 --> 01:37:51.655 Now the second leading cause  
NOTE Confidence: 0.863373547792435  
01:37:51.655 --> 01:37:53.780 of death in young people.  
NOTE Confidence: 0.863373547792435  
01:37:53.780 --> 01:37:56.944 Treatment is so important and we have  
NOTE Confidence: 0.863373547792435  
01:37:56.944 --> 01:37:59.149 medications and psychotherapy that can  
NOTE Confidence: 0.863373547792435  
01:37:59.149 --> 01:38:01.477 be quite effective for many patients,  
NOTE Confidence: 0.863373547792435  
01:38:01.480 --> 01:38:04.763 but up to 20% will have depression  
NOTE Confidence: 0.863373547792435  
01:38:04.763 --> 01:38:08.069 symptoms that are treatment resistant.  
NOTE Confidence: 0.863373547792435  
01:38:08.070 --> 01:38:10.462 And so our real goal of the last  
NOTE Confidence: 0.863373547792435  
01:38:10.462 --> 01:38:12.799 year since I've joined the faculty,  
NOTE Confidence: 0.863373547792435  
01:38:12.800 --> 01:38:14.844 is trying to establish child study center  
NOTE Confidence: 0.863373547792435  
01:38:14.844 --> 01:38:17.528 as a world leader in pediatric depression,  
NOTE Confidence: 0.863373547792435

01:38:17.530 --> 01:38:18.544 clinical treatment and  
NOTE Confidence: 0.863373547792435

01:38:18.544 --> 01:38:19.220 translational research.  
NOTE Confidence: 0.863373547792435

01:38:19.220 --> 01:38:21.893 And so I'm going to tell you about some  
NOTE Confidence: 0.863373547792435

01:38:21.893 --> 01:38:24.675 of the progress and areas for growth.  
NOTE Confidence: 0.863373547792435

01:38:24.680 --> 01:38:25.062 Program.  
NOTE Confidence: 0.863373547792435

01:38:25.062 --> 01:38:27.736 So the first is the clinical program  
NOTE Confidence: 0.863373547792435

01:38:27.736 --> 01:38:30.458 that we've started to build the  
NOTE Confidence: 0.863373547792435

01:38:30.458 --> 01:38:31.871 subspecialty service pediatric  
NOTE Confidence: 0.863373547792435

01:38:31.871 --> 01:38:34.379 patients with TRD or underserved.  
NOTE Confidence: 0.863373547792435

01:38:34.380 --> 01:38:36.840 So there's already a shortage of  
NOTE Confidence: 0.863373547792435

01:38:36.840 --> 01:38:38.909 child psychiatrists and these kinds  
NOTE Confidence: 0.863373547792435

01:38:38.909 --> 01:38:40.694 of cases that are complicated  
NOTE Confidence: 0.863373547792435

01:38:40.694 --> 01:38:42.790 and keep people up at night.  
NOTE Confidence: 0.863373547792435

01:38:42.790 --> 01:38:45.170 It's even harder to find a specialist  
NOTE Confidence: 0.863373547792435

01:38:45.170 --> 01:38:47.681 with both the bandwidth and the expertise  
NOTE Confidence: 0.863373547792435

01:38:47.681 --> 01:38:50.810 to take on these types of presentations.

NOTE Confidence: 0.863373547792435

01:38:50.810 --> 01:38:53.102 So we started the pediatric treatment

NOTE Confidence: 0.863373547792435

01:38:53.102 --> 01:38:54.248 resistant Depression Service,

NOTE Confidence: 0.863373547792435

01:38:54.250 --> 01:38:56.878 which opened a year ago in.

NOTE Confidence: 0.863373547792435

01:38:56.880 --> 01:38:59.856 Number of 2019 I Co direct the service

NOTE Confidence: 0.863373547792435

01:38:59.856 --> 01:39:02.814 with Michael Block and we provide

NOTE Confidence: 0.863373547792435

01:39:02.814 --> 01:39:05.489 comprehensive assessment of complex patients.

NOTE Confidence: 0.863373547792435

01:39:05.490 --> 01:39:08.746 At the end of our half Day interview,

NOTE Confidence: 0.863373547792435

01:39:08.750 --> 01:39:09.833 instead of assessments,

NOTE Confidence: 0.863373547792435

01:39:09.833 --> 01:39:11.638 we give a diagnostic formulation

NOTE Confidence: 0.863373547792435

01:39:11.638 --> 01:39:13.240 and treatment recommendations,

NOTE Confidence: 0.863373547792435

01:39:13.240 --> 01:39:16.096 and in the cases where it's appropriate,

NOTE Confidence: 0.863373547792435

01:39:16.100 --> 01:39:18.980 we also help facilitate access to

NOTE Confidence: 0.863373547792435

01:39:18.980 --> 01:39:20.420 interventional psychiatry approaches

NOTE Confidence: 0.863373547792435

01:39:20.420 --> 01:39:22.627 such as our TMS Academy or ECT.

NOTE Confidence: 0.863373547792435

01:39:22.630 --> 01:39:25.409 And that's really a unique feature of

NOTE Confidence: 0.863373547792435

01:39:25.409 --> 01:39:28.281 the environment here at Yale and our  
NOTE Confidence: 0.863373547792435

01:39:28.281 --> 01:39:30.296 partnerships both within the Department  
NOTE Confidence: 0.863373547792435

01:39:30.296 --> 01:39:33.155 and across the Department of Psychiatry.  
NOTE Confidence: 0.863373547792435

01:39:33.155 --> 01:39:33.890 We,  
NOTE Confidence: 0.863373547792435

01:39:33.890 --> 01:39:35.189 like everyone else.  
NOTE Confidence: 0.863373547792435

01:39:35.189 --> 01:39:37.354 I've had significant covid challenges,  
NOTE Confidence: 0.863373547792435

01:39:37.360 --> 01:39:39.520 but I think also some  
NOTE Confidence: 0.863373547792435

01:39:39.520 --> 01:39:40.816 opportunities embedded therein,  
NOTE Confidence: 0.863373547792435

01:39:40.820 --> 01:39:42.985 similar to let Doctor Cegelski  
NOTE Confidence: 0.863373547792435

01:39:42.985 --> 01:39:45.150 talked about with Tele medicine.  
NOTE Confidence: 0.863373547792435

01:39:45.150 --> 01:39:47.290 Being able to really bring  
NOTE Confidence: 0.863373547792435

01:39:47.290 --> 01:39:49.430 treatments and assessments in a  
NOTE Confidence: 0.863373547792435

01:39:49.508 --> 01:39:51.648 way that has enhanced access.  
NOTE Confidence: 0.863373547792435

01:39:51.650 --> 01:39:53.810 We've adapted our assessment virtually,  
NOTE Confidence: 0.863373547792435

01:39:53.810 --> 01:39:56.757 and I think this can be really  
NOTE Confidence: 0.863373547792435

01:39:56.757 --> 01:39:59.009 helpful in terms of equity,

NOTE Confidence: 0.863373547792435

01:39:59.010 --> 01:40:02.082 so we get requests from all over the

NOTE Confidence: 0.863373547792435

01:40:02.082 --> 01:40:05.090 country for these types of assessments.

NOTE Confidence: 0.863373547792435

01:40:05.090 --> 01:40:06.782 But not everyone is able to

NOTE Confidence: 0.863373547792435

01:40:06.782 --> 01:40:07.910 travel to New Haven,

NOTE Confidence: 0.863373547792435

01:40:07.910 --> 01:40:10.269 and so we hope that Tele medicine

NOTE Confidence: 0.863373547792435

01:40:10.269 --> 01:40:12.220 is something that's here to stay

NOTE Confidence: 0.863373547792435

01:40:12.220 --> 01:40:14.264 so that we can reach more people.

NOTE Confidence: 0.894061863422394

01:40:14.270 --> 01:40:16.839 This is an area of rapid growth.

NOTE Confidence: 0.894061863422394

01:40:16.840 --> 01:40:18.910 We're hoping that will have the

NOTE Confidence: 0.894061863422394

01:40:18.910 --> 01:40:21.103 resources to hire some additional staff

NOTE Confidence: 0.894061863422394

01:40:21.103 --> 01:40:23.700 and personnel so that we're able to

NOTE Confidence: 0.894061863422394

01:40:23.700 --> 01:40:25.992 bring this subspecialty care to more

NOTE Confidence: 0.894061863422394

01:40:25.992 --> 01:40:30.080 kids over the coming months and years.

NOTE Confidence: 0.894061863422394

01:40:30.080 --> 01:40:32.660 So the secondary I'm going to talk about

NOTE Confidence: 0.894061863422394

01:40:32.660 --> 01:40:34.698 is some of our translational research

NOTE Confidence: 0.894061863422394



01:40:34.698 --> 01:40:36.626 about novel pediatric treatments,  
NOTE Confidence: 0.894061863422394

01:40:36.630 --> 01:40:39.177 so you can see here on the left looking  
NOTE Confidence: 0.894061863422394

01:40:39.177 --> 01:40:42.157 at the number of FDA approved anti  
NOTE Confidence: 0.894061863422394

01:40:42.157 --> 01:40:43.909 depressant medications in adults,  
NOTE Confidence: 0.894061863422394

01:40:43.910 --> 01:40:46.094 there's like 30 Medecins to choose  
NOTE Confidence: 0.894061863422394

01:40:46.094 --> 01:40:47.186 from and Pediatrics.  
NOTE Confidence: 0.894061863422394

01:40:47.190 --> 01:40:49.640 Maybe you can't even see this tiny  
NOTE Confidence: 0.894061863422394

01:40:49.640 --> 01:40:51.504 speck that represents the two  
NOTE Confidence: 0.894061863422394

01:40:51.504 --> 01:40:53.379 medications that are FDA approved.  
NOTE Confidence: 0.894061863422394

01:40:53.380 --> 01:40:56.327 The results of this is that many  
NOTE Confidence: 0.894061863422394

01:40:56.327 --> 01:40:58.380 medications are prescribed off label.  
NOTE Confidence: 0.894061863422394

01:40:58.380 --> 01:41:01.145 And even if kids get evidence based  
NOTE Confidence: 0.894061863422394

01:41:01.145 --> 01:41:03.520 treatment, which many do not together,  
NOTE Confidence: 0.894061863422394

01:41:03.520 --> 01:41:06.418 you know 20% that will have  
NOTE Confidence: 0.894061863422394

01:41:06.418 --> 01:41:07.384 resistance symptoms.  
NOTE Confidence: 0.894061863422394

01:41:07.390 --> 01:41:11.140 So we really need new treatments.

NOTE Confidence: 0.894061863422394  
01:41:11.140 --> 01:41:13.150 Industry has had some questionable  
NOTE Confidence: 0.894061863422394  
01:41:13.150 --> 01:41:15.541 clinical trials in the past and  
NOTE Confidence: 0.894061863422394  
01:41:15.541 --> 01:41:17.106 for a variety of reasons,  
NOTE Confidence: 0.894061863422394  
01:41:17.110 --> 01:41:20.183 many major players in industry have largely  
NOTE Confidence: 0.894061863422394  
01:41:20.183 --> 01:41:22.989 left the pediatric mental health space.  
NOTE Confidence: 0.894061863422394  
01:41:22.990 --> 01:41:26.110 Which leads us to rely on federal funding,  
NOTE Confidence: 0.894061863422394  
01:41:26.110 --> 01:41:29.230 which is actually not been much more helpful.  
NOTE Confidence: 0.894061863422394  
01:41:29.230 --> 01:41:31.594 They haven't funded a pediatric TRD  
NOTE Confidence: 0.894061863422394  
01:41:31.594 --> 01:41:33.909 clinical trials and tortilla was funded,  
NOTE Confidence: 0.894061863422394  
01:41:33.910 --> 01:41:37.160 which started back in 2001.  
NOTE Confidence: 0.894061863422394  
01:41:37.160 --> 01:41:39.580 So we're really looking at this treatment  
NOTE Confidence: 0.894061863422394  
01:41:39.580 --> 01:41:41.280 wastelands for pediatric patients in  
NOTE Confidence: 0.894061863422394  
01:41:41.337 --> 01:41:42.817 pediatric patients deserve evidence  
NOTE Confidence: 0.894061863422394  
01:41:42.817 --> 01:41:45.037 based medicine just like everyone else,  
NOTE Confidence: 0.894061863422394  
01:41:45.040 --> 01:41:47.544 and so we've been working to try to  
NOTE Confidence: 0.894061863422394

01:41:47.544 --> 01:41:50.520 sort of create an Oasis in the desert  
NOTE Confidence: 0.894061863422394

01:41:50.520 --> 01:41:52.910 here with our clinical trial work.  
NOTE Confidence: 0.894061863422394

01:41:52.910 --> 01:41:55.774 So I showed this figure two years ago.  
NOTE Confidence: 0.894061863422394

01:41:55.780 --> 01:41:57.928 I think from our initial CADA  
NOTE Confidence: 0.894061863422394

01:41:57.928 --> 01:41:59.360 mean randomized control trial.  
NOTE Confidence: 0.894061863422394

01:41:59.360 --> 01:42:02.072 We were the first group to ever do  
NOTE Confidence: 0.894061863422394

01:42:02.072 --> 01:42:05.080 in RCT of CADA mean in this group,  
NOTE Confidence: 0.894061863422394

01:42:05.080 --> 01:42:07.282 and this is showing a significant  
NOTE Confidence: 0.894061863422394

01:42:07.282 --> 01:42:08.383 reduction of depression.  
NOTE Confidence: 0.894061863422394

01:42:08.390 --> 01:42:10.931 Symptoms in kids with TRD after a  
NOTE Confidence: 0.894061863422394

01:42:10.931 --> 01:42:13.161 single dose of cada mean lasting  
NOTE Confidence: 0.894061863422394

01:42:13.161 --> 01:42:15.646 all the way out to two weeks.  
NOTE Confidence: 0.894061863422394

01:42:15.650 --> 01:42:17.322 Based on this data,  
NOTE Confidence: 0.894061863422394

01:42:17.322 --> 01:42:19.412 we started the second clinical  
NOTE Confidence: 0.894061863422394

01:42:19.412 --> 01:42:22.066 trial called the Sad Kids trial  
NOTE Confidence: 0.894061863422394

01:42:22.066 --> 01:42:23.350 severe adolescent depression.

NOTE Confidence: 0.894061863422394  
01:42:23.350 --> 01:42:26.010 Cada mean intermediate duration study.  
NOTE Confidence: 0.894061863422394  
01:42:26.010 --> 01:42:28.306 And this is a repeat dosing trial,  
NOTE Confidence: 0.894061863422394  
01:42:28.310 --> 01:42:30.630 so looking at 6 doses of CADA mean  
NOTE Confidence: 0.894061863422394  
01:42:30.630 --> 01:42:33.509 versus 6 doses of an active control and  
NOTE Confidence: 0.894061863422394  
01:42:33.509 --> 01:42:36.237 then following kids over six months to  
NOTE Confidence: 0.894061863422394  
01:42:36.237 --> 01:42:38.577 look at both safety and effectiveness.  
NOTE Confidence: 0.894061863422394  
01:42:38.580 --> 01:42:40.790 The study was initially funded  
NOTE Confidence: 0.894061863422394  
01:42:40.790 --> 01:42:43.000 by the Clean Steam Foundation,  
NOTE Confidence: 0.894061863422394  
01:42:43.000 --> 01:42:45.210 which we're very grateful for,  
NOTE Confidence: 0.894061863422394  
01:42:45.210 --> 01:42:47.900 and we're hopeful that these  
NOTE Confidence: 0.894061863422394  
01:42:47.900 --> 01:42:51.230 studies will resume very soon once  
NOTE Confidence: 0.894061863422394  
01:42:51.230 --> 01:42:53.935 kovid is under better control.  
NOTE Confidence: 0.894061863422394  
01:42:53.940 --> 01:42:56.786 And the last piece I'm going to talk about,  
NOTE Confidence: 0.894061863422394  
01:42:56.790 --> 01:42:58.380 which I'm really excited about,  
NOTE Confidence: 0.894061863422394  
01:42:58.380 --> 01:43:00.762 is integrating this idea of brain  
NOTE Confidence: 0.894061863422394

01:43:00.762 --> 01:43:01.953 based personalized medicine  
NOTE Confidence: 0.894061863422394

01:43:01.953 --> 01:43:03.679 into some of our research.  
NOTE Confidence: 0.894061863422394

01:43:03.680 --> 01:43:05.944 So we know that we need new treatments,  
NOTE Confidence: 0.894061863422394

01:43:05.950 --> 01:43:07.158 but it's not just.  
NOTE Confidence: 0.894061863422394

01:43:07.158 --> 01:43:08.970 Is there a treatment available but  
NOTE Confidence: 0.894061863422394

01:43:09.032 --> 01:43:11.027 which treatment for which patients?  
NOTE Confidence: 0.894061863422394

01:43:11.030 --> 01:43:13.256 And right now the current state  
NOTE Confidence: 0.894061863422394

01:43:13.256 --> 01:43:14.369 of antidepressant prescribing  
NOTE Confidence: 0.894061863422394

01:43:14.369 --> 01:43:15.730 is pretty pathetic.  
NOTE Confidence: 0.894061863422394

01:43:15.730 --> 01:43:17.848 It is trial and error medicine  
NOTE Confidence: 0.894061863422394

01:43:17.848 --> 01:43:20.050 where we try a medicine.  
NOTE Confidence: 0.894061863422394

01:43:20.050 --> 01:43:22.396 We wait 6 to 8 weeks.  
NOTE Confidence: 0.894061863422394

01:43:22.400 --> 01:43:23.597 It doesn't work.  
NOTE Confidence: 0.894061863422394

01:43:23.597 --> 01:43:27.472 We try something else and we waste so much  
NOTE Confidence: 0.894061863422394

01:43:27.472 --> 01:43:30.466 developmental time playing a guessing game.  
NOTE Confidence: 0.894061863422394

01:43:30.470 --> 01:43:34.210 And so the gold standard is really to be able

NOTE Confidence: 0.870402216911316  
01:43:34.297 --> 01:43:36.707 to have a biologically based,  
NOTE Confidence: 0.870402216911316  
01:43:36.710 --> 01:43:38.630 reproducible brain based measure  
NOTE Confidence: 0.870402216911316  
01:43:38.630 --> 01:43:41.030 that helps predict what treatment  
NOTE Confidence: 0.870402216911316  
01:43:41.030 --> 01:43:43.197 will work for which patients.  
NOTE Confidence: 0.870402216911316  
01:43:43.200 --> 01:43:46.400 As you try to move towards that goal,  
NOTE Confidence: 0.870402216911316  
01:43:46.400 --> 01:43:48.962 we've partnered with Todd Constable in  
NOTE Confidence: 0.870402216911316  
01:43:48.962 --> 01:43:51.605 the Department of Radiology to utilized  
NOTE Confidence: 0.870402216911316  
01:43:51.605 --> 01:43:53.775 this MRI based predictive modeling.  
NOTE Confidence: 0.870402216911316  
01:43:53.780 --> 01:43:56.939 So we put our participants in a magnet and  
NOTE Confidence: 0.870402216911316  
01:43:56.939 --> 01:44:00.414 have them do a series of tasks and rest  
NOTE Confidence: 0.870402216911316  
01:44:00.414 --> 01:44:02.820 conditions while scanning their brain.  
NOTE Confidence: 0.870402216911316  
01:44:02.820 --> 01:44:04.785 Sort of make this analogous  
NOTE Confidence: 0.870402216911316  
01:44:04.785 --> 01:44:06.750 to a cardiac stress test,  
NOTE Confidence: 0.870402216911316  
01:44:06.750 --> 01:44:08.710 acceptance of brain stress test.  
NOTE Confidence: 0.870402216911316  
01:44:08.710 --> 01:44:11.068 So we're going to stretch the  
NOTE Confidence: 0.870402216911316

01:44:11.068 --> 01:44:12.640 brain across multiple domains,  
NOTE Confidence: 0.870402216911316

01:44:12.640 --> 01:44:14.825 so cognitive domains affect if  
NOTE Confidence: 0.870402216911316

01:44:14.825 --> 01:44:17.406 domain social domains and then we  
NOTE Confidence: 0.870402216911316

01:44:17.406 --> 01:44:19.660 can aggregate all of that data and  
NOTE Confidence: 0.870402216911316

01:44:19.660 --> 01:44:22.449 turn it into an individual brain  
NOTE Confidence: 0.870402216911316

01:44:22.449 --> 01:44:25.034 fingerprint or connect own fingerprints.  
NOTE Confidence: 0.870402216911316

01:44:25.040 --> 01:44:28.020 And use that for prediction.  
NOTE Confidence: 0.870402216911316

01:44:28.020 --> 01:44:29.922 So you can complete this task  
NOTE Confidence: 0.870402216911316

01:44:29.922 --> 01:44:31.190 in under an hour.  
NOTE Confidence: 0.870402216911316

01:44:31.190 --> 01:44:33.409 We've run some kids through this protocol.  
NOTE Confidence: 0.870402216911316

01:44:33.410 --> 01:44:34.802 They tolerate it well.  
NOTE Confidence: 0.870402216911316

01:44:34.802 --> 01:44:37.458 And this has been a successful  
NOTE Confidence: 0.870402216911316

01:44:37.458 --> 01:44:38.356 predictive strategy.  
NOTE Confidence: 0.870402216911316

01:44:38.356 --> 01:44:41.730 It's mostly been used to predict symptoms,  
NOTE Confidence: 0.870402216911316

01:44:41.730 --> 01:44:44.205 so it's successfully predicted the  
NOTE Confidence: 0.870402216911316

01:44:44.205 --> 01:44:47.299 degree of inattention in ADHD sample

NOTE Confidence: 0.870402216911316  
01:44:47.299 --> 01:44:49.969 that has also successfully predicted  
NOTE Confidence: 0.870402216911316  
01:44:49.969 --> 01:44:52.593 autism symptom scores and mixed  
NOTE Confidence: 0.870402216911316  
01:44:52.593 --> 01:44:55.435 sample of kids with ADHD and autism.  
NOTE Confidence: 0.870402216911316  
01:44:55.440 --> 01:44:58.186 But I'm really keen on this idea of  
NOTE Confidence: 0.870402216911316  
01:44:58.186 --> 01:45:00.870 using it not just to predict symptoms,  
NOTE Confidence: 0.870402216911316  
01:45:00.870 --> 01:45:02.600 but to predict treatment and  
NOTE Confidence: 0.870402216911316  
01:45:02.600 --> 01:45:04.774 in adults this work has started  
NOTE Confidence: 0.870402216911316  
01:45:04.774 --> 01:45:06.659 to really bear some fruit,  
NOTE Confidence: 0.870402216911316  
01:45:06.660 --> 01:45:08.760 so being able to predict treatment  
NOTE Confidence: 0.870402216911316  
01:45:08.760 --> 01:45:11.009 outcomes in adult substance use disorders.  
NOTE Confidence: 0.870402216911316  
01:45:11.010 --> 01:45:13.434 So we've decided to integrate this  
NOTE Confidence: 0.870402216911316  
01:45:13.434 --> 01:45:15.833 into our clinical trial model and  
NOTE Confidence: 0.870402216911316  
01:45:15.833 --> 01:45:17.963 I'm really excited to share with  
NOTE Confidence: 0.870402216911316  
01:45:17.963 --> 01:45:20.415 you that we just got a big grant,  
NOTE Confidence: 0.870402216911316  
01:45:20.420 --> 01:45:21.940 almost a \$2,000,000 grant from  
NOTE Confidence: 0.870402216911316



01:45:21.940 --> 01:45:23.994 the NIH for a project called  
NOTE Confidence: 0.870402216911316

01:45:23.994 --> 01:45:25.866 reducing adolescent suicide risk.  
NOTE Confidence: 0.870402216911316

01:45:25.870 --> 01:45:26.317 Safety,  
NOTE Confidence: 0.870402216911316

01:45:26.317 --> 01:45:26.764 efficacy,  
NOTE Confidence: 0.870402216911316

01:45:26.764 --> 01:45:28.552 and connection phenotypes of  
NOTE Confidence: 0.870402216911316

01:45:28.552 --> 01:45:29.446 intravenous Academy.  
NOTE Confidence: 0.870402216911316

01:45:29.450 --> 01:45:31.665 So really marrying Academy clinical  
NOTE Confidence: 0.870402216911316

01:45:31.665 --> 01:45:35.043 trial work with some of the brain  
NOTE Confidence: 0.870402216911316

01:45:35.043 --> 01:45:37.199 based personalized medicine work.  
NOTE Confidence: 0.870402216911316

01:45:37.200 --> 01:45:39.264 So this is a four year trial that's  
NOTE Confidence: 0.870402216911316

01:45:39.264 --> 01:45:41.035 going to incorporate neuroimaging  
NOTE Confidence: 0.870402216911316

01:45:41.035 --> 01:45:42.829 based predictive modeling,  
NOTE Confidence: 0.870402216911316

01:45:42.830 --> 01:45:45.086 and it's the first NIH funding  
NOTE Confidence: 0.870402216911316

01:45:45.086 --> 01:45:46.590 for an adolescent depression  
NOTE Confidence: 0.870402216911316

01:45:46.662 --> 01:45:48.447 trial in nearly two decades.  
NOTE Confidence: 0.870402216911316

01:45:48.450 --> 01:45:51.327 And so we're really excited that NIH

NOTE Confidence: 0.870402216911316

01:45:51.327 --> 01:45:54.685 appreciates that this is an area of great

NOTE Confidence: 0.870402216911316

01:45:54.685 --> 01:45:56.740 need and potentially great innovation.

NOTE Confidence: 0.870402216911316

01:45:56.740 --> 01:45:59.092 So I hope that I've convinced you that

NOTE Confidence: 0.870402216911316

01:45:59.092 --> 01:46:01.748 we are well on our way to building

NOTE Confidence: 0.870402216911316

01:46:01.748 --> 01:46:04.584 a real flagship program in terms of

NOTE Confidence: 0.870402216911316

01:46:04.584 --> 01:46:06.492 clinical and translational excellence

NOTE Confidence: 0.870402216911316

01:46:06.492 --> 01:46:08.300 in pediatric depression care.

NOTE Confidence: 0.870402216911316

01:46:08.300 --> 01:46:10.890 We have clinical trial work going on

NOTE Confidence: 0.870402216911316

01:46:10.890 --> 01:46:12.491 this personalized medicine approach

NOTE Confidence: 0.870402216911316

01:46:12.491 --> 01:46:14.861 going on and then really integrating

NOTE Confidence: 0.870402216911316

01:46:14.861 --> 01:46:16.740 that into our clinical programs

NOTE Confidence: 0.870402216911316

01:46:16.740 --> 01:46:19.120 so that we can bring cutting edge

NOTE Confidence: 0.870402216911316

01:46:19.120 --> 01:46:21.724 care to as many kids as possible.

NOTE Confidence: 0.870402216911316

01:46:21.730 --> 01:46:23.842 So I really appreciate you all

NOTE Confidence: 0.870402216911316

01:46:23.842 --> 01:46:25.830 taking the time to listen,

NOTE Confidence: 0.870402216911316

01:46:25.830 --> 01:46:27.948 and I'm hopeful that we'll be  
NOTE Confidence: 0.870402216911316

01:46:27.948 --> 01:46:30.330 able to chat a little bit.  
NOTE Confidence: 0.870402216911316

01:46:30.330 --> 01:46:30.800 More.  
NOTE Confidence: 0.806087195873261

01:46:32.140 --> 01:46:34.688 Thank you very much.  
NOTE Confidence: 0.806087195873261

01:46:34.688 --> 01:46:37.873 Any really thank you great.  
NOTE Confidence: 0.806087195873261

01:46:37.880 --> 01:46:39.707 So here in my turn to you and then  
NOTE Confidence: 0.806087195873261

01:46:39.707 --> 01:46:41.698 will have questions, I'm at the end.  
NOTE Confidence: 0.849495530128479

01:46:45.020 --> 01:46:46.850 Thank you so much Linda,  
NOTE Confidence: 0.849495530128479

01:46:46.850 --> 01:46:48.134 and what a privilege.  
NOTE Confidence: 0.849495530128479

01:46:48.134 --> 01:46:50.499 But also such a challenge to follow  
NOTE Confidence: 0.849495530128479

01:46:50.499 --> 01:46:52.329 the fantastic talks that we've  
NOTE Confidence: 0.849495530128479

01:46:52.329 --> 01:46:54.510 heard not just this afternoon,  
NOTE Confidence: 0.849495530128479

01:46:54.510 --> 01:46:57.065 but from our colleagues across this week.  
NOTE Confidence: 0.849495530128479

01:46:57.070 --> 01:46:59.218 It's really been such an interesting  
NOTE Confidence: 0.849495530128479

01:46:59.218 --> 01:47:01.815 associates week and my name is Kieran  
NOTE Confidence: 0.849495530128479

01:47:01.815 --> 01:47:03.640 O'Donnell and as Linda mentioned,

NOTE Confidence: 0.849495530128479  
01:47:03.640 --> 01:47:06.076 I am a recent addition to the  
NOTE Confidence: 0.849495530128479  
01:47:06.076 --> 01:47:07.961 Child Study Center virtually since  
NOTE Confidence: 0.849495530128479  
01:47:07.961 --> 01:47:10.649 July 1st and then in person since  
NOTE Confidence: 0.849495530128479  
01:47:10.649 --> 01:47:13.197 the end of September and I lead  
NOTE Confidence: 0.849495530128479  
01:47:13.197 --> 01:47:15.073 the health omics and perinatal.  
NOTE Confidence: 0.849495530128479  
01:47:15.073 --> 01:47:17.971 Epidemiology research group here at the  
NOTE Confidence: 0.849495530128479  
01:47:17.971 --> 01:47:20.898 Child Study Center and within my group,  
NOTE Confidence: 0.849495530128479  
01:47:20.900 --> 01:47:24.029 we capitalize on our ability to describe  
NOTE Confidence: 0.849495530128479  
01:47:24.029 --> 01:47:25.837 and characterize complex biological  
NOTE Confidence: 0.849495530128479  
01:47:25.837 --> 01:47:28.623 systems an in greater depth and breath  
NOTE Confidence: 0.849495530128479  
01:47:28.623 --> 01:47:31.557 than has ever been previously possible.  
NOTE Confidence: 0.849495530128479  
01:47:31.560 --> 01:47:34.912 And then the goal is to mobilize this  
NOTE Confidence: 0.849495530128479  
01:47:34.912 --> 01:47:38.136 new knowledge to inform the care of  
NOTE Confidence: 0.849495530128479  
01:47:38.136 --> 01:47:40.436 pregnant women and their children.  
NOTE Confidence: 0.849495530128479  
01:47:40.440 --> 01:47:43.210 Now, one biological system that my group  
NOTE Confidence: 0.849495530128479

01:47:43.210 --> 01:47:46.250 spends a lot of time characterizing.  
NOTE Confidence: 0.849495530128479

01:47:46.250 --> 01:47:48.450 Is the epigenome now epigenetics?  
NOTE Confidence: 0.849495530128479

01:47:48.450 --> 01:47:51.593 Quite simply means on top of genetics  
NOTE Confidence: 0.849495530128479

01:47:51.593 --> 01:47:55.500 and there is a series of chemical marks  
NOTE Confidence: 0.849495530128479

01:47:55.500 --> 01:47:58.939 or modifications that sit on or close  
NOTE Confidence: 0.849495530128479

01:47:58.939 --> 01:48:02.459 to the DNA that can change its function.  
NOTE Confidence: 0.849495530128479

01:48:02.460 --> 01:48:05.124 But I like to think of the epigenome  
NOTE Confidence: 0.849495530128479

01:48:05.124 --> 01:48:07.458 as essentially a translator as an  
NOTE Confidence: 0.849495530128479

01:48:07.458 --> 01:48:09.453 interpreter that allows the environment  
NOTE Confidence: 0.849495530128479

01:48:09.453 --> 01:48:11.750 to communicate with the genome.  
NOTE Confidence: 0.849495530128479

01:48:11.750 --> 01:48:14.072 Changing the genomes function in response  
NOTE Confidence: 0.849495530128479

01:48:14.072 --> 01:48:16.589 to changes in the environment with  
NOTE Confidence: 0.849495530128479

01:48:16.589 --> 01:48:19.271 potentially the lasting effects on the  
NOTE Confidence: 0.849495530128479

01:48:19.271 --> 01:48:22.485 phenotype of the of the mother or the child.  
NOTE Confidence: 0.849495530128479

01:48:22.485 --> 01:48:23.507 And now,  
NOTE Confidence: 0.849495530128479

01:48:23.507 --> 01:48:25.589 of course the question are there.

NOTE Confidence: 0.849495530128479  
01:48:25.590 --> 01:48:27.330 When I started my presentation,  
NOTE Confidence: 0.849495530128479  
01:48:27.330 --> 01:48:29.430 I mentioned that we try to mobilize  
NOTE Confidence: 0.849495530128479  
01:48:29.430 --> 01:48:31.858 these data to improve health outcomes.  
NOTE Confidence: 0.849495530128479  
01:48:31.860 --> 01:48:33.320 So the question is,  
NOTE Confidence: 0.849495530128479  
01:48:33.320 --> 01:48:36.380 what is the health outcome that I focus on?  
NOTE Confidence: 0.849495530128479  
01:48:36.380 --> 01:48:36.707 Well,  
NOTE Confidence: 0.849495530128479  
01:48:36.707 --> 01:48:38.996 for those of you that have heard  
NOTE Confidence: 0.849495530128479  
01:48:38.996 --> 01:48:40.210 me speak before,  
NOTE Confidence: 0.849495530128479  
01:48:40.210 --> 01:48:42.681 you know that I obsess about a  
NOTE Confidence: 0.849495530128479  
01:48:42.681 --> 01:48:44.732 series of numbers and those numbers  
NOTE Confidence: 0.849495530128479  
01:48:44.732 --> 01:48:46.820 are 414 and 4414 and 40.  
NOTE Confidence: 0.849495530128479  
01:48:46.820 --> 01:48:48.908 So what do these numbers represent?  
NOTE Confidence: 0.849495530128479  
01:48:48.910 --> 01:48:51.346 Well, these numbers represent one in four.  
NOTE Confidence: 0.849495530128479  
01:48:51.350 --> 01:48:53.438 That is, the number of women.  
NOTE Confidence: 0.849495530128479  
01:48:53.440 --> 01:48:55.785 Number of pregnant women that we may  
NOTE Confidence: 0.849495530128479

01:48:55.785 --> 01:48:57.690 struggle with their mental health,  
NOTE Confidence: 0.849495530128479

01:48:57.690 --> 01:48:59.460 most commonly anxiety or depression.  
NOTE Confidence: 0.849495530128479

01:48:59.460 --> 01:49:00.348 One in four,  
NOTE Confidence: 0.849495530128479

01:49:00.348 --> 01:49:02.873 and we know that many of these women  
NOTE Confidence: 0.849495530128479

01:49:02.873 --> 01:49:05.526 will not even be assessed for their  
NOTE Confidence: 0.849495530128479

01:49:05.526 --> 01:49:07.472 mental health needs in pregnancy  
NOTE Confidence: 0.849495530128479

01:49:07.472 --> 01:49:10.076 and those that are assessed may not  
NOTE Confidence: 0.849495530128479

01:49:10.080 --> 01:49:11.968 receive the adequate treatment.  
NOTE Confidence: 0.849495530128479

01:49:11.968 --> 01:49:14.328 So that's one in four.  
NOTE Confidence: 0.849495530128479

01:49:14.330 --> 01:49:14.776 Now,  
NOTE Confidence: 0.849495530128479

01:49:14.776 --> 01:49:17.452 what about those other numbers that  
NOTE Confidence: 0.849495530128479

01:49:17.452 --> 01:49:20.580 I mentioned? The 14 and the 40?  
NOTE Confidence: 0.849495530128479

01:49:20.580 --> 01:49:21.104 Well,  
NOTE Confidence: 0.849495530128479

01:49:21.104 --> 01:49:23.724 those numbers represent the costs  
NOTE Confidence: 0.849495530128479

01:49:23.724 --> 01:49:25.820 associated with untreated perinatal  
NOTE Confidence: 0.849495530128479

01:49:25.894 --> 01:49:27.949 mental health problems in the

NOTE Confidence: 0.849495530128479

01:49:27.949 --> 01:49:29.593 United States per year.

NOTE Confidence: 0.849495530128479

01:49:29.600 --> 01:49:31.718 And most probably even more shockingly,

NOTE Confidence: 0.849495530128479

01:49:31.720 --> 01:49:34.224 the 40% that cost is derived from the

NOTE Confidence: 0.849495530128479

01:49:34.224 --> 01:49:36.104 adverse effects of perinatal mental

NOTE Confidence: 0.849495530128479

01:49:36.104 --> 01:49:38.094 health problems on child outcomes,

NOTE Confidence: 0.849495530128479

01:49:38.100 --> 01:49:40.290 and those costs are only calculated

NOTE Confidence: 0.849495530128479

01:49:40.290 --> 01:49:42.700 from birth to four years of age.

NOTE Confidence: 0.849495530128479

01:49:42.700 --> 01:49:45.880 So you can imagine as we go from 5 to

NOTE Confidence: 0.849495530128479

01:49:45.971 --> 01:49:49.067 10 to 15 to 20 years post pregnancy,

NOTE Confidence: 0.849495530128479

01:49:49.070 --> 01:49:51.894 how those costs are likely to add up.

NOTE Confidence: 0.849495530128479

01:49:51.900 --> 01:49:53.316 So you might ask,

NOTE Confidence: 0.849495530128479

01:49:53.316 --> 01:49:55.440 what are the costs associated with?

NOTE Confidence: 0.849495530128479

01:49:55.440 --> 01:49:55.761 Well,

NOTE Confidence: 0.849495530128479

01:49:55.761 --> 01:49:58.008 my own research in a large cord

NOTE Confidence: 0.849495530128479

01:49:58.008 --> 01:49:59.770 from the United Kingdom.

NOTE Confidence: 0.858283579349518



01:49:59.770 --> 01:50:01.792 Assume that children born to women  
NOTE Confidence: 0.858283579349518

01:50:01.792 --> 01:50:03.517 who experience high levels of  
NOTE Confidence: 0.858283579349518

01:50:03.517 --> 01:50:05.117 anxiety or depression in pregnancy  
NOTE Confidence: 0.858283579349518

01:50:05.117 --> 01:50:07.304 have double the risk for adverse  
NOTE Confidence: 0.858283579349518

01:50:07.304 --> 01:50:08.996 mental health outcomes themselves.  
NOTE Confidence: 0.858283579349518

01:50:09.000 --> 01:50:11.555 These effects are evident in early childhood  
NOTE Confidence: 0.858283579349518

01:50:11.555 --> 01:50:13.969 and they persist until at least early.  
NOTE Confidence: 0.858283579349518

01:50:13.970 --> 01:50:15.750 Adult hood. Now, of course,  
NOTE Confidence: 0.858283579349518

01:50:15.750 --> 01:50:17.170 the question then becomes  
NOTE Confidence: 0.858283579349518

01:50:17.170 --> 01:50:19.300 what can we do about this?  
NOTE Confidence: 0.858283579349518

01:50:19.300 --> 01:50:21.628 So within my group we are trying to  
NOTE Confidence: 0.858283579349518

01:50:21.628 --> 01:50:23.464 build better next generation screening  
NOTE Confidence: 0.858283579349518

01:50:23.464 --> 01:50:25.834 tools to identify women that are  
NOTE Confidence: 0.858283579349518

01:50:25.834 --> 01:50:28.141 likely to struggle with their mental  
NOTE Confidence: 0.858283579349518

01:50:28.141 --> 01:50:29.991 health in and around pregnancy.  
NOTE Confidence: 0.858283579349518

01:50:30.000 --> 01:50:31.840 So we're building a molecular

NOTE Confidence: 0.858283579349518  
01:50:31.840 --> 01:50:33.680 screening tool based on hormone  
NOTE Confidence: 0.858283579349518  
01:50:33.741 --> 01:50:35.250 sensitivity in pregnancy,  
NOTE Confidence: 0.858283579349518  
01:50:35.250 --> 01:50:36.862 so implementing a molecular  
NOTE Confidence: 0.858283579349518  
01:50:36.862 --> 01:50:38.474 screen in first trimester,  
NOTE Confidence: 0.858283579349518  
01:50:38.480 --> 01:50:40.862 pregnant women and using gene network  
NOTE Confidence: 0.858283579349518  
01:50:40.862 --> 01:50:43.268 analysis to identify genes that are  
NOTE Confidence: 0.858283579349518  
01:50:43.268 --> 01:50:45.506 sensitive to hormones of pregnancy and  
NOTE Confidence: 0.858283579349518  
01:50:45.506 --> 01:50:48.179 that predict risk of postpartum depression.  
NOTE Confidence: 0.858283579349518  
01:50:48.180 --> 01:50:50.214 Because we know that there's at  
NOTE Confidence: 0.858283579349518  
01:50:50.214 --> 01:50:52.681 least a subgroup of women that  
NOTE Confidence: 0.858283579349518  
01:50:52.681 --> 01:50:54.238 you'll heighten sensitivity,  
NOTE Confidence: 0.858283579349518  
01:50:54.240 --> 01:50:55.888 the hormones of pregnancy,  
NOTE Confidence: 0.858283579349518  
01:50:55.888 --> 01:50:57.948 and when those levels dropped  
NOTE Confidence: 0.858283579349518  
01:50:57.948 --> 01:50:59.490 precipitously in the postpartum,  
NOTE Confidence: 0.858283579349518  
01:50:59.490 --> 01:51:00.262 those women.  
NOTE Confidence: 0.858283579349518

01:51:00.262 --> 01:51:02.192 Are rendered more more susceptible  
NOTE Confidence: 0.858283579349518

01:51:02.192 --> 01:51:03.350 to postpartum depression.  
NOTE Confidence: 0.858283579349518

01:51:03.350 --> 01:51:05.961 The second tool that we're developing is  
NOTE Confidence: 0.858283579349518

01:51:05.961 --> 01:51:08.550 sitting in most of your back pockets,  
NOTE Confidence: 0.858283579349518

01:51:08.550 --> 01:51:11.526 or hopefully not your hands at the moment.  
NOTE Confidence: 0.858283579349518

01:51:11.530 --> 01:51:13.018 That's a smart phone,  
NOTE Confidence: 0.858283579349518

01:51:13.018 --> 01:51:15.250 so we're using passive data capture,  
NOTE Confidence: 0.858283579349518

01:51:15.250 --> 01:51:17.110 so that's background data capture  
NOTE Confidence: 0.858283579349518

01:51:17.110 --> 01:51:19.384 from smartphones to create a digital  
NOTE Confidence: 0.858283579349518

01:51:19.384 --> 01:51:21.508 index of social support because we  
NOTE Confidence: 0.858283579349518

01:51:21.508 --> 01:51:23.764 know that social support plays a  
NOTE Confidence: 0.858283579349518

01:51:23.764 --> 01:51:25.654 profound role in influencing risk  
NOTE Confidence: 0.858283579349518

01:51:25.654 --> 01:51:27.625 for perinatal mental health problems.  
NOTE Confidence: 0.858283579349518

01:51:27.625 --> 01:51:30.460 So there are two of the examples  
NOTE Confidence: 0.858283579349518

01:51:30.539 --> 01:51:32.059 in my group that I'm.  
NOTE Confidence: 0.858283579349518

01:51:32.060 --> 01:51:33.452 Research projects that I'm

NOTE Confidence: 0.858283579349518  
01:51:33.452 --> 01:51:34.844 expanding here at Yale,  
NOTE Confidence: 0.858283579349518  
01:51:34.850 --> 01:51:37.162 but turning out to the child were also  
NOTE Confidence: 0.858283579349518  
01:51:37.162 --> 01:51:38.674 harnessing the information contained  
NOTE Confidence: 0.858283579349518  
01:51:38.674 --> 01:51:40.859 in individuals biology to better  
NOTE Confidence: 0.858283579349518  
01:51:40.859 --> 01:51:42.878 understand which children are at risk.  
NOTE Confidence: 0.858283579349518  
01:51:42.880 --> 01:51:45.204 You will remember that I mentioned the  
NOTE Confidence: 0.858283579349518  
01:51:45.204 --> 01:51:47.278 children children born to women who  
NOTE Confidence: 0.858283579349518  
01:51:47.278 --> 01:51:48.968 struggle with anxiety or depression  
NOTE Confidence: 0.858283579349518  
01:51:48.968 --> 01:51:51.175 and pregnancy have twice the risk  
NOTE Confidence: 0.858283579349518  
01:51:51.175 --> 01:51:52.647 for emotional behavioral problems.  
NOTE Confidence: 0.858283579349518  
01:51:52.650 --> 01:51:54.594 But the important message is that  
NOTE Confidence: 0.858283579349518  
01:51:54.594 --> 01:51:56.490 not all children are affected,  
NOTE Confidence: 0.858283579349518  
01:51:56.490 --> 01:51:58.572 and those children that are affected  
NOTE Confidence: 0.858283579349518  
01:51:58.572 --> 01:52:00.715 can be affected in very different  
NOTE Confidence: 0.858283579349518  
01:52:00.715 --> 01:52:02.430 ways and we just don't.  
NOTE Confidence: 0.858283579349518

01:52:02.430 --> 01:52:04.715 Understand what is the biological  
NOTE Confidence: 0.858283579349518

01:52:04.715 --> 01:52:07.000 basis in the biological contribution  
NOTE Confidence: 0.858283579349518

01:52:07.066 --> 01:52:09.090 to such individual differences.  
NOTE Confidence: 0.858283579349518

01:52:09.090 --> 01:52:11.470 So we've been developing biomarkers,  
NOTE Confidence: 0.858283579349518

01:52:11.470 --> 01:52:12.925 particularly epigenetic biomarkers,  
NOTE Confidence: 0.858283579349518

01:52:12.925 --> 01:52:15.350 to better understand the biological  
NOTE Confidence: 0.858283579349518

01:52:15.350 --> 01:52:17.659 embedding of the early environment,  
NOTE Confidence: 0.858283579349518

01:52:17.660 --> 01:52:21.468 and this is 1 example of those biomarkers.  
NOTE Confidence: 0.858283579349518

01:52:21.470 --> 01:52:24.122 An epigenetic Clock that allows us  
NOTE Confidence: 0.858283579349518

01:52:24.122 --> 01:52:27.180 to calculate a child epigenetic age,  
NOTE Confidence: 0.858283579349518

01:52:27.180 --> 01:52:30.603 and we find that children who are  
NOTE Confidence: 0.858283579349518

01:52:30.603 --> 01:52:33.849 epigenetically older and show a greater rate.  
NOTE Confidence: 0.858283579349518

01:52:33.850 --> 01:52:35.830 Of an autism spectrum disorder  
NOTE Confidence: 0.858283579349518

01:52:35.830 --> 01:52:38.754 and most recently in our study in  
NOTE Confidence: 0.858283579349518

01:52:38.754 --> 01:52:40.914 Singapore and in the Netherlands,  
NOTE Confidence: 0.858283579349518

01:52:40.920 --> 01:52:43.290 we find that maternal prenatal anxiety

NOTE Confidence: 0.858283579349518

01:52:43.290 --> 01:52:44.870 is associated with accelerated

NOTE Confidence: 0.858283579349518

01:52:44.935 --> 01:52:45.909 epigenetic aging,

NOTE Confidence: 0.858283579349518

01:52:45.910 --> 01:52:48.451 and the question that we then ask

NOTE Confidence: 0.858283579349518

01:52:48.451 --> 01:52:51.507 ourselves is how can we use this

NOTE Confidence: 0.858283579349518

01:52:51.507 --> 01:52:53.395 information to inform interventions.

NOTE Confidence: 0.858283579349518

01:52:53.400 --> 01:52:56.256 I think a theme that we've heard

NOTE Confidence: 0.858283579349518

01:52:56.256 --> 01:52:57.980 from Doctor Dwars talk.

NOTE Confidence: 0.858283579349518

01:52:57.980 --> 01:53:00.572 I've also doctor Makaris talk and

NOTE Confidence: 0.858283579349518

01:53:00.572 --> 01:53:02.744 really throughout this week is

NOTE Confidence: 0.858283579349518

01:53:02.744 --> 01:53:03.860 trying to promote.

NOTE Confidence: 0.858283579349518

01:53:03.860 --> 01:53:05.680 Personalized care how can we

NOTE Confidence: 0.858283579349518

01:53:05.680 --> 01:53:07.500 integrate measures of biology to

NOTE Confidence: 0.858283579349518

01:53:07.569 --> 01:53:09.449 better understand why some children

NOTE Confidence: 0.858283579349518

01:53:09.449 --> 01:53:11.839 do better and some children don't

NOTE Confidence: 0.858283579349518

01:53:11.839 --> 01:53:13.607 respond to early interventions.

NOTE Confidence: 0.858283579349518

01:53:13.610 --> 01:53:15.470 Some very excited to partner  
NOTE Confidence: 0.858283579349518

01:53:15.470 --> 01:53:17.330 with Doctor Megan Smith who  
NOTE Confidence: 0.834923684597015

01:53:17.405 --> 01:53:19.069 you heard from yesterday,  
NOTE Confidence: 0.834923684597015

01:53:19.070 --> 01:53:21.020 is developing really a phenomenal  
NOTE Confidence: 0.834923684597015

01:53:21.020 --> 01:53:22.618 intervention in Bridgeport, CT,  
NOTE Confidence: 0.834923684597015

01:53:22.618 --> 01:53:24.758 where women vulnerable women will  
NOTE Confidence: 0.834923684597015

01:53:24.758 --> 01:53:26.470 be supported through pregnancy  
NOTE Confidence: 0.834923684597015

01:53:26.539 --> 01:53:28.429 in terms of their mental half,  
NOTE Confidence: 0.834923684597015

01:53:28.430 --> 01:53:30.770 their ability to parent and multiple  
NOTE Confidence: 0.834923684597015

01:53:30.770 --> 01:53:32.330 aspects of child development,  
NOTE Confidence: 0.834923684597015

01:53:32.330 --> 01:53:33.622 and we hoped it.  
NOTE Confidence: 0.834923684597015

01:53:33.622 --> 01:53:34.591 Integrates these epigenetic  
NOTE Confidence: 0.834923684597015

01:53:34.591 --> 01:53:36.047 biomarkers to better understand  
NOTE Confidence: 0.834923684597015

01:53:36.047 --> 01:53:37.771 individual differences in treatment  
NOTE Confidence: 0.834923684597015

01:53:37.771 --> 01:53:39.495 response to early intervention,  
NOTE Confidence: 0.834923684597015

01:53:39.500 --> 01:53:41.350 so putting it all together,

NOTE Confidence: 0.834923684597015  
01:53:41.350 --> 01:53:43.576 we're really trying to harness the  
NOTE Confidence: 0.834923684597015  
01:53:43.576 --> 01:53:45.458 information contained within the genome  
NOTE Confidence: 0.834923684597015  
01:53:45.458 --> 01:53:47.123 within biology to better understand  
NOTE Confidence: 0.834923684597015  
01:53:47.123 --> 01:53:49.509 the impact of the early environment,  
NOTE Confidence: 0.834923684597015  
01:53:49.510 --> 01:53:52.110 and I think this can be summed up  
NOTE Confidence: 0.834923684597015  
01:53:52.110 --> 01:53:54.488 beautifully in this image taken from  
NOTE Confidence: 0.834923684597015  
01:53:54.488 --> 01:53:56.558 the WHL nurturing care framework,  
NOTE Confidence: 0.834923684597015  
01:53:56.560 --> 01:53:59.101 which says that if we can change  
NOTE Confidence: 0.834923684597015  
01:53:59.101 --> 01:54:01.010 the beginning of the story,  
NOTE Confidence: 0.834923684597015  
01:54:01.010 --> 01:54:03.236 we can change the whole story.  
NOTE Confidence: 0.834923684597015  
01:54:03.240 --> 01:54:04.696 I truly believe that.  
NOTE Confidence: 0.834923684597015  
01:54:04.696 --> 01:54:06.516 With every woman we can,  
NOTE Confidence: 0.834923684597015  
01:54:06.520 --> 01:54:08.260 we should promote and optimize  
NOTE Confidence: 0.834923684597015  
01:54:08.260 --> 01:54:08.956 pregnancy well.  
NOTE Confidence: 0.834923684597015  
01:54:08.960 --> 01:54:11.608 Being and in doing so we stand to  
NOTE Confidence: 0.834923684597015



01:54:11.608 --> 01:54:14.339 promote and optimize child development.  
NOTE Confidence: 0.834923684597015

01:54:14.340 --> 01:54:15.090 Thank you,  
NOTE Confidence: 0.834923684597015

01:54:15.090 --> 01:54:15.840 thank you  
NOTE Confidence: 0.897407114505768

01:54:15.840 --> 01:54:18.913 so much, Karen. And thank you for  
NOTE Confidence: 0.897407114505768

01:54:18.913 --> 01:54:21.967 bringing us to a message of hope.  
NOTE Confidence: 0.897407114505768

01:54:21.970 --> 01:54:24.714 And the virtual floor is open for  
NOTE Confidence: 0.897407114505768

01:54:24.714 --> 01:54:27.000 questions for Jenny and procuring.  
NOTE Confidence: 0.852015137672424

01:54:29.670 --> 01:54:32.550 And Jenny the best way we can see that your  
NOTE Confidence: 0.852015137672424

01:54:32.626 --> 01:54:35.990 live is the sunset that was behind you.  
NOTE Confidence: 0.852015137672424

01:54:35.990 --> 01:54:40.364 Become Twilight, yes. So any questions?  
NOTE Confidence: 0.852015137672424

01:54:40.364 --> 01:54:43.150 Thank you for sharing a picture of your son  
NOTE Confidence: 0.826963186264038

01:54:43.150 --> 01:54:45.430 to that. That's him when he is quiet  
NOTE Confidence: 0.826963186264038

01:54:45.430 --> 01:54:47.830 and end jellick, I figured that was  
NOTE Confidence: 0.826963186264038

01:54:47.830 --> 01:54:51.060 the right one to show.  
NOTE Confidence: 0.906259000301361

01:54:51.060 --> 01:54:53.481 If you would like, you can just speak out  
NOTE Confidence: 0.906259000301361

01:54:53.481 --> 01:54:55.844 the questions or put them in the chat.

NOTE Confidence: 0.877202332019806  
01:55:02.030 --> 01:55:04.060 I guess I have a  
NOTE Confidence: 0.877202332019806  
01:55:04.060 --> 01:55:05.686 question about Kieran's work.  
NOTE Confidence: 0.877202332019806  
01:55:05.686 --> 01:55:08.120 When you were talking about the  
NOTE Confidence: 0.877202332019806  
01:55:08.120 --> 01:55:10.558 molecular screen in the first trimester.  
NOTE Confidence: 0.877202332019806  
01:55:10.560 --> 01:55:12.585 For women that seem really  
NOTE Confidence: 0.877202332019806  
01:55:12.585 --> 01:55:14.205 sensitive to hormonal changes,  
NOTE Confidence: 0.877202332019806  
01:55:14.210 --> 01:55:16.514 does that have any implications for  
NOTE Confidence: 0.877202332019806  
01:55:16.514 --> 01:55:18.543 the new postpartum depression treatment  
NOTE Confidence: 0.877202332019806  
01:55:18.543 --> 01:55:20.708 that was FDA approved BREXANOLONE,  
NOTE Confidence: 0.877202332019806  
01:55:20.710 --> 01:55:23.038 which is supposed to help sort  
NOTE Confidence: 0.877202332019806  
01:55:23.038 --> 01:55:25.579 of create a smoother landing pad?  
NOTE Confidence: 0.877202332019806  
01:55:25.580 --> 01:55:28.016 I guess for the declining levels  
NOTE Confidence: 0.877202332019806  
01:55:28.016 --> 01:55:29.640 of pregnancy hormones exactly  
NOTE Confidence: 0.877202332019806  
01:55:29.640 --> 01:55:32.475 yeah, so this is, as you know,  
NOTE Confidence: 0.877202332019806  
01:55:32.480 --> 01:55:33.312 really interesting  
NOTE Confidence: 0.877202332019806

01:55:33.312 --> 01:55:34.976 development in the treatment.  
NOTE Confidence: 0.877202332019806

01:55:34.980 --> 01:55:38.220 Of postpartum depression.  
NOTE Confidence: 0.877202332019806

01:55:38.220 --> 01:55:40.650 One of the challenges without treatment  
NOTE Confidence: 0.877202332019806

01:55:40.650 --> 01:55:42.675 is that it's incredibly expensive,  
NOTE Confidence: 0.877202332019806

01:55:42.675 --> 01:55:45.105 so costs over \$35,000 for treatment  
NOTE Confidence: 0.877202332019806

01:55:45.105 --> 01:55:47.482 with Solaris or Brown, Lexile, Ann,  
NOTE Confidence: 0.877202332019806

01:55:47.482 --> 01:55:49.738 and what's interesting about it is  
NOTE Confidence: 0.877202332019806

01:55:49.738 --> 01:55:51.433 essentially replenishing and naturally  
NOTE Confidence: 0.877202332019806

01:55:51.433 --> 01:55:53.209 occurring metabolite of progesterone.  
NOTE Confidence: 0.877202332019806

01:55:53.210 --> 01:55:55.625 So we would really like to determine  
NOTE Confidence: 0.877202332019806

01:55:55.625 --> 01:55:58.563 if we can identify which women are  
NOTE Confidence: 0.877202332019806

01:55:58.563 --> 01:56:01.305 likely to respond to that treatment.  
NOTE Confidence: 0.877202332019806

01:56:01.310 --> 01:56:04.145 So there's not this huge cost for  
NOTE Confidence: 0.877202332019806

01:56:04.145 --> 01:56:05.360 potentially ineffective treatment,  
NOTE Confidence: 0.877202332019806

01:56:05.360 --> 01:56:07.410 so within that molecular screening  
NOTE Confidence: 0.877202332019806

01:56:07.410 --> 01:56:08.230 tool assessment.

NOTE Confidence: 0.877202332019806  
01:56:08.230 --> 01:56:10.155 We're also including and allopregnanolone  
NOTE Confidence: 0.877202332019806  
01:56:10.155 --> 01:56:13.477 arm to the study to try and determine  
NOTE Confidence: 0.877202332019806  
01:56:13.477 --> 01:56:15.245 sensitivity to Al pregnenolone,  
NOTE Confidence: 0.877202332019806  
01:56:15.250 --> 01:56:18.393 so we will have separate arms determining  
NOTE Confidence: 0.877202332019806  
01:56:18.393 --> 01:56:20.449 sensitivity to dexamethasone so it  
NOTE Confidence: 0.877202332019806  
01:56:20.449 --> 01:56:22.375 looks like corticoid and to Ester  
NOTE Confidence: 0.877202332019806  
01:56:22.375 --> 01:56:24.749 Dylann to allopregnanolone so great.  
NOTE Confidence: 0.877202332019806  
01:56:24.750 --> 01:56:25.472 Great question,  
NOTE Confidence: 0.877202332019806  
01:56:25.472 --> 01:56:27.638 so hopefully we can get closer  
NOTE Confidence: 0.877202332019806  
01:56:27.638 --> 01:56:29.710 to that precision medicine.  
NOTE Confidence: 0.877202332019806  
01:56:30.270 --> 01:56:32.330 Very cool.  
NOTE Confidence: 0.899806392192841  
01:56:32.330 --> 01:56:34.950 Thank you. Any other questions?  
NOTE Confidence: 0.881212609154837  
01:56:37.310 --> 01:56:44.086 I have a question. Please so it  
NOTE Confidence: 0.844077825546265  
01:56:44.090 --> 01:56:46.084 might not necessarily fit in,  
NOTE Confidence: 0.844077825546265  
01:56:46.084 --> 01:56:49.214 but it's kind of thinking of a lot  
NOTE Confidence: 0.844077825546265

01:56:49.214 --> 01:56:52.049 of the adolescents that we see in  
NOTE Confidence: 0.844077825546265

01:56:52.049 --> 01:56:54.034 the in the Depression clinic.  
NOTE Confidence: 0.844077825546265

01:56:54.040 --> 01:56:56.428 A lot of them are driven there.  
NOTE Confidence: 0.844077825546265

01:56:56.430 --> 01:56:58.420 Hormones drive a lot of  
NOTE Confidence: 0.844077825546265

01:56:58.420 --> 01:56:59.614 their depressive episodes.  
NOTE Confidence: 0.844077825546265

01:56:59.620 --> 01:57:02.780 Current do do you know if there's any  
NOTE Confidence: 0.844077825546265

01:57:02.780 --> 01:57:05.120 studies done about hormones and if  
NOTE Confidence: 0.844077825546265

01:57:05.120 --> 01:57:07.975 any of these markers might tell you  
NOTE Confidence: 0.844077825546265

01:57:07.975 --> 01:57:10.758 which women are more prone to have  
NOTE Confidence: 0.844077825546265

01:57:10.758 --> 01:57:13.724 depression because of these changes in there?  
NOTE Confidence: 0.844077825546265

01:57:13.724 --> 01:57:15.672 Here, in their hormonal  
NOTE Confidence: 0.844077825546265

01:57:15.672 --> 01:57:17.620 patterns prior to being.  
NOTE Confidence: 0.844077825546265

01:57:17.620 --> 01:57:20.100 Pregnant. Yeah,  
NOTE Confidence: 0.858091056346893

01:57:20.100 --> 01:57:21.171 that you know,  
NOTE Confidence: 0.858091056346893

01:57:21.171 --> 01:57:23.313 and so that's a great question.  
NOTE Confidence: 0.858091056346893

01:57:23.320 --> 01:57:25.072 And there has actually been a

NOTE Confidence: 0.858091056346893  
01:57:25.072 --> 01:57:26.704 lot of research focusing around  
NOTE Confidence: 0.858091056346893  
01:57:26.704 --> 01:57:28.709 menopause and showing certain women  
NOTE Confidence: 0.858091056346893  
01:57:28.709 --> 01:57:30.313 being particularly sensitive to  
NOTE Confidence: 0.858091056346893  
01:57:30.372 --> 01:57:32.267 manifolds in terms of precipitating  
NOTE Confidence: 0.858091056346893  
01:57:32.270 --> 01:57:34.024 and depressive like symptoms and  
NOTE Confidence: 0.858091056346893  
01:57:34.024 --> 01:57:36.418 then showing that if you do make  
NOTE Confidence: 0.858091056346893  
01:57:36.418 --> 01:57:37.971 experimental manipulation of Easter  
NOTE Confidence: 0.858091056346893  
01:57:37.971 --> 01:57:40.269 dial levels that you can again  
NOTE Confidence: 0.858091056346893  
01:57:40.269 --> 01:57:41.388 precipitate increased symptoms  
NOTE Confidence: 0.858091056346893  
01:57:41.388 --> 01:57:43.404 of depression and would there is  
NOTE Confidence: 0.858091056346893  
01:57:43.404 --> 01:57:45.740 not a whole lot of literature on  
NOTE Confidence: 0.858091056346893  
01:57:45.740 --> 01:57:48.020 that in the context of puberty.  
NOTE Confidence: 0.858091056346893  
01:57:48.020 --> 01:57:49.830 So it's a very interesting  
NOTE Confidence: 0.858091056346893  
01:57:49.830 --> 01:57:50.554 research perspective.  
NOTE Confidence: 0.858091056346893  
01:57:50.560 --> 01:57:53.038 One of our colleagues in Copenhagen  
NOTE Confidence: 0.858091056346893

01:57:53.038 --> 01:57:55.161 actually has an experimental approach  
NOTE Confidence: 0.858091056346893

01:57:55.161 --> 01:57:57.161 where they use subcutaneous implants  
NOTE Confidence: 0.858091056346893

01:57:57.161 --> 01:58:00.059 to push and pull Easter dial levels,  
NOTE Confidence: 0.858091056346893

01:58:00.060 --> 01:58:02.951 and she does show that in some  
NOTE Confidence: 0.858091056346893

01:58:02.951 --> 01:58:05.012 women they can precipitate and  
NOTE Confidence: 0.858091056346893

01:58:05.012 --> 01:58:06.248 kind of depressive  
NOTE Confidence: 0.852757573127747

01:58:06.250 --> 01:58:07.910 symptoms. 'cause we we've  
NOTE Confidence: 0.852757573127747

01:58:07.910 --> 01:58:10.878 seen a subset in the in this just  
NOTE Confidence: 0.852757573127747

01:58:10.878 --> 01:58:14.429 taking it back to some of the other  
NOTE Confidence: 0.852757573127747

01:58:14.429 --> 01:58:16.579 pathologies that we we study.  
NOTE Confidence: 0.852757573127747

01:58:16.580 --> 01:58:18.640 A specific subset of women,  
NOTE Confidence: 0.852757573127747

01:58:18.640 --> 01:58:20.760 for example with Tourettes syndrome.  
NOTE Confidence: 0.852757573127747

01:58:20.760 --> 01:58:24.426 That during during the hormonal changes.  
NOTE Confidence: 0.852757573127747

01:58:24.430 --> 01:58:26.138 That drastically changes that  
NOTE Confidence: 0.852757573127747

01:58:26.138 --> 01:58:29.240 the way or the patterns in which  
NOTE Confidence: 0.852757573127747

01:58:29.240 --> 01:58:31.530 they are there ticks manifest.

NOTE Confidence: 0.852757573127747  
01:58:31.530 --> 01:58:33.755 Of course women with Tourette's  
NOTE Confidence: 0.852757573127747  
01:58:33.755 --> 01:58:35.090 are a minority,  
NOTE Confidence: 0.852757573127747  
01:58:35.090 --> 01:58:38.634 so it's difficult to kind of follow them,  
NOTE Confidence: 0.852757573127747  
01:58:38.640 --> 01:58:42.104 but it almost seems like the the hormones  
NOTE Confidence: 0.852757573127747  
01:58:42.104 --> 01:58:44.663 are uniquely driving the the the  
NOTE Confidence: 0.852757573127747  
01:58:44.663 --> 01:58:47.960 sequence of the ticks that are happening.  
NOTE Confidence: 0.852757573127747  
01:58:47.960 --> 01:58:50.942 So I'm just interested in maybe seeing  
NOTE Confidence: 0.852757573127747  
01:58:50.942 --> 01:58:53.778 or using some of this molecular.  
NOTE Confidence: 0.852757573127747  
01:58:53.780 --> 01:58:55.940 Biomarkers and maybe using it for  
NOTE Confidence: 0.852757573127747  
01:58:55.940 --> 01:58:58.509 other not just in pregnant women,  
NOTE Confidence: 0.852757573127747  
01:58:58.510 --> 01:59:00.868 but maybe for other you know,  
NOTE Confidence: 0.852757573127747  
01:59:00.870 --> 01:59:02.450 focusing specifically on women's  
NOTE Confidence: 0.852757573127747  
01:59:02.450 --> 01:59:03.240 mental health.  
NOTE Confidence: 0.855478882789612  
01:59:03.830 --> 01:59:07.250 I think you know  
NOTE Confidence: 0.855478882789612  
01:59:05.350 --> 01:59:07.250 it's trying to identify those  
NOTE Confidence: 0.855478882789612



01:59:07.250 --> 01:59:09.150 subgroups. Trying to understand that  
NOTE Confidence: 0.855478882789612

01:59:09.150 --> 01:59:11.430 heterogeneity, so I think that's that's  
NOTE Confidence: 0.855478882789612

01:59:11.430 --> 01:59:12.570 fantastic engineer experience  
NOTE Confidence: 0.855478882789612

01:59:12.570 --> 01:59:13.710 with adolescent girls.  
NOTE Confidence: 0.855478882789612

01:59:13.710 --> 01:59:15.610 In puberty, in the clinic,  
NOTE Confidence: 0.855478882789612

01:59:15.610 --> 01:59:17.890 sure, yeah. I mean, the gender  
NOTE Confidence: 0.855478882789612

01:59:17.890 --> 01:59:19.030 difference in depressione  
NOTE Confidence: 0.855478882789612

01:59:19.030 --> 01:59:20.930 incidents comes out at puberty,  
NOTE Confidence: 0.855478882789612

01:59:20.930 --> 01:59:23.802 so we know that there is a significant  
NOTE Confidence: 0.855478882789612

01:59:23.802 --> 01:59:26.250 impact of hormones on the brain.  
NOTE Confidence: 0.855478882789612

01:59:26.250 --> 01:59:29.202 And so we certainly see that just in  
NOTE Confidence: 0.855478882789612

01:59:29.202 --> 01:59:32.327 terms of the ages is when people say,  
NOTE Confidence: 0.855478882789612

01:59:32.330 --> 01:59:35.466 like you know, really starting to get bad  
NOTE Confidence: 0.855478882789612

01:59:35.466 --> 01:59:38.022 right around the time that puberty happened.  
NOTE Confidence: 0.855478882789612

01:59:38.022 --> 01:59:40.245 I think the literature on hormone  
NOTE Confidence: 0.855478882789612

01:59:40.245 --> 01:59:42.370 manipulation adolescence is a tricky one.

NOTE Confidence: 0.855478882789612  
01:59:42.370 --> 01:59:43.814 I mean, there's actually  
NOTE Confidence: 0.855478882789612  
01:59:43.814 --> 01:59:44.897 some big observation.  
NOTE Confidence: 0.855478882789612  
01:59:44.900 --> 01:59:47.072 ULL studies that suggest that oral  
NOTE Confidence: 0.855478882789612  
01:59:47.072 --> 01:59:48.520 contraceptives can actually lead  
NOTE Confidence: 0.855478882789612  
01:59:48.579 --> 01:59:50.309 to worst mental health outcomes.  
NOTE Confidence: 0.855478882789612  
01:59:50.310 --> 01:59:52.476 You know where you would think?  
NOTE Confidence: 0.855478882789612  
01:59:52.480 --> 01:59:54.797 Maybe if we're regulating cycles that you  
NOTE Confidence: 0.855478882789612  
01:59:54.797 --> 01:59:57.169 would get better mental health outcomes.  
NOTE Confidence: 0.855478882789612  
01:59:57.170 --> 02:00:00.060 So it is a really complicated system that  
NOTE Confidence: 0.855478882789612  
02:00:00.060 --> 02:00:02.950 has a lot of complex biofeedback built in.  
NOTE Confidence: 0.855478882789612  
02:00:02.950 --> 02:00:05.114 So anytime you take her with  
NOTE Confidence: 0.855478882789612  
02:00:05.114 --> 02:00:07.640 something over here, you get a can  
NOTE Confidence: 0.855478882789612  
02:00:07.640 --> 02:00:09.371 pensa Tori change somewhere else.  
NOTE Confidence: 0.855478882789612  
02:00:09.371 --> 02:00:11.056 But it's something that we  
NOTE Confidence: 0.855478882789612  
02:00:11.056 --> 02:00:12.489 certainly pay attention to,  
NOTE Confidence: 0.855478882789612

02:00:12.490 --> 02:00:13.154 and actually,  
NOTE Confidence: 0.855478882789612

02:00:13.154 --> 02:00:14.810 in preparing for this meeting  
NOTE Confidence: 0.855478882789612

02:00:14.810 --> 02:00:15.804 we talked about.  
NOTE Confidence: 0.855478882789612

02:00:15.804 --> 02:00:17.466 Maybe we should be measuring  
NOTE Confidence: 0.855478882789612

02:00:17.466 --> 02:00:18.799 hormone levels in some  
NOTE Confidence: 0.873935699462891

02:00:18.800 --> 02:00:20.120 of our clinical trials,  
NOTE Confidence: 0.873935699462891

02:00:20.120 --> 02:00:21.119 so I think  
NOTE Confidence: 0.873935699462891

02:00:21.120 --> 02:00:22.780 it's a really important important  
NOTE Confidence: 0.873935699462891

02:00:22.780 --> 02:00:24.440 area to be thinking about.  
NOTE Confidence: 0.922774434089661

02:00:25.100 --> 02:00:28.484 Well, I want to be sensitive to everyone's  
NOTE Confidence: 0.922774434089661

02:00:28.484 --> 02:00:32.150 time and thank you so much for joining us.  
NOTE Confidence: 0.922774434089661

02:00:32.150 --> 02:00:34.425 Just so you know, we have recorded  
NOTE Confidence: 0.922774434089661

02:00:34.425 --> 02:00:36.485 these sessions so that will make  
NOTE Confidence: 0.922774434089661

02:00:36.485 --> 02:00:38.525 them available over the next week.  
NOTE Confidence: 0.922774434089661

02:00:38.530 --> 02:00:41.410 They'll be available for if you want to  
NOTE Confidence: 0.922774434089661

02:00:41.410 --> 02:00:44.565 listen to them either again or share them.

NOTE Confidence: 0.922774434089661  
02:00:44.570 --> 02:00:47.058 I will also we would also welcome any  
NOTE Confidence: 0.922774434089661  
02:00:47.058 --> 02:00:48.924 questions that you might have issue,  
NOTE Confidence: 0.922774434089661  
02:00:48.924 --> 02:00:51.098 think about what you've heard.  
NOTE Confidence: 0.922774434089661  
02:00:51.100 --> 02:00:52.804 And we would be very grateful  
NOTE Confidence: 0.922774434089661  
02:00:52.804 --> 02:00:54.400 for feedback on this format.  
NOTE Confidence: 0.922774434089661  
02:00:54.400 --> 02:00:56.200 It's allowed us to have you  
NOTE Confidence: 0.922774434089661  
02:00:56.200 --> 02:00:59.160 with us over a week.  
NOTE Confidence: 0.922774434089661  
02:00:59.160 --> 02:01:01.536 It's also allowed us to have more people  
NOTE Confidence: 0.922774434089661  
02:01:01.536 --> 02:01:04.319 to talk and to present more of our science  
NOTE Confidence: 0.922774434089661  
02:01:04.319 --> 02:01:06.598 and to present it in different ways.  
NOTE Confidence: 0.922774434089661  
02:01:06.600 --> 02:01:08.150 So so we'd be very,  
NOTE Confidence: 0.922774434089661  
02:01:08.150 --> 02:01:09.700 very grateful for your feedback  
NOTE Confidence: 0.922774434089661  
02:01:09.700 --> 02:01:11.720 on on the format.  
NOTE Confidence: 0.922774434089661  
02:01:11.720 --> 02:01:13.771 And just want to thank you again  
NOTE Confidence: 0.922774434089661  
02:01:13.771 --> 02:01:16.279 for joining us and hope to see you  
NOTE Confidence: 0.922774434089661

02:01:16.279 --> 02:01:17.839 online and hopefully in person  
NOTE Confidence: 0.922774434089661

02:01:17.905 --> 02:01:19.468 in the not too distant future.  
NOTE Confidence: 0.922774434089661

02:01:19.470 --> 02:01:21.286 Thank you very much.  
NOTE Confidence: 0.922774434089661

02:01:21.286 --> 02:01:22.720 May I comment?  
NOTE Confidence: 0.922774434089661

02:01:22.720 --> 02:01:24.200 May I just  
NOTE Confidence: 0.863267958164215

02:01:24.200 --> 02:01:26.713 say I would just like to thank  
NOTE Confidence: 0.863267958164215

02:01:26.713 --> 02:01:29.695 you Linda and support staff and  
NOTE Confidence: 0.863267958164215

02:01:29.695 --> 02:01:32.720 researchers and clinicians for the  
NOTE Confidence: 0.863267958164215

02:01:32.720 --> 02:01:34.994 incredibly impressive transition you  
NOTE Confidence: 0.863267958164215

02:01:34.994 --> 02:01:37.934 made this year with the pandemic.  
NOTE Confidence: 0.863267958164215

02:01:37.940 --> 02:01:41.988 How quickly, with new hires an all the  
NOTE Confidence: 0.863267958164215

02:01:41.988 --> 02:01:45.310 present people in place you moved from  
NOTE Confidence: 0.863267958164215

02:01:45.310 --> 02:01:48.260 the regular format to this format,  
NOTE Confidence: 0.863267958164215

02:01:48.260 --> 02:01:50.750 which I think is spectacular  
NOTE Confidence: 0.863267958164215

02:01:50.750 --> 02:01:52.244 considering the circumstances.  
NOTE Confidence: 0.863267958164215

02:01:52.250 --> 02:01:54.250 And we're fortunate enough to

NOTE Confidence: 0.863267958164215  
02:01:54.250 --> 02:01:56.250 have technology on our site.  
NOTE Confidence: 0.863267958164215  
02:01:56.250 --> 02:01:59.050 20 years ago. It would have happened.  
NOTE Confidence: 0.863267958164215  
02:01:59.050 --> 02:02:01.450 The work itself is extremely impressive.  
NOTE Confidence: 0.863267958164215  
02:02:01.450 --> 02:02:03.190 There wasn't one.  
NOTE Confidence: 0.863267958164215  
02:02:03.190 --> 02:02:05.413 One presentation today that would  
NOTE Confidence: 0.863267958164215  
02:02:05.413 --> 02:02:07.668 not have passed what Edward  
NOTE Confidence: 0.863267958164215  
02:02:07.668 --> 02:02:10.388 for used to refer to as the.  
NOTE Confidence: 0.863267958164215  
02:02:10.388 --> 02:02:12.796 So what test they all did Anne  
NOTE Confidence: 0.863267958164215  
02:02:12.796 --> 02:02:14.909 Anne beautifully executed.  
NOTE Confidence: 0.863267958164215  
02:02:14.910 --> 02:02:18.039 I have loads of questions that will  
NOTE Confidence: 0.863267958164215  
02:02:18.039 --> 02:02:21.786 come up as as time goes on 'cause the  
NOTE Confidence: 0.863267958164215  
02:02:21.786 --> 02:02:25.330 research is so intricate and this is really.  
NOTE Confidence: 0.863267958164215  
02:02:25.330 --> 02:02:27.050 The tip of the iceberg,  
NOTE Confidence: 0.863267958164215  
02:02:27.050 --> 02:02:28.076 but I'm very,  
NOTE Confidence: 0.863267958164215  
02:02:28.076 --> 02:02:29.786 very grateful for the incredible  
NOTE Confidence: 0.863267958164215

02:02:29.786 --> 02:02:31.875 capacity displayed today in the way  
NOTE Confidence: 0.863267958164215

02:02:31.875 --> 02:02:34.249 that that it was shared with us,  
NOTE Confidence: 0.863267958164215

02:02:34.250 --> 02:02:36.986 and I'm very grateful to be apart of  
NOTE Confidence: 0.887471497058868

02:02:36.990 --> 02:02:38.795 this. Alright, we're very grateful  
NOTE Confidence: 0.887471497058868

02:02:38.795 --> 02:02:41.448 to have you be a part of it,  
NOTE Confidence: 0.887471497058868

02:02:41.450 --> 02:02:43.170 so thank you so much.  
NOTE Confidence: 0.887471497058868

02:02:43.170 --> 02:02:45.216 Very very thank you and I  
NOTE Confidence: 0.887471497058868

02:02:45.220 --> 02:02:46.600 love your background, thanks.  
NOTE Confidence: 0.889461874961853

02:02:48.340 --> 02:02:49.848 So again thanks everyone,  
NOTE Confidence: 0.889461874961853

02:02:49.848 --> 02:02:52.544 and we'll see you online soon again  
NOTE Confidence: 0.889461874961853

02:02:52.544 --> 02:02:54.716 and the posters will remain up.  
NOTE Confidence: 0.889461874961853

02:02:54.720 --> 02:02:58.090 So please, if you have time to see them,  
NOTE Confidence: 0.889461874961853

02:02:58.090 --> 02:02:59.968 the posters are spectacular too.  
NOTE Confidence: 0.889461874961853

02:02:59.968 --> 02:03:01.474 Thank you. Thank you.  
NOTE Confidence: 0.889461874961853

02:03:01.474 --> 02:03:02.228 Thanks everybody.