

WEBVTT

NOTE duration: "00:54:07.914"

NOTE Confidence: 0.98333824

00:00:00.160 --> 00:00:01.760 Good afternoon, everyone, and welcome

NOTE Confidence: 0.98333824

00:00:01.760 --> 00:00:02.800 to Grand Rounds.

NOTE Confidence: 0.97821736

00:00:03.600 --> 00:00:04.880 I've already muted. I'm muted.

NOTE Confidence: 0.97821736

00:00:04.880 --> 00:00:06.480 Thanks. Sam was just trying

NOTE Confidence: 0.97821736

00:00:06.480 --> 00:00:07.520 to adjust the comfort level

NOTE Confidence: 0.97821736

00:00:07.520 --> 00:00:08.480 in the room for anyone

NOTE Confidence: 0.97821736

00:00:08.480 --> 00:00:09.599 that's, a little bit too

NOTE Confidence: 0.97821736

00:00:09.599 --> 00:00:10.960 cozy at the moment. Thank

NOTE Confidence: 0.97821736

00:00:10.960 --> 00:00:11.700 you, Sam.

NOTE Confidence: 0.9674607

00:00:12.240 --> 00:00:13.840 So today is our last

NOTE Confidence: 0.9674607

00:00:13.840 --> 00:00:15.325 Grand Rounds of this year.

NOTE Confidence: 0.9674607

00:00:15.325 --> 00:00:16.364 I'd like to start by

NOTE Confidence: 0.9674607

00:00:16.364 --> 00:00:17.245 wishing you all a very

NOTE Confidence: 0.9674607

00:00:17.245 --> 00:00:18.685 happy holiday season and happy

NOTE Confidence: 0.9674607

00:00:18.685 --> 00:00:20.364 new year. We'll be getting  
NOTE Confidence: 0.9674607

00:00:20.364 --> 00:00:22.125 started on January seventh with  
NOTE Confidence: 0.9674607

00:00:22.125 --> 00:00:23.825 doctor Linda Mays with her,  
NOTE Confidence: 0.9674607

00:00:24.125 --> 00:00:25.645 annual address to kick off  
NOTE Confidence: 0.9674607

00:00:25.645 --> 00:00:27.210 Grand Rounds for next year.  
NOTE Confidence: 0.9674607

00:00:27.210 --> 00:00:28.890 But today, we're ending on  
NOTE Confidence: 0.9674607

00:00:28.890 --> 00:00:30.430 a high, and we're delighted  
NOTE Confidence: 0.96143734

00:00:30.890 --> 00:00:32.570 that doctor Kasia Habarska has  
NOTE Confidence: 0.96143734

00:00:32.570 --> 00:00:34.270 decided to give grand rounds  
NOTE Confidence: 0.96143734

00:00:34.329 --> 00:00:35.770 today. All of you know,  
NOTE Confidence: 0.96143734

00:00:36.010 --> 00:00:37.150 doctor Habarska  
NOTE Confidence: 0.9903552

00:00:37.530 --> 00:00:38.970 and her fantastic work trying  
NOTE Confidence: 0.9903552

00:00:38.970 --> 00:00:39.629 to identify,  
NOTE Confidence: 0.86054677

00:00:40.250 --> 00:00:41.610 early diagnostic farm,  
NOTE Confidence: 0.99403256

00:00:42.315 --> 00:00:44.155 markers and novel treatment targets  
NOTE Confidence: 0.99403256

00:00:44.155 --> 00:00:45.775 for autism spectrum disorders.

NOTE Confidence: 0.86097354

00:00:46.555 --> 00:00:48.475 Doctor Hovashka is the, Emily

NOTE Confidence: 0.86097354

00:00:48.475 --> 00:00:49.835 Fraser Beatty professor of child

NOTE Confidence: 0.86097354

00:00:49.835 --> 00:00:51.695 psychiatry, pediatrics, and statistics,

NOTE Confidence: 0.95743537

00:00:52.555 --> 00:00:53.915 and is the director of

NOTE Confidence: 0.95743537

00:00:53.915 --> 00:00:55.770 the NIH funded, Center for

NOTE Confidence: 0.95743537

00:00:55.770 --> 00:00:57.930 Excellence, for autism spectrum disorders

NOTE Confidence: 0.95743537

00:00:57.930 --> 00:00:58.809 here at the Yale Child

NOTE Confidence: 0.95743537

00:00:58.809 --> 00:01:00.809 Study Center. And so, please

NOTE Confidence: 0.95743537

00:01:00.809 --> 00:01:02.090 join me in welcoming Kasia

NOTE Confidence: 0.95743537

00:01:02.090 --> 00:01:03.370 and thanking her for giving

NOTE Confidence: 0.95743537

00:01:03.370 --> 00:01:04.490 the last grand rounds of

NOTE Confidence: 0.95743537

00:01:04.490 --> 00:01:05.549 twenty twenty four.

NOTE Confidence: 0.9893066

00:01:09.965 --> 00:01:11.245 Thank you so much. You

NOTE Confidence: 0.9893066

00:01:11.245 --> 00:01:12.065 know, it's always,

NOTE Confidence: 0.9806953

00:01:12.604 --> 00:01:13.725 it's always fun to give

NOTE Confidence: 0.9806953

00:01:13.725 --> 00:01:14.225 talks,  
NOTE Confidence: 0.9896978  
00:01:14.925 --> 00:01:16.205 but it's always the greatest  
NOTE Confidence: 0.9896978  
00:01:16.205 --> 00:01:17.084 pleasure to do it at  
NOTE Confidence: 0.9896978  
00:01:17.084 --> 00:01:18.845 home. So, I'm really grateful  
NOTE Confidence: 0.9896978  
00:01:18.845 --> 00:01:20.365 for this opportunity, and thank  
NOTE Confidence: 0.9896978  
00:01:20.365 --> 00:01:22.065 you for for inviting me.  
NOTE Confidence: 0.93572646  
00:01:22.420 --> 00:01:24.020 And thanks for everyone being  
NOTE Confidence: 0.93572646  
00:01:24.020 --> 00:01:25.140 here. I know this is  
NOTE Confidence: 0.93572646  
00:01:25.140 --> 00:01:26.920 the busiest time of  
NOTE Confidence: 0.9371398  
00:01:27.220 --> 00:01:28.819 the year, and I know,  
NOTE Confidence: 0.9371398  
00:01:29.140 --> 00:01:30.260 many of us are still  
NOTE Confidence: 0.9371398  
00:01:30.260 --> 00:01:30.920 in connects  
NOTE Confidence: 0.8142194  
00:01:31.220 --> 00:01:31.959 right now.  
NOTE Confidence: 0.99749506  
00:01:32.500 --> 00:01:34.180 But I really appreciate everyone  
NOTE Confidence: 0.99749506  
00:01:34.180 --> 00:01:35.140 online and here in the  
NOTE Confidence: 0.99749506  
00:01:35.140 --> 00:01:36.440 room for being here.

NOTE Confidence: 0.97240824  
00:01:37.725 --> 00:01:38.225 So,  
NOTE Confidence: 0.96022034  
00:01:39.405 --> 00:01:40.765 the reason behind this talk  
NOTE Confidence: 0.96022034  
00:01:40.765 --> 00:01:42.444 is behind this topic is  
NOTE Confidence: 0.96022034  
00:01:42.444 --> 00:01:42.944 that,  
NOTE Confidence: 0.83140695  
00:01:43.885 --> 00:01:44.385 Kelly,  
NOTE Confidence: 0.9358825  
00:01:45.244 --> 00:01:46.705 a group of amazing clinicians  
NOTE Confidence: 0.9358825  
00:01:46.765 --> 00:01:48.125 in in our lab, in  
NOTE Confidence: 0.9358825  
00:01:48.125 --> 00:01:49.345 our clinic, Kelly,  
NOTE Confidence: 0.64817744  
00:01:50.690 --> 00:01:52.930 Paula, Mariana Torres, and Chelsea  
NOTE Confidence: 0.64817744  
00:01:52.930 --> 00:01:53.430 Morgan.  
NOTE Confidence: 0.99406576  
00:01:53.730 --> 00:01:55.570 And I have been, having  
NOTE Confidence: 0.99406576  
00:01:55.570 --> 00:01:56.070 discussions  
NOTE Confidence: 0.967716  
00:01:56.370 --> 00:01:56.850 about,  
NOTE Confidence: 0.97537386  
00:01:57.490 --> 00:01:59.350 differential diagnosis in babies.  
NOTE Confidence: 0.9881952  
00:01:59.650 --> 00:02:00.150 Right?  
NOTE Confidence: 0.9899925

00:02:01.810 --> 00:02:03.730 Spurred by the fact can  
NOTE Confidence: 0.9899925

00:02:03.730 --> 00:02:04.550 you hear me?  
NOTE Confidence: 0.92594886

00:02:05.345 --> 00:02:06.465 Spurred? No. I I think  
NOTE Confidence: 0.92594886

00:02:06.465 --> 00:02:07.505 I'm I think I'm using  
NOTE Confidence: 0.92594886

00:02:07.505 --> 00:02:08.465 it. Can you hear me?  
NOTE Confidence: 0.92594886

00:02:08.465 --> 00:02:08.965 Yes.  
NOTE Confidence: 0.9218553

00:02:09.505 --> 00:02:10.005 Okay.  
NOTE Confidence: 0.97877735

00:02:11.185 --> 00:02:12.225 Spurred by the fact that,  
NOTE Confidence: 0.97877735

00:02:12.465 --> 00:02:14.065 in, in the past twenty  
NOTE Confidence: 0.97877735

00:02:14.065 --> 00:02:15.105 five years, we've been seeing  
NOTE Confidence: 0.97877735

00:02:15.105 --> 00:02:16.465 a lot of toddlers in,  
NOTE Confidence: 0.97877735

00:02:16.625 --> 00:02:18.385 our clinics and through research  
NOTE Confidence: 0.97877735

00:02:18.385 --> 00:02:18.885 programs.  
NOTE Confidence: 0.9435736

00:02:19.590 --> 00:02:21.030 And, we are always struck  
NOTE Confidence: 0.9435736

00:02:21.030 --> 00:02:21.850 by the complexity  
NOTE Confidence: 0.9942612

00:02:22.230 --> 00:02:23.530 of the clinical presentation

NOTE Confidence: 0.80934095  
00:02:24.790 --> 00:02:25.110 and,  
NOTE Confidence: 0.85530937  
00:02:25.830 --> 00:02:27.770 and difficulty sometimes in considering,  
NOTE Confidence: 0.95492816  
00:02:28.470 --> 00:02:30.230 what the primary diagnosis might  
NOTE Confidence: 0.95492816  
00:02:30.230 --> 00:02:32.389 be and, difficulties in making  
NOTE Confidence: 0.95492816  
00:02:32.389 --> 00:02:32.889 predictions,  
NOTE Confidence: 0.9523449  
00:02:33.670 --> 00:02:34.490 about outcomes,  
NOTE Confidence: 0.98595405  
00:02:35.335 --> 00:02:37.095 of these kids. So today,  
NOTE Confidence: 0.98595405  
00:02:37.095 --> 00:02:38.055 I would like to invite  
NOTE Confidence: 0.98595405  
00:02:38.055 --> 00:02:39.175 you to kind of walk  
NOTE Confidence: 0.98595405  
00:02:39.175 --> 00:02:40.535 with me through what we  
NOTE Confidence: 0.98595405  
00:02:40.535 --> 00:02:41.915 know, what we don't know,  
NOTE Confidence: 0.99753577  
00:02:42.215 --> 00:02:43.195 and think about,  
NOTE Confidence: 0.9783781  
00:02:43.815 --> 00:02:44.775 where we would like to  
NOTE Confidence: 0.9783781  
00:02:44.775 --> 00:02:46.455 be in ten years, from  
NOTE Confidence: 0.9783781  
00:02:46.455 --> 00:02:47.995 now in terms of,  
NOTE Confidence: 0.9997064

00:02:48.375 --> 00:02:49.435 creating new  
NOTE Confidence: 0.90055937

00:02:49.750 --> 00:02:51.209 or better diagnostic,  
NOTE Confidence: 0.94180334

00:02:52.150 --> 00:02:54.069 approaches to early diagnosis. We're  
NOTE Confidence: 0.94180334

00:02:54.069 --> 00:02:55.110 gonna talk about a little  
NOTE Confidence: 0.94180334

00:02:55.110 --> 00:02:56.010 bit about the,  
NOTE Confidence: 0.9976676

00:02:57.510 --> 00:02:58.650 concept of differentiation.  
NOTE Confidence: 0.99673826

00:02:59.669 --> 00:03:00.810 We'll talk about,  
NOTE Confidence: 0.9987272

00:03:01.895 --> 00:03:02.855 you know, what what do  
NOTE Confidence: 0.9987272

00:03:02.855 --> 00:03:04.715 we know about early manifestation  
NOTE Confidence: 0.9502211

00:03:05.095 --> 00:03:05.975 of some of the,  
NOTE Confidence: 0.9780418

00:03:06.455 --> 00:03:07.514 complex neurodevelopmental  
NOTE Confidence: 0.9674661

00:03:07.975 --> 00:03:09.995 conditions we deal with, including  
NOTE Confidence: 0.9674661

00:03:10.055 --> 00:03:11.355 autism and ADHD,  
NOTE Confidence: 0.9955854

00:03:12.615 --> 00:03:13.755 some clinical implications  
NOTE Confidence: 0.99123

00:03:14.135 --> 00:03:15.895 about from what we know  
NOTE Confidence: 0.99123

00:03:15.895 --> 00:03:16.950 or we don't know,



NOTE Confidence: 0.99123865  
00:03:17.590 --> 00:03:19.830 and, perhaps about some new  
NOTE Confidence: 0.99123865  
00:03:19.830 --> 00:03:21.910 directions or or or glimpses  
NOTE Confidence: 0.99123865  
00:03:21.910 --> 00:03:22.810 of new directions,  
NOTE Confidence: 0.98250604  
00:03:23.590 --> 00:03:24.989 that might, might give us  
NOTE Confidence: 0.98250604  
00:03:24.989 --> 00:03:25.910 a little bit more a  
NOTE Confidence: 0.98250604  
00:03:25.910 --> 00:03:27.590 better sense or different sense  
NOTE Confidence: 0.98250604  
00:03:27.590 --> 00:03:28.629 of of,  
NOTE Confidence: 0.94857496  
00:03:29.030 --> 00:03:30.810 of, differential diagnosis.  
NOTE Confidence: 0.9848068  
00:03:32.165 --> 00:03:33.205 So, I want you to  
NOTE Confidence: 0.9848068  
00:03:33.205 --> 00:03:34.345 sit back and imagine  
NOTE Confidence: 0.938564  
00:03:34.805 --> 00:03:36.485 that in a galaxy far,  
NOTE Confidence: 0.938564  
00:03:36.485 --> 00:03:37.125 far away,  
NOTE Confidence: 0.98990214  
00:03:38.485 --> 00:03:39.305 little brains,  
NOTE Confidence: 0.98129153  
00:03:39.925 --> 00:03:41.625 read the diagnostic instruments.  
NOTE Confidence: 0.9605853  
00:03:42.485 --> 00:03:42.985 And,  
NOTE Confidence: 0.9794637

00:03:43.765 --> 00:03:46.005 accordingly they develop accordingly to  
NOTE Confidence: 0.9794637

00:03:46.005 --> 00:03:48.000 what they read and, develop  
NOTE Confidence: 0.9794637

00:03:48.000 --> 00:03:49.220 very nicely separated  
NOTE Confidence: 0.9926596

00:03:50.560 --> 00:03:51.060 phenotypes.  
NOTE Confidence: 0.9881387

00:03:51.920 --> 00:03:53.060 They are very clearly,  
NOTE Confidence: 0.99970883

00:03:54.000 --> 00:03:54.500 delineated  
NOTE Confidence: 0.9401117

00:03:55.280 --> 00:03:56.660 and, very clearly,  
NOTE Confidence: 0.99916613

00:03:57.280 --> 00:03:57.780 defined.  
NOTE Confidence: 0.98720056

00:04:01.125 --> 00:04:02.585 In our galaxy, however,  
NOTE Confidence: 0.97766066

00:04:03.125 --> 00:04:04.745 in our Milky Way galaxy,  
NOTE Confidence: 0.97766066

00:04:04.885 --> 00:04:06.105 things are a little different.  
NOTE Confidence: 0.98631275

00:04:06.965 --> 00:04:08.405 At at the least, we  
NOTE Confidence: 0.98631275

00:04:08.405 --> 00:04:10.825 see significant overlaps between,  
NOTE Confidence: 0.99770904

00:04:11.445 --> 00:04:13.685 children who are presenting with  
NOTE Confidence: 0.99770904

00:04:13.685 --> 00:04:14.185 neurodevelopmental  
NOTE Confidence: 0.9906639

00:04:14.805 --> 00:04:17.180 conditions being autism, global delays,

NOTE Confidence: 0.966444  
00:04:17.560 --> 00:04:18.060 language,  
NOTE Confidence: 0.8926133  
00:04:18.440 --> 00:04:20.540 disorders, or or motor stereotypies.  
NOTE Confidence: 0.96023405  
00:04:21.960 --> 00:04:23.500 Actually, this may look,  
NOTE Confidence: 0.9892106  
00:04:24.920 --> 00:04:25.420 complicated.  
NOTE Confidence: 0.9983737  
00:04:26.839 --> 00:04:28.200 There's a delay in the  
NOTE Confidence: 0.9983737  
00:04:28.200 --> 00:04:28.700 display.  
NOTE Confidence: 0.99178934  
00:04:29.495 --> 00:04:30.955 Is that okay?  
NOTE Confidence: 0.998153  
00:04:31.735 --> 00:04:32.455 There's a bit of a  
NOTE Confidence: 0.998153  
00:04:32.455 --> 00:04:33.495 delay in the display of  
NOTE Confidence: 0.998153  
00:04:33.495 --> 00:04:34.154 the slides.  
NOTE Confidence: 0.9746098  
00:04:36.935 --> 00:04:38.455 Okay. So I'll just now  
NOTE Confidence: 0.9746098  
00:04:38.455 --> 00:04:39.575 that I know it's there,  
NOTE Confidence: 0.9746098  
00:04:39.575 --> 00:04:40.695 I will be mindful about  
NOTE Confidence: 0.9746098  
00:04:40.695 --> 00:04:42.360 that. Sorry about this. So  
NOTE Confidence: 0.9746098  
00:04:42.360 --> 00:04:43.320 so this is pretty much  
NOTE Confidence: 0.9746098

00:04:43.320 --> 00:04:44.279 what we see in our  
NOTE Confidence: 0.9746098

00:04:44.279 --> 00:04:45.880 clinics. It's much more likely  
NOTE Confidence: 0.9746098

00:04:45.880 --> 00:04:46.919 to see we're much more  
NOTE Confidence: 0.9746098

00:04:46.919 --> 00:04:47.720 likely to see in the  
NOTE Confidence: 0.9746098

00:04:47.800 --> 00:04:48.699 in our clinics  
NOTE Confidence: 0.9544854

00:04:49.000 --> 00:04:50.300 considerable overlap  
NOTE Confidence: 0.9944793

00:04:50.600 --> 00:04:52.699 between, in symptom expression,  
NOTE Confidence: 0.92590106

00:04:53.320 --> 00:04:55.580 in children representing for differential,  
NOTE Confidence: 0.9991575

00:04:56.040 --> 00:04:56.540 diagnosis.  
NOTE Confidence: 0.9860348

00:04:57.555 --> 00:04:58.675 If that was really the  
NOTE Confidence: 0.9860348

00:04:58.675 --> 00:04:59.955 case, this would be actually  
NOTE Confidence: 0.9860348

00:04:59.955 --> 00:05:00.615 very nice.  
NOTE Confidence: 0.9961416

00:05:01.154 --> 00:05:02.354 In reality, what we are  
NOTE Confidence: 0.9961416

00:05:02.354 --> 00:05:03.895 seeing is something like that.  
NOTE Confidence: 0.96819115

00:05:04.354 --> 00:05:05.555 It's something like that. The  
NOTE Confidence: 0.96819115

00:05:05.555 --> 00:05:06.755 children who are referred to

NOTE Confidence: 0.96819115  
00:05:06.755 --> 00:05:08.375 us for differential diagnosis,  
NOTE Confidence: 0.9867744  
00:05:08.914 --> 00:05:10.694 one, two, three,  
NOTE Confidence: 0.998444  
00:05:11.430 --> 00:05:11.930 four,  
NOTE Confidence: 0.9927195  
00:05:12.230 --> 00:05:12.730 five,  
NOTE Confidence: 0.9800346  
00:05:13.190 --> 00:05:15.290 six, seven, eight, nine, ten.  
NOTE Confidence: 0.9800346  
00:05:15.589 --> 00:05:16.570 We have a delay.  
NOTE Confidence: 0.9766038  
00:05:17.830 --> 00:05:18.650 Can we?  
NOTE Confidence: 0.97825575  
00:05:21.670 --> 00:05:22.950 Can we do something about  
NOTE Confidence: 0.97825575  
00:05:22.950 --> 00:05:23.450 it?  
NOTE Confidence: 0.80627525  
00:05:24.070 --> 00:05:25.455 Do you want to I  
NOTE Confidence: 0.80627525  
00:05:25.534 --> 00:05:26.335 think everything we need to  
NOTE Confidence: 0.80627525  
00:05:26.335 --> 00:05:27.134 do is stop share and  
NOTE Confidence: 0.80627525  
00:05:27.134 --> 00:05:27.634 reshare.  
NOTE Confidence: 0.9972421  
00:05:28.335 --> 00:05:28.835 Uh-huh.  
NOTE Confidence: 0.9460707  
00:07:29.985 --> 00:07:31.505 Clinics is something like that.  
NOTE Confidence: 0.9460707

00:07:31.505 --> 00:07:32.785 We see some children who  
NOTE Confidence: 0.9460707

00:07:32.785 --> 00:07:34.065 are presenting with a more  
NOTE Confidence: 0.9460707

00:07:34.065 --> 00:07:35.445 clear clinical pictures,  
NOTE Confidence: 0.9145376

00:07:37.000 --> 00:07:38.120 that we can see here  
NOTE Confidence: 0.9145376

00:07:38.120 --> 00:07:39.480 clustering the same color on  
NOTE Confidence: 0.9145376

00:07:39.480 --> 00:07:40.139 the periphery.  
NOTE Confidence: 0.957165

00:07:40.440 --> 00:07:41.800 But in reality, we also  
NOTE Confidence: 0.957165

00:07:41.800 --> 00:07:42.680 see a lot of kids  
NOTE Confidence: 0.957165

00:07:42.680 --> 00:07:44.040 who are actually presenting in  
NOTE Confidence: 0.957165

00:07:44.040 --> 00:07:45.500 multiplicity of symptoms  
NOTE Confidence: 0.98044735

00:07:45.880 --> 00:07:47.479 coming from a variety of  
NOTE Confidence: 0.98044735

00:07:47.479 --> 00:07:49.500 different, syndromes. And our  
NOTE Confidence: 0.9810142

00:07:49.995 --> 00:07:51.995 job here is to make  
NOTE Confidence: 0.9810142

00:07:51.995 --> 00:07:52.495 a,  
NOTE Confidence: 0.99703485

00:07:53.195 --> 00:07:53.695 clinically,  
NOTE Confidence: 0.96850306

00:07:54.395 --> 00:07:56.715 informed, relevant, and helpful to

NOTE Confidence: 0.96850306  
00:07:56.715 --> 00:07:57.375 the family,  
NOTE Confidence: 0.99939185  
00:07:57.835 --> 00:07:58.335 differentiation.  
NOTE Confidence: 0.822198  
00:08:03.515 --> 00:08:04.015 Sam.  
NOTE Confidence: 0.7995334  
00:08:05.630 --> 00:08:06.449 Hi, Sam.  
NOTE Confidence: 0.97651744  
00:08:13.790 --> 00:08:14.530 Ten seconds.  
NOTE Confidence: 0.8675311  
00:08:15.630 --> 00:08:16.590 I got slides on the  
NOTE Confidence: 0.8675311  
00:08:16.590 --> 00:08:17.710 computer here if you want.  
NOTE Confidence: 0.8675311  
00:08:17.710 --> 00:08:18.850 Do whatever. Yeah.  
NOTE Confidence: 0.7820076  
00:08:21.295 --> 00:08:21.795 Yeah.  
NOTE Confidence: 0.9803197  
00:08:22.495 --> 00:08:23.695 Do whatever. So how many  
NOTE Confidence: 0.9803197  
00:08:23.695 --> 00:08:26.015 people are, here working with,  
NOTE Confidence: 0.96787894  
00:08:26.655 --> 00:08:28.015 faced with the issue of  
NOTE Confidence: 0.96787894  
00:08:28.015 --> 00:08:29.855 differential diagnosis on a daily  
NOTE Confidence: 0.96787894  
00:08:29.855 --> 00:08:30.355 basis?  
NOTE Confidence: 0.9829128  
00:08:33.020 --> 00:08:33.920 Lots of clinicians.  
NOTE Confidence: 0.9820989

00:08:34.300 --> 00:08:35.200 So it's relevant.  
NOTE Confidence: 0.9677664

00:08:35.660 --> 00:08:37.179 You know, I typically do  
NOTE Confidence: 0.9677664

00:08:37.179 --> 00:08:38.780 research. I I don't see  
NOTE Confidence: 0.9677664

00:08:38.780 --> 00:08:40.400 patients these days a lot,  
NOTE Confidence: 0.9677664

00:08:40.540 --> 00:08:42.380 but it's also tremendously important  
NOTE Confidence: 0.9677664

00:08:42.380 --> 00:08:44.059 from us from the, research  
NOTE Confidence: 0.9677664

00:08:44.059 --> 00:08:46.235 standpoint because after all, after  
NOTE Confidence: 0.9677664

00:08:46.235 --> 00:08:47.535 it's all said and done,  
NOTE Confidence: 0.9677664

00:08:47.595 --> 00:08:48.315 we do,  
NOTE Confidence: 0.99229014

00:08:48.955 --> 00:08:49.695 most cases,  
NOTE Confidence: 0.9909951

00:08:50.154 --> 00:08:51.455 come back to the question,  
NOTE Confidence: 0.9618313

00:08:51.915 --> 00:08:53.035 what is the group? What  
NOTE Confidence: 0.9618313

00:08:53.035 --> 00:08:55.115 is the differential? Right? How  
NOTE Confidence: 0.9618313

00:08:55.115 --> 00:08:56.075 can we come how can  
NOTE Confidence: 0.9618313

00:08:56.075 --> 00:08:58.415 we differentiate our complex phenotypes  
NOTE Confidence: 0.9618313

00:08:58.554 --> 00:08:59.595 in order to, at the



NOTE Confidence: 0.9618313  
00:08:59.595 --> 00:09:01.400 end, end up with phenotypes  
NOTE Confidence: 0.9618313  
00:09:01.420 --> 00:09:03.220 which are separated enough so  
NOTE Confidence: 0.9618313  
00:09:03.220 --> 00:09:04.600 we can actually see something  
NOTE Confidence: 0.9886143  
00:09:04.980 --> 00:09:06.900 important or or new, in  
NOTE Confidence: 0.9886143  
00:09:06.900 --> 00:09:07.800 terms of our,  
NOTE Confidence: 0.97317207  
00:09:08.660 --> 00:09:09.559 outcome variables.  
NOTE Confidence: 0.80670714  
00:09:22.645 --> 00:09:23.145 Oh,  
NOTE Confidence: 0.9730669  
00:09:24.245 --> 00:09:25.145 that's awesome.  
NOTE Confidence: 0.8105458  
00:09:26.245 --> 00:09:27.925 You think? Oh, yeah. She  
NOTE Confidence: 0.8105458  
00:09:27.925 --> 00:09:28.585 did that.  
NOTE Confidence: 0.66925555  
00:09:29.125 --> 00:09:30.085 She did that thing as  
NOTE Confidence: 0.66925555  
00:09:30.085 --> 00:09:30.585 well.  
NOTE Confidence: 0.93010384  
00:09:40.570 --> 00:09:41.850 I think everything is in  
NOTE Confidence: 0.93010384  
00:09:41.850 --> 00:09:43.630 holiday mode already. So  
NOTE Confidence: 0.71153903  
00:09:45.184 --> 00:09:45.684 Just  
NOTE Confidence: 0.77431804

00:09:46.945 --> 00:09:47.684 be chill.  
NOTE Confidence: 0.9812194  
00:09:48.065 --> 00:09:48.644 Be chill.  
NOTE Confidence: 0.9027835  
00:09:48.945 --> 00:09:50.165 Go down. Down. Down.  
NOTE Confidence: 0.7950284  
00:09:51.264 --> 00:09:52.084 Down. Right here.  
NOTE Confidence: 0.8305667  
00:09:53.105 --> 00:09:53.605 Okay.  
NOTE Confidence: 0.9917596  
00:09:54.945 --> 00:09:56.065 Do I get another five  
NOTE Confidence: 0.9917596  
00:09:56.065 --> 00:09:56.565 minutes?  
NOTE Confidence: 0.9723168  
00:09:56.945 --> 00:09:58.084 Yeah. Of course.  
NOTE Confidence: 0.9680966  
00:09:58.980 --> 00:10:00.500 I'll be very, very fast.  
NOTE Confidence: 0.9680966  
00:10:00.500 --> 00:10:02.020 I'll be super fast. So,  
NOTE Confidence: 0.9680966  
00:10:02.020 --> 00:10:03.220 anyway, so what do we  
NOTE Confidence: 0.9680966  
00:10:03.220 --> 00:10:03.959 have to do?  
NOTE Confidence: 0.84687686  
00:10:04.420 --> 00:10:06.040 Advance this? Yeah.  
NOTE Confidence: 0.27664247  
00:10:06.580 --> 00:10:07.080 That  
NOTE Confidence: 0.9558617  
00:10:08.020 --> 00:10:09.700 yep. Thank you. Okay. So  
NOTE Confidence: 0.9558617  
00:10:09.700 --> 00:10:10.260 what do we have to

NOTE Confidence: 0.9558617  
00:10:10.260 --> 00:10:10.980 do? We have to make  
NOTE Confidence: 0.9558617  
00:10:10.980 --> 00:10:11.720 this differentiation.  
NOTE Confidence: 0.99814445  
00:10:12.020 --> 00:10:13.240 So what is the differentiation  
NOTE Confidence: 0.9270508  
00:10:13.779 --> 00:10:15.394 in our case? It's really  
NOTE Confidence: 0.9270508  
00:10:15.394 --> 00:10:17.254 an act of identifying differences  
NOTE Confidence: 0.9270508  
00:10:17.394 --> 00:10:19.394 between things between entities and  
NOTE Confidence: 0.9270508  
00:10:19.394 --> 00:10:20.595 trying to come up with  
NOTE Confidence: 0.9270508  
00:10:20.595 --> 00:10:21.795 the the sort of the  
NOTE Confidence: 0.9270508  
00:10:21.795 --> 00:10:22.295 sharpest,  
NOTE Confidence: 0.9911521  
00:10:23.074 --> 00:10:24.754 boundaries between them in order  
NOTE Confidence: 0.9911521  
00:10:24.754 --> 00:10:25.894 to tell them apart.  
NOTE Confidence: 0.9930832  
00:10:27.480 --> 00:10:29.400 It's when this principle is  
NOTE Confidence: 0.9930832  
00:10:29.400 --> 00:10:31.160 applied to psychopathology, things can  
NOTE Confidence: 0.9930832  
00:10:31.160 --> 00:10:32.300 get a little complicated.  
NOTE Confidence: 0.9986135  
00:10:32.840 --> 00:10:34.620 The premise here is that,  
NOTE Confidence: 0.8981651

00:10:35.640 --> 00:10:37.420 psychiatric and developmental conditions,  
NOTE Confidence: 0.9887824

00:10:38.280 --> 00:10:39.500 are really manifestations  
NOTE Confidence: 0.92797035

00:10:39.880 --> 00:10:40.840 different kind of,  
NOTE Confidence: 0.9140528

00:10:41.925 --> 00:10:44.105 conditions are manifestations of distinct,  
NOTE Confidence: 0.89932275

00:10:44.565 --> 00:10:45.065 pathophysiology.  
NOTE Confidence: 0.9920996

00:10:46.245 --> 00:10:48.645 And, our role is to  
NOTE Confidence: 0.9920996

00:10:48.645 --> 00:10:49.945 find the boundaries  
NOTE Confidence: 0.91584545

00:10:50.485 --> 00:10:52.645 between these entities and separate  
NOTE Confidence: 0.91584545

00:10:52.645 --> 00:10:53.925 the groups. So separate the  
NOTE Confidence: 0.91584545

00:10:53.925 --> 00:10:55.385 phenotypes into ideologically,  
NOTE Confidence: 0.98342496

00:10:56.429 --> 00:10:58.190 homogeneous groups, groups that will  
NOTE Confidence: 0.98342496

00:10:58.190 --> 00:11:00.450 also have certain clinical significance  
NOTE Confidence: 0.98342496

00:11:00.590 --> 00:11:02.350 in terms of implications for  
NOTE Confidence: 0.98342496

00:11:02.350 --> 00:11:02.850 prognostication  
NOTE Confidence: 0.9944461

00:11:03.309 --> 00:11:04.130 and for treatment.  
NOTE Confidence: 0.9822994

00:11:06.110 --> 00:11:07.950 What's interesting about this approach

NOTE Confidence: 0.9822994

00:11:07.950 --> 00:11:09.470 is that the boundaries are

NOTE Confidence: 0.9822994

00:11:09.470 --> 00:11:11.250 actually refined as our knowledge,

NOTE Confidence: 0.9264289

00:11:11.855 --> 00:11:13.375 expands. And you can see

NOTE Confidence: 0.9264289

00:11:13.375 --> 00:11:14.335 it very well here in

NOTE Confidence: 0.9264289

00:11:14.335 --> 00:11:15.135 the d s in the

NOTE Confidence: 0.9264289

00:11:15.135 --> 00:11:17.315 progression of the diagnostic statistics

NOTE Confidence: 0.9264289

00:11:17.455 --> 00:11:17.955 manual,

NOTE Confidence: 0.83890885

00:11:18.735 --> 00:11:20.335 from very early ages. You

NOTE Confidence: 0.83890885

00:11:20.335 --> 00:11:21.615 see that little thick little

NOTE Confidence: 0.83890885

00:11:21.695 --> 00:11:22.915 thin thin little thing,

NOTE Confidence: 0.8851829

00:11:23.855 --> 00:11:25.695 over time. So becoming more

NOTE Confidence: 0.8851829

00:11:25.695 --> 00:11:27.149 and more thicker,

NOTE Confidence: 0.949381

00:11:27.770 --> 00:11:29.470 as more knowledge is accumulated

NOTE Confidence: 0.949381

00:11:29.610 --> 00:11:31.450 and as things, as as

NOTE Confidence: 0.949381

00:11:31.450 --> 00:11:33.770 the concept diagnostic concepts begin

NOTE Confidence: 0.949381

00:11:33.770 --> 00:11:34.510 to evolve.  
NOTE Confidence: 0.9861605

00:11:35.770 --> 00:11:37.209 A very good example of  
NOTE Confidence: 0.9861605

00:11:37.209 --> 00:11:38.830 this evolution is a concept  
NOTE Confidence: 0.9861605

00:11:38.890 --> 00:11:39.790 of autism.  
NOTE Confidence: 0.959725

00:11:40.515 --> 00:11:41.875 Autism has been around for  
NOTE Confidence: 0.959725

00:11:41.875 --> 00:11:42.995 a while, not quite a  
NOTE Confidence: 0.959725

00:11:42.995 --> 00:11:44.934 century yet as a diagnostic  
NOTE Confidence: 0.959725

00:11:45.155 --> 00:11:46.675 entity. And in nineteen forty  
NOTE Confidence: 0.959725

00:11:46.675 --> 00:11:48.515 three, Kenner described the first,  
NOTE Confidence: 0.948434

00:11:49.715 --> 00:11:51.795 set of of clinical cases,  
NOTE Confidence: 0.948434

00:11:51.795 --> 00:11:53.335 and he called the syndrome,  
NOTE Confidence: 0.95896083

00:11:54.000 --> 00:11:56.500 inborn autistic disturbance of affective  
NOTE Confidence: 0.95896083

00:11:56.720 --> 00:11:57.220 contact.  
NOTE Confidence: 0.996894

00:11:57.600 --> 00:11:58.740 It's a very mouthful,  
NOTE Confidence: 0.9926243

00:11:59.120 --> 00:12:00.100 kind of thing.  
NOTE Confidence: 0.9954893

00:12:01.760 --> 00:12:03.600 This term has been further

NOTE Confidence: 0.9954893  
00:12:03.600 --> 00:12:04.100 refined,  
NOTE Confidence: 0.9347961  
00:12:04.559 --> 00:12:07.125 when, DSM three DSM two  
NOTE Confidence: 0.9347961  
00:12:07.125 --> 00:12:08.644 came on board in the  
NOTE Confidence: 0.9347961  
00:12:08.644 --> 00:12:09.545 nineteen seventies.  
NOTE Confidence: 0.9895253  
00:12:10.485 --> 00:12:11.625 In its label,  
NOTE Confidence: 0.99727356  
00:12:12.005 --> 00:12:13.605 autism was linked very closely  
NOTE Confidence: 0.99727356  
00:12:13.605 --> 00:12:14.345 to schizophrenia.  
NOTE Confidence: 0.9726098  
00:12:14.884 --> 00:12:16.425 It was called childhood schizophrenic  
NOTE Confidence: 0.99886227  
00:12:17.445 --> 00:12:17.945 reaction.  
NOTE Confidence: 0.9717561  
00:12:18.644 --> 00:12:19.144 DSM  
NOTE Confidence: 0.98182195  
00:12:19.649 --> 00:12:21.029 three in nineteen eighty,  
NOTE Confidence: 0.93912786  
00:12:21.569 --> 00:12:23.490 began to recognize the idea  
NOTE Confidence: 0.93912786  
00:12:23.490 --> 00:12:24.850 that autism is a very  
NOTE Confidence: 0.93912786  
00:12:24.850 --> 00:12:26.370 complex disorder. It needs to  
NOTE Confidence: 0.93912786  
00:12:26.370 --> 00:12:28.230 be a very heterogeneous disorder  
NOTE Confidence: 0.93912786

00:12:28.529 --> 00:12:30.050 and perhaps will be better  
NOTE Confidence: 0.93912786

00:12:30.050 --> 00:12:32.389 served if we fractionate it  
NOTE Confidence: 0.93912786

00:12:32.529 --> 00:12:34.865 into different subtypes. In this  
NOTE Confidence: 0.93912786

00:12:34.865 --> 00:12:37.125 case, they called it, infantile  
NOTE Confidence: 0.93912786

00:12:37.345 --> 00:12:39.045 autism and then sub threshold  
NOTE Confidence: 0.82392836

00:12:39.425 --> 00:12:41.285 pervasive developmental disorder.  
NOTE Confidence: 0.9298573

00:12:42.625 --> 00:12:44.785 Nineteen ninety four, comes along,  
NOTE Confidence: 0.9298573

00:12:44.785 --> 00:12:45.925 and Fred Bockmar,  
NOTE Confidence: 0.9924807

00:12:47.339 --> 00:12:48.559 leads the DSM,  
NOTE Confidence: 0.8197471

00:12:49.179 --> 00:12:49.679 for,  
NOTE Confidence: 0.9298731

00:12:50.140 --> 00:12:51.839 task for for autism,  
NOTE Confidence: 0.9587167

00:12:52.140 --> 00:12:53.040 and the fractionation  
NOTE Confidence: 0.7409156

00:12:54.540 --> 00:12:55.040 further,  
NOTE Confidence: 0.90643555

00:12:55.500 --> 00:12:57.279 develops and, Asperger  
NOTE Confidence: 0.98654777

00:12:57.660 --> 00:12:59.520 disorder is added to the,  
NOTE Confidence: 0.9788268

00:12:59.900 --> 00:13:01.120 to the to the fold.



NOTE Confidence: 0.92454445  
00:13:02.595 --> 00:13:03.815 But two thousand thirteen.  
NOTE Confidence: 0.9485102  
00:13:06.355 --> 00:13:08.135 Another roundtable discussion  
NOTE Confidence: 0.96349555  
00:13:08.515 --> 00:13:10.195 results in the ideas that,  
NOTE Confidence: 0.96349555  
00:13:10.195 --> 00:13:11.155 you know, we we would  
NOTE Confidence: 0.96349555  
00:13:11.155 --> 00:13:11.975 like to fractionate,  
NOTE Confidence: 0.92535335  
00:13:12.515 --> 00:13:14.054 this heterogeneous syndrome,  
NOTE Confidence: 0.9775413  
00:13:14.690 --> 00:13:16.050 but we really, don't have  
NOTE Confidence: 0.9775413  
00:13:16.050 --> 00:13:17.090 a good good way of  
NOTE Confidence: 0.9775413  
00:13:17.090 --> 00:13:18.050 doing it. So why don't  
NOTE Confidence: 0.9775413  
00:13:18.050 --> 00:13:18.929 we just put this all  
NOTE Confidence: 0.9775413  
00:13:18.929 --> 00:13:20.790 together into a single category  
NOTE Confidence: 0.97301507  
00:13:21.170 --> 00:13:22.710 called autism spectrum,  
NOTE Confidence: 0.8992131  
00:13:23.170 --> 00:13:23.670 disorder?  
NOTE Confidence: 0.9702259  
00:13:25.730 --> 00:13:27.010 This is I can tell  
NOTE Confidence: 0.9702259  
00:13:27.010 --> 00:13:28.770 you, already, this is twenty  
NOTE Confidence: 0.9702259

00:13:28.770 --> 00:13:30.505 three, eleven years later. I  
NOTE Confidence: 0.9702259

00:13:30.505 --> 00:13:31.464 can tell you that this  
NOTE Confidence: 0.9702259

00:13:31.464 --> 00:13:32.425 is not the end of  
NOTE Confidence: 0.9702259

00:13:32.425 --> 00:13:33.165 the story.  
NOTE Confidence: 0.9962301

00:13:33.704 --> 00:13:34.904 We are beginning to talk  
NOTE Confidence: 0.9962301

00:13:34.904 --> 00:13:36.584 again about fractionation of the  
NOTE Confidence: 0.9962301

00:13:36.584 --> 00:13:37.084 syndrome  
NOTE Confidence: 0.9968836

00:13:37.464 --> 00:13:39.225 into, for instance, something that's  
NOTE Confidence: 0.9968836

00:13:39.225 --> 00:13:40.045 called profound  
NOTE Confidence: 0.93753576

00:13:40.665 --> 00:13:41.165 autism.  
NOTE Confidence: 0.99052924

00:13:41.545 --> 00:13:43.529 So more to come. But  
NOTE Confidence: 0.99052924

00:13:43.529 --> 00:13:44.970 but the idea is that  
NOTE Confidence: 0.99052924

00:13:44.970 --> 00:13:45.950 our diagnostic  
NOTE Confidence: 0.9997267

00:13:46.490 --> 00:13:46.990 boundaries  
NOTE Confidence: 0.94501185

00:13:47.690 --> 00:13:48.910 evolve over time,  
NOTE Confidence: 0.9747348

00:13:49.370 --> 00:13:50.170 and we need to be

NOTE Confidence: 0.9747348  
00:13:50.170 --> 00:13:52.089 mindful of that evolution that  
NOTE Confidence: 0.9747348  
00:13:52.089 --> 00:13:52.970 we are part of the  
NOTE Confidence: 0.9747348  
00:13:52.970 --> 00:13:53.470 process.  
NOTE Confidence: 0.9964919  
00:13:53.850 --> 00:13:55.550 Nothing is written in stone.  
NOTE Confidence: 0.9997247  
00:13:55.995 --> 00:13:56.495 So  
NOTE Confidence: 0.9782942  
00:13:57.835 --> 00:13:59.115 when we think about young  
NOTE Confidence: 0.9782942  
00:13:59.115 --> 00:13:59.615 kids,  
NOTE Confidence: 0.9926766  
00:14:01.515 --> 00:14:03.195 there are a number of  
NOTE Confidence: 0.9926766  
00:14:03.195 --> 00:14:05.214 disorders that either can  
NOTE Confidence: 0.9718383  
00:14:06.154 --> 00:14:07.855 manifest themselves or  
NOTE Confidence: 0.8923006  
00:14:08.700 --> 00:14:09.600 may have prodromal  
NOTE Confidence: 0.9977556  
00:14:09.980 --> 00:14:10.480 characteristics  
NOTE Confidence: 0.9780554  
00:14:10.860 --> 00:14:11.760 already online,  
NOTE Confidence: 0.9551866  
00:14:13.020 --> 00:14:14.140 during the first three years  
NOTE Confidence: 0.9551866  
00:14:14.140 --> 00:14:15.900 of life. Tons of stuff.  
NOTE Confidence: 0.9551866

00:14:15.900 --> 00:14:16.400 Autism,  
NOTE Confidence: 0.9028743

00:14:18.140 --> 00:14:20.800 attention deficit disorder, hyper hyperactivity,  
NOTE Confidence: 0.9797738

00:14:21.785 --> 00:14:24.665 intellectual disabilities, speech disorders, various  
NOTE Confidence: 0.9797738

00:14:24.665 --> 00:14:26.444 speech disorders, learning disorders,  
NOTE Confidence: 0.9836341

00:14:26.985 --> 00:14:28.925 stereotypic movement disorder, anxiety,  
NOTE Confidence: 0.9688728

00:14:29.944 --> 00:14:30.444 conduct,  
NOTE Confidence: 0.9557104

00:14:30.904 --> 00:14:32.425 and and probably a few  
NOTE Confidence: 0.9557104

00:14:32.425 --> 00:14:34.080 others you can name. So  
NOTE Confidence: 0.9557104

00:14:34.080 --> 00:14:35.300 there's a tremendously  
NOTE Confidence: 0.99908066

00:14:35.760 --> 00:14:36.900 dense space  
NOTE Confidence: 0.97668505

00:14:38.080 --> 00:14:39.300 very early on  
NOTE Confidence: 0.9390105

00:14:39.840 --> 00:14:41.200 in which is these these  
NOTE Confidence: 0.9390105

00:14:41.200 --> 00:14:42.640 symptoms can be expressed, and  
NOTE Confidence: 0.9390105

00:14:42.640 --> 00:14:43.920 they would be expressing very  
NOTE Confidence: 0.9390105

00:14:43.920 --> 00:14:45.460 young and immature neurodevelopmental  
NOTE Confidence: 0.9995271

00:14:46.080 --> 00:14:46.580 systems.

NOTE Confidence: 0.96229106  
00:14:48.875 --> 00:14:50.394 I'm going to focus today  
NOTE Confidence: 0.96229106  
00:14:50.394 --> 00:14:51.355 on on two things, on  
NOTE Confidence: 0.96229106  
00:14:51.355 --> 00:14:53.274 autism and ADHD, not because  
NOTE Confidence: 0.96229106  
00:14:53.274 --> 00:14:54.735 I know anything about ADHD,  
NOTE Confidence: 0.96229106  
00:14:54.875 --> 00:14:56.154 but I had to learn  
NOTE Confidence: 0.96229106  
00:14:56.154 --> 00:14:57.514 because Kelly would not let  
NOTE Confidence: 0.96229106  
00:14:57.514 --> 00:14:58.014 me,  
NOTE Confidence: 0.9995349  
00:14:58.555 --> 00:14:59.695 go without that.  
NOTE Confidence: 0.9933588  
00:15:00.270 --> 00:15:01.790 So, I'm going to talk  
NOTE Confidence: 0.9933588  
00:15:01.790 --> 00:15:03.390 about these two disorders because,  
NOTE Confidence: 0.91265917  
00:15:03.870 --> 00:15:04.690 they're actually,  
NOTE Confidence: 0.9497169  
00:15:06.510 --> 00:15:08.270 quite co current, and there's  
NOTE Confidence: 0.9497169  
00:15:08.270 --> 00:15:10.270 some interesting similarities and differences  
NOTE Confidence: 0.9497169  
00:15:10.270 --> 00:15:11.950 between them. And people sometimes  
NOTE Confidence: 0.9497169  
00:15:11.950 --> 00:15:13.310 wonder whether this is maybe  
NOTE Confidence: 0.9497169

00:15:13.310 --> 00:15:14.210 the same thing,  
NOTE Confidence: 0.9840505

00:15:15.215 --> 00:15:17.055 or maybe maybe the symptoms  
NOTE Confidence: 0.9840505

00:15:17.055 --> 00:15:18.675 that we see of ADHD  
NOTE Confidence: 0.9840505

00:15:18.895 --> 00:15:20.575 in autism are completely different  
NOTE Confidence: 0.9840505

00:15:20.575 --> 00:15:21.615 story than when we see  
NOTE Confidence: 0.9840505

00:15:21.615 --> 00:15:23.315 them in, ADHD.  
NOTE Confidence: 0.9318745

00:15:24.095 --> 00:15:25.695 So both types the both  
NOTE Confidence: 0.9318745

00:15:25.695 --> 00:15:27.795 disorders have very early onset,  
NOTE Confidence: 0.9318745

00:15:27.855 --> 00:15:29.135 sometimes before the age of  
NOTE Confidence: 0.9318745

00:15:29.135 --> 00:15:30.195 three or five.  
NOTE Confidence: 0.9947438

00:15:30.610 --> 00:15:31.350 Very high  
NOTE Confidence: 0.9598967

00:15:31.810 --> 00:15:33.990 prevalence, in the population. Tremendous,  
NOTE Confidence: 0.9680107

00:15:34.450 --> 00:15:34.950 heritability,  
NOTE Confidence: 0.8780001

00:15:35.890 --> 00:15:37.750 which suggests that genetic factors  
NOTE Confidence: 0.9963629

00:15:38.450 --> 00:15:39.810 play a very, very important  
NOTE Confidence: 0.9963629

00:15:39.810 --> 00:15:40.310 role.

NOTE Confidence: 0.97228837  
00:15:41.090 --> 00:15:42.790 Unaffected family members,  
NOTE Confidence: 0.8359046  
00:15:43.810 --> 00:15:44.175 have,  
NOTE Confidence: 0.97405756  
00:15:44.815 --> 00:15:46.894 features that are related to  
NOTE Confidence: 0.97405756  
00:15:46.894 --> 00:15:48.255 the to the to the  
NOTE Confidence: 0.97405756  
00:15:48.255 --> 00:15:49.935 disorder. So they in autism,  
NOTE Confidence: 0.97405756  
00:15:49.935 --> 00:15:51.635 we have broader autism phenotype,  
NOTE Confidence: 0.97448915  
00:15:52.015 --> 00:15:52.894 and there's something,  
NOTE Confidence: 0.99801874  
00:15:53.295 --> 00:15:55.475 similar in, in ADHD.  
NOTE Confidence: 0.9609498  
00:15:56.510 --> 00:15:58.350 They are both developmental conditions.  
NOTE Confidence: 0.9609498  
00:15:58.350 --> 00:16:00.670 Symptoms change, evolve over time,  
NOTE Confidence: 0.9609498  
00:16:00.990 --> 00:16:02.770 as children grow and,  
NOTE Confidence: 0.96468043  
00:16:03.870 --> 00:16:04.690 and become,  
NOTE Confidence: 0.9637377  
00:16:05.550 --> 00:16:06.350 become more,  
NOTE Confidence: 0.9990603  
00:16:06.990 --> 00:16:07.490 capable.  
NOTE Confidence: 0.9415301  
00:16:09.075 --> 00:16:11.095 There's higher prevalence in boys.  
NOTE Confidence: 0.97885025

00:16:12.195 --> 00:16:13.955 There's a spectrum severity. Some  
NOTE Confidence: 0.97885025

00:16:13.955 --> 00:16:15.315 kids are very impaired. Some  
NOTE Confidence: 0.97885025

00:16:15.315 --> 00:16:16.855 some are mildly affected.  
NOTE Confidence: 0.9887228

00:16:17.395 --> 00:16:19.175 And each of these conditions  
NOTE Confidence: 0.9887228

00:16:19.315 --> 00:16:21.175 have many co occurring,  
NOTE Confidence: 0.99965245

00:16:22.355 --> 00:16:23.655 conditions as well.  
NOTE Confidence: 0.7361209

00:16:26.149 --> 00:16:26.649 Interesting,  
NOTE Confidence: 0.96012866

00:16:27.589 --> 00:16:28.629 stat there's a number of  
NOTE Confidence: 0.96012866

00:16:28.629 --> 00:16:30.629 studies right now, that suggest  
NOTE Confidence: 0.96012866

00:16:30.629 --> 00:16:32.230 that there's actually quite significant  
NOTE Confidence: 0.96012866

00:16:32.230 --> 00:16:34.310 genetic overlap between autism and  
NOTE Confidence: 0.96012866

00:16:34.310 --> 00:16:36.069 ADHD with about thirty, forty  
NOTE Confidence: 0.96012866

00:16:36.069 --> 00:16:37.750 percent of genes shared between  
NOTE Confidence: 0.96012866

00:16:37.750 --> 00:16:38.410 the two,  
NOTE Confidence: 0.9836682

00:16:38.845 --> 00:16:39.345 disorders.  
NOTE Confidence: 0.9667314

00:16:39.805 --> 00:16:41.565 There are studies emerging on



NOTE Confidence: 0.9667314  
00:16:41.565 --> 00:16:42.705 brain, connectivity,  
NOTE Confidence: 0.9227168  
00:16:43.165 --> 00:16:45.245 brain structure also showing some  
NOTE Confidence: 0.9227168  
00:16:45.245 --> 00:16:45.745 similarities  
NOTE Confidence: 0.97575843  
00:16:46.125 --> 00:16:47.345 as well as differences.  
NOTE Confidence: 0.9736717  
00:16:48.125 --> 00:16:49.485 And about thirty percent of  
NOTE Confidence: 0.9736717  
00:16:49.485 --> 00:16:50.765 kids with autism will have  
NOTE Confidence: 0.9736717  
00:16:50.765 --> 00:16:51.265 ADHD,  
NOTE Confidence: 0.9907972  
00:16:51.725 --> 00:16:52.925 and many more will have  
NOTE Confidence: 0.9907972  
00:16:52.925 --> 00:16:55.399 some symptoms without meeting formal  
NOTE Confidence: 0.99652135  
00:16:55.700 --> 00:16:56.200 diagnosis  
NOTE Confidence: 0.99952924  
00:16:56.740 --> 00:16:57.560 of ADHD.  
NOTE Confidence: 0.99560106  
00:16:58.500 --> 00:17:00.020 Also, about thirty to forty  
NOTE Confidence: 0.99560106  
00:17:00.020 --> 00:17:01.720 percent of kids with ADHD  
NOTE Confidence: 0.9982536  
00:17:02.339 --> 00:17:05.059 will have some elevation of  
NOTE Confidence: 0.9982536  
00:17:05.059 --> 00:17:06.440 symptoms of autism,  
NOTE Confidence: 0.9836417

00:17:07.059 --> 00:17:08.179 be it in a social  
NOTE Confidence: 0.9836417

00:17:08.179 --> 00:17:09.720 or repetitive domains.  
NOTE Confidence: 0.99172765

00:17:11.115 --> 00:17:12.335 Am I doing okay, Kelly?  
NOTE Confidence: 0.9954871

00:17:14.955 --> 00:17:16.234 So, what do we know  
NOTE Confidence: 0.9954871

00:17:16.234 --> 00:17:18.255 about emergence of these two,  
NOTE Confidence: 0.96239865

00:17:19.115 --> 00:17:21.035 syndromes in early childhood? Right?  
NOTE Confidence: 0.96239865

00:17:21.035 --> 00:17:21.994 Because if you want to  
NOTE Confidence: 0.96239865

00:17:21.994 --> 00:17:23.595 differentiate them, we know what  
NOTE Confidence: 0.96239865

00:17:23.595 --> 00:17:24.795 they are, what they look  
NOTE Confidence: 0.96239865

00:17:24.795 --> 00:17:26.560 like. What is the prototype  
NOTE Confidence: 0.96239865

00:17:26.859 --> 00:17:28.619 of autistic toddlers? What is  
NOTE Confidence: 0.96239865

00:17:28.619 --> 00:17:30.220 the prototype of a toddler  
NOTE Confidence: 0.96239865

00:17:30.220 --> 00:17:31.040 with ADHD?  
NOTE Confidence: 0.96908224

00:17:31.660 --> 00:17:32.780 And only if we have  
NOTE Confidence: 0.96908224

00:17:32.780 --> 00:17:34.380 that, we can begin to  
NOTE Confidence: 0.96908224

00:17:34.380 --> 00:17:34.700 make,

NOTE Confidence: 0.8874333  
00:17:35.180 --> 00:17:35.680 differentiations.  
NOTE Confidence: 0.8591722  
00:17:36.700 --> 00:17:37.180 So,  
NOTE Confidence: 0.9550743  
00:17:38.545 --> 00:17:40.225 until about twenty years ago,  
NOTE Confidence: 0.9550743  
00:17:40.225 --> 00:17:41.984 autism was not diagnosed until  
NOTE Confidence: 0.9550743  
00:17:41.984 --> 00:17:42.625 the age,  
NOTE Confidence: 0.94866276  
00:17:43.025 --> 00:17:43.744 five years,  
NOTE Confidence: 0.986904  
00:17:44.065 --> 00:17:44.725 of age.  
NOTE Confidence: 0.97900456  
00:17:45.025 --> 00:17:46.065 And when I came to  
NOTE Confidence: 0.97900456  
00:17:46.065 --> 00:17:46.885 Yale here  
NOTE Confidence: 0.9679761  
00:17:47.185 --> 00:17:48.625 twenty five years ago or  
NOTE Confidence: 0.9679761  
00:17:48.625 --> 00:17:50.325 so, these were the discussions  
NOTE Confidence: 0.9679761  
00:17:50.385 --> 00:17:51.400 Fred and I were having  
NOTE Confidence: 0.9679761  
00:17:51.400 --> 00:17:52.359 that, you know, this is  
NOTE Confidence: 0.9679761  
00:17:52.359 --> 00:17:53.240 the state of the art.  
NOTE Confidence: 0.9679761  
00:17:53.240 --> 00:17:55.320 Anything that's happening could be  
NOTE Confidence: 0.9679761

00:17:55.320 --> 00:17:57.240 earlier. It's really hard to  
NOTE Confidence: 0.9679761

00:17:57.240 --> 00:17:59.080 differentiate from anything, and we  
NOTE Confidence: 0.9679761

00:17:59.080 --> 00:18:00.060 cannot really  
NOTE Confidence: 0.986791

00:18:00.440 --> 00:18:02.060 we don't have right instruments  
NOTE Confidence: 0.986791

00:18:02.280 --> 00:18:03.640 to diagnose kids with with  
NOTE Confidence: 0.986791

00:18:03.640 --> 00:18:04.140 autism.  
NOTE Confidence: 0.9482709

00:18:04.785 --> 00:18:06.225 That changed. You know? Here,  
NOTE Confidence: 0.9482709

00:18:06.225 --> 00:18:07.505 we open in the year  
NOTE Confidence: 0.9482709

00:18:07.505 --> 00:18:08.945 two thousand. We opened one  
NOTE Confidence: 0.9482709

00:18:08.945 --> 00:18:10.145 of the first clinics in  
NOTE Confidence: 0.9482709

00:18:10.145 --> 00:18:11.825 the country that focus on  
NOTE Confidence: 0.9482709

00:18:11.825 --> 00:18:13.025 autism under the age of  
NOTE Confidence: 0.9482709

00:18:13.025 --> 00:18:13.525 three,  
NOTE Confidence: 0.97836167

00:18:14.785 --> 00:18:16.225 which was, which was something  
NOTE Confidence: 0.97836167

00:18:16.225 --> 00:18:18.100 that was extremely innovative at  
NOTE Confidence: 0.97836167

00:18:18.100 --> 00:18:19.700 that point. I'm still happy

NOTE Confidence: 0.97836167  
00:18:19.700 --> 00:18:20.820 to say that we are  
NOTE Confidence: 0.97836167  
00:18:20.820 --> 00:18:22.040 running the same clinic.  
NOTE Confidence: 0.9940953  
00:18:23.300 --> 00:18:23.780 And,  
NOTE Confidence: 0.9281562  
00:18:24.179 --> 00:18:26.100 through our work, through work  
NOTE Confidence: 0.9281562  
00:18:26.100 --> 00:18:27.619 of our colleagues around the  
NOTE Confidence: 0.9281562  
00:18:27.619 --> 00:18:30.015 country, tremendous effort went in  
NOTE Confidence: 0.9281562  
00:18:30.175 --> 00:18:31.715 to understanding the syndrome  
NOTE Confidence: 0.98479813  
00:18:32.255 --> 00:18:33.155 in the first,  
NOTE Confidence: 0.9668761  
00:18:34.015 --> 00:18:35.875 in in in in toddler's  
NOTE Confidence: 0.9668761  
00:18:36.015 --> 00:18:37.135 second or third year of  
NOTE Confidence: 0.9668761  
00:18:37.135 --> 00:18:37.635 life.  
NOTE Confidence: 0.98332804  
00:18:38.494 --> 00:18:40.015 We found out that, yes,  
NOTE Confidence: 0.98332804  
00:18:40.015 --> 00:18:40.755 we can,  
NOTE Confidence: 0.9988527  
00:18:41.135 --> 00:18:41.635 identify  
NOTE Confidence: 0.9011928  
00:18:41.935 --> 00:18:44.035 symptoms in nonverbal and developmental  
NOTE Confidence: 0.83872586

00:18:44.415 --> 00:18:46.230 light kids that are specific  
NOTE Confidence: 0.83872586

00:18:46.289 --> 00:18:46.950 to autism.  
NOTE Confidence: 0.9788065

00:18:47.330 --> 00:18:48.369 There's a whole list of  
NOTE Confidence: 0.9788065

00:18:48.369 --> 00:18:48.869 them.  
NOTE Confidence: 0.8785387

00:18:49.490 --> 00:18:50.390 And also,  
NOTE Confidence: 0.99490786

00:18:51.169 --> 00:18:51.830 our colleagues,  
NOTE Confidence: 0.83256423

00:18:52.289 --> 00:18:54.230 including Cathy Lord have developed,  
NOTE Confidence: 0.9981558

00:18:54.850 --> 00:18:57.169 valid and reliable instruments for  
NOTE Confidence: 0.9981558

00:18:57.169 --> 00:18:57.669 quantifying  
NOTE Confidence: 0.981037

00:18:57.970 --> 00:18:59.794 these symptoms in very, very  
NOTE Confidence: 0.981037

00:19:00.014 --> 00:19:01.315 young kids. So  
NOTE Confidence: 0.99138254

00:19:01.615 --> 00:19:02.835 so we've made tremendous  
NOTE Confidence: 0.99890774

00:19:03.534 --> 00:19:05.075 progress in understanding  
NOTE Confidence: 0.9801562

00:19:05.455 --> 00:19:07.315 what a prototype of autism  
NOTE Confidence: 0.9801562

00:19:07.375 --> 00:19:08.815 might look like in very  
NOTE Confidence: 0.9801562

00:19:08.815 --> 00:19:09.315 early

NOTE Confidence: 0.9951793  
00:19:09.615 --> 00:19:10.115 ages.  
NOTE Confidence: 0.9749655  
00:19:10.575 --> 00:19:11.534 And, of course, we had  
NOTE Confidence: 0.9749655  
00:19:11.534 --> 00:19:12.575 to ask the question, is  
NOTE Confidence: 0.9749655  
00:19:12.575 --> 00:19:14.195 there anything else happening,  
NOTE Confidence: 0.91340536  
00:19:14.600 --> 00:19:16.780 before that during this prodromal  
NOTE Confidence: 0.91340536  
00:19:16.920 --> 00:19:18.520 stage between birth and the  
NOTE Confidence: 0.91340536  
00:19:18.520 --> 00:19:19.420 second birthday?  
NOTE Confidence: 0.6127944  
00:19:20.359 --> 00:19:21.180 First birthday,  
NOTE Confidence: 0.99707913  
00:19:22.280 --> 00:19:22.780 complex  
NOTE Confidence: 0.9855698  
00:19:23.880 --> 00:19:25.980 conditions do not arise overnight.  
NOTE Confidence: 0.99943984  
00:19:26.359 --> 00:19:27.720 There's got to be something  
NOTE Confidence: 0.99943984  
00:19:27.720 --> 00:19:28.700 else happening  
NOTE Confidence: 0.98864627  
00:19:29.240 --> 00:19:30.705 in the brain, in the  
NOTE Confidence: 0.98864627  
00:19:30.705 --> 00:19:32.645 behavior that is forecasting  
NOTE Confidence: 0.96690655  
00:19:33.105 --> 00:19:34.804 later emergence of the syndrome.  
NOTE Confidence: 0.96690655

00:19:35.025 --> 00:19:35.684 And, indeed,  
NOTE Confidence: 0.99106807

00:19:36.145 --> 00:19:37.205 lots of work  
NOTE Confidence: 0.91769946

00:19:37.744 --> 00:19:40.065 went into studying younger siblings  
NOTE Confidence: 0.91769946

00:19:40.065 --> 00:19:41.505 of children with autism who  
NOTE Confidence: 0.91769946

00:19:41.505 --> 00:19:41.905 have,  
NOTE Confidence: 0.99424124

00:19:42.385 --> 00:19:43.924 elevated risk for developing,  
NOTE Confidence: 0.8513422

00:19:44.304 --> 00:19:44.965 the disorder.  
NOTE Confidence: 0.9934766

00:19:45.769 --> 00:19:46.269 And,  
NOTE Confidence: 0.9745822

00:19:47.609 --> 00:19:48.649 and work here,  
NOTE Confidence: 0.984985

00:19:48.970 --> 00:19:50.510 in our lab, for instance,  
NOTE Confidence: 0.9816886

00:19:51.609 --> 00:19:52.109 documented,  
NOTE Confidence: 0.86001825

00:19:52.889 --> 00:19:53.389 that,  
NOTE Confidence: 0.9839991

00:19:54.330 --> 00:19:56.010 way before symptoms of autism  
NOTE Confidence: 0.9839991

00:19:56.010 --> 00:19:57.450 come online, we can see  
NOTE Confidence: 0.9839991

00:19:57.450 --> 00:19:57.950 attentional,  
NOTE Confidence: 0.9612088

00:19:59.215 --> 00:20:00.894 vulnerabilities in six month old



NOTE Confidence: 0.9612088

00:20:00.894 --> 00:20:02.414 babies more recently. We are

NOTE Confidence: 0.9612088

00:20:02.414 --> 00:20:03.875 looking actually at the,

NOTE Confidence: 0.9236315

00:20:04.255 --> 00:20:04.734 brain,

NOTE Confidence: 0.9836175

00:20:05.135 --> 00:20:07.234 structure and connectivity in neonates

NOTE Confidence: 0.9836175

00:20:07.375 --> 00:20:09.375 in relation to later outcomes

NOTE Confidence: 0.9836175

00:20:09.375 --> 00:20:10.274 in these siblings.

NOTE Confidence: 0.99562824

00:20:10.940 --> 00:20:11.419 So,

NOTE Confidence: 0.9646478

00:20:11.900 --> 00:20:13.740 lots of work, happening in

NOTE Confidence: 0.9646478

00:20:13.740 --> 00:20:14.480 that space,

NOTE Confidence: 0.99340665

00:20:14.859 --> 00:20:17.020 and, and it's definitely more

NOTE Confidence: 0.99340665

00:20:17.020 --> 00:20:17.679 to come.

NOTE Confidence: 0.9956613

00:20:18.380 --> 00:20:19.440 In that context,

NOTE Confidence: 0.95321935

00:20:19.740 --> 00:20:20.540 if I can make a

NOTE Confidence: 0.95321935

00:20:20.540 --> 00:20:22.220 quick plug, we are just

NOTE Confidence: 0.95321935

00:20:22.220 --> 00:20:23.179 starting a new,

NOTE Confidence: 0.9884612

00:20:24.075 --> 00:20:25.674 study that's focused on brain  
NOTE Confidence: 0.9884612

00:20:25.674 --> 00:20:26.174 imaging  
NOTE Confidence: 0.9978007

00:20:26.635 --> 00:20:27.455 in newborns.  
NOTE Confidence: 0.9724219

00:20:28.154 --> 00:20:29.434 So if you're pregnant, if  
NOTE Confidence: 0.9724219

00:20:29.434 --> 00:20:30.794 you're thinking of getting pregnant,  
NOTE Confidence: 0.9724219

00:20:30.794 --> 00:20:31.835 if you know someone who's  
NOTE Confidence: 0.9724219

00:20:31.835 --> 00:20:32.955 pregnant, or if you know  
NOTE Confidence: 0.9724219

00:20:32.955 --> 00:20:34.154 someone who's pregnant who has  
NOTE Confidence: 0.9724219

00:20:34.154 --> 00:20:35.595 a family member of a  
NOTE Confidence: 0.9724219

00:20:35.595 --> 00:20:37.355 child with autism, do let  
NOTE Confidence: 0.9724219

00:20:37.355 --> 00:20:38.015 us know.  
NOTE Confidence: 0.9910517

00:20:38.850 --> 00:20:40.609 We'll be delighted delighted to  
NOTE Confidence: 0.9910517

00:20:40.609 --> 00:20:41.750 say hello to them.  
NOTE Confidence: 0.9960189

00:20:43.090 --> 00:20:44.550 So what's happening,  
NOTE Confidence: 0.9488925

00:20:45.090 --> 00:20:47.090 in ADHD? Again, we're looking  
NOTE Confidence: 0.9488925

00:20:47.090 --> 00:20:48.210 for a prototype. What do

NOTE Confidence: 0.9488925  
00:20:48.210 --> 00:20:49.490 we know about ADHD in  
NOTE Confidence: 0.9488925  
00:20:49.490 --> 00:20:50.930 young kids? Same stories with  
NOTE Confidence: 0.9488925  
00:20:50.930 --> 00:20:51.430 autism.  
NOTE Confidence: 0.97567767  
00:20:52.369 --> 00:20:54.210 Not typically diagnosed until the  
NOTE Confidence: 0.97567767  
00:20:54.210 --> 00:20:55.865 age of five. People started  
NOTE Confidence: 0.97567767  
00:20:55.865 --> 00:20:58.445 asking questions what's happening before  
NOTE Confidence: 0.8680868  
00:20:58.984 --> 00:21:00.044 for good reasons,  
NOTE Confidence: 0.97285163  
00:21:00.345 --> 00:21:01.865 including the fact that the  
NOTE Confidence: 0.97285163  
00:21:01.865 --> 00:21:03.405 parents were telling everyone.  
NOTE Confidence: 0.9777657  
00:21:03.945 --> 00:21:05.544 My child always was like  
NOTE Confidence: 0.9777657  
00:21:05.544 --> 00:21:07.065 that. Why are we talking  
NOTE Confidence: 0.9777657  
00:21:07.065 --> 00:21:07.565 about  
NOTE Confidence: 0.9477437  
00:21:07.865 --> 00:21:09.085 the diagnosis now?  
NOTE Confidence: 0.98608065  
00:21:09.690 --> 00:21:10.190 So,  
NOTE Confidence: 0.94552267  
00:21:11.289 --> 00:21:12.649 there has been some research  
NOTE Confidence: 0.94552267

00:21:12.649 --> 00:21:14.190 in that space, but certainly  
NOTE Confidence: 0.94552267

00:21:14.250 --> 00:21:15.529 not as much as we  
NOTE Confidence: 0.94552267

00:21:15.529 --> 00:21:16.889 did as as it happened  
NOTE Confidence: 0.94552267

00:21:16.889 --> 00:21:17.549 in autism.  
NOTE Confidence: 0.94931614

00:21:18.570 --> 00:21:20.010 There has been some research  
NOTE Confidence: 0.94931614

00:21:20.010 --> 00:21:22.475 on fine tuning diagnostic criteria  
NOTE Confidence: 0.97491324

00:21:22.934 --> 00:21:24.335 so they can be extended  
NOTE Confidence: 0.97491324

00:21:24.335 --> 00:21:25.994 to kids who are younger  
NOTE Confidence: 0.9712479

00:21:26.455 --> 00:21:27.734 by excluding some of the  
NOTE Confidence: 0.9712479

00:21:27.734 --> 00:21:29.174 verbal items. So that was  
NOTE Confidence: 0.9712479

00:21:29.174 --> 00:21:29.674 great.  
NOTE Confidence: 0.9792154

00:21:30.455 --> 00:21:31.815 And research in this space  
NOTE Confidence: 0.9792154

00:21:31.815 --> 00:21:33.655 is actually quite spare. It's  
NOTE Confidence: 0.9792154

00:21:33.655 --> 00:21:35.355 it's largely focused on temperamental  
NOTE Confidence: 0.9153498

00:21:35.655 --> 00:21:36.155 indices  
NOTE Confidence: 0.94567657

00:21:36.695 --> 00:21:39.170 where researchers ask parents to

NOTE Confidence: 0.94567657  
00:21:39.170 --> 00:21:41.030 rate their children along multiple  
NOTE Confidence: 0.94567657  
00:21:41.170 --> 00:21:41.670 dimensions  
NOTE Confidence: 0.66502136  
00:21:42.369 --> 00:21:43.990 and, children, the  
NOTE Confidence: 0.88639325  
00:21:44.450 --> 00:21:45.350 tend to have,  
NOTE Confidence: 0.903209  
00:21:46.050 --> 00:21:47.970 surprisingly, or maybe not high  
NOTE Confidence: 0.903209  
00:21:47.970 --> 00:21:49.515 activity level, elevated  
NOTE Confidence: 0.96420383  
00:21:50.475 --> 00:21:52.415 propensity to respond with negative  
NOTE Confidence: 0.96420383  
00:21:52.475 --> 00:21:54.575 affect to, challenges, environmental  
NOTE Confidence: 0.85689306  
00:21:55.115 --> 00:21:55.615 challenges,  
NOTE Confidence: 0.9376409  
00:21:55.994 --> 00:21:57.375 and difficulty sustaining  
NOTE Confidence: 0.9912521  
00:21:57.755 --> 00:21:58.255 attention.  
NOTE Confidence: 0.9975411  
00:21:58.875 --> 00:22:00.234 And they also may may  
NOTE Confidence: 0.9975411  
00:22:00.234 --> 00:22:01.295 show some elevated,  
NOTE Confidence: 0.8209928  
00:22:02.635 --> 00:22:04.494 social and repetitive behaviors,  
NOTE Confidence: 0.9870427  
00:22:05.380 --> 00:22:07.220 that are typically associated with  
NOTE Confidence: 0.9870427

00:22:07.220 --> 00:22:07.720 autism.  
NOTE Confidence: 0.9960303

00:22:09.220 --> 00:22:09.720 But,  
NOTE Confidence: 0.9657433

00:22:10.180 --> 00:22:11.540 we know much less about  
NOTE Confidence: 0.9657433

00:22:11.540 --> 00:22:13.540 them, as we, know about  
NOTE Confidence: 0.9657433

00:22:13.540 --> 00:22:14.980 toddlers with autism. And when  
NOTE Confidence: 0.9657433

00:22:14.980 --> 00:22:17.060 we think about potential prodrome,  
NOTE Confidence: 0.9657433

00:22:17.060 --> 00:22:18.135 we are not even calling  
NOTE Confidence: 0.9657433

00:22:18.135 --> 00:22:19.734 it necessarily a prodrome yet  
NOTE Confidence: 0.9657433

00:22:19.734 --> 00:22:20.475 in ADHD.  
NOTE Confidence: 0.991255

00:22:21.175 --> 00:22:22.455 There is not much work.  
NOTE Confidence: 0.991255

00:22:22.455 --> 00:22:24.315 There's some work on on,  
NOTE Confidence: 0.9634788

00:22:25.415 --> 00:22:27.035 babies who later were diagnosed  
NOTE Confidence: 0.9634788

00:22:27.095 --> 00:22:28.535 with autism, and and they  
NOTE Confidence: 0.9634788

00:22:28.535 --> 00:22:30.369 also this research also suggests  
NOTE Confidence: 0.9634788

00:22:30.369 --> 00:22:31.510 that there are some temperamental  
NOTE Confidence: 0.9634788

00:22:31.650 --> 00:22:32.150 markers

NOTE Confidence: 0.98992777  
00:22:32.770 --> 00:22:33.990 temperamental features,  
NOTE Confidence: 0.9636819  
00:22:35.090 --> 00:22:36.130 that are seen in kids  
NOTE Confidence: 0.9636819  
00:22:36.130 --> 00:22:37.570 who develop autism, but these  
NOTE Confidence: 0.9636819  
00:22:37.570 --> 00:22:39.730 are not diagnostic markers. None  
NOTE Confidence: 0.9636819  
00:22:39.730 --> 00:22:41.330 of these are specific to  
NOTE Confidence: 0.9636819  
00:22:41.330 --> 00:22:41.830 autism.  
NOTE Confidence: 0.98449326  
00:22:42.289 --> 00:22:43.650 ADHD, they are seen in  
NOTE Confidence: 0.98449326  
00:22:43.650 --> 00:22:44.470 other kids.  
NOTE Confidence: 0.9421951  
00:22:44.865 --> 00:22:45.365 So,  
NOTE Confidence: 0.8439779  
00:22:47.905 --> 00:22:49.365 very, very limited.  
NOTE Confidence: 0.9838908  
00:22:49.744 --> 00:22:50.625 I wish, you know, if  
NOTE Confidence: 0.9838908  
00:22:50.625 --> 00:22:51.585 this was my wish, if  
NOTE Confidence: 0.9838908  
00:22:51.585 --> 00:22:52.705 I could do anything, if  
NOTE Confidence: 0.9838908  
00:22:52.705 --> 00:22:53.825 I had the same money  
NOTE Confidence: 0.9838908  
00:22:53.825 --> 00:22:54.965 as, Bezos,  
NOTE Confidence: 0.8963083

00:22:55.425 --> 00:22:56.880 I would invest it really  
NOTE Confidence: 0.8963083

00:22:57.119 --> 00:22:59.119 into trying to understand the  
NOTE Confidence: 0.8963083

00:22:59.119 --> 00:23:00.880 early program of, a lot  
NOTE Confidence: 0.8963083

00:23:00.880 --> 00:23:02.820 of the new developmental conditions,  
NOTE Confidence: 0.97921574

00:23:03.680 --> 00:23:04.800 because this is the time  
NOTE Confidence: 0.97921574

00:23:04.800 --> 00:23:05.540 and space,  
NOTE Confidence: 0.8965127

00:23:06.160 --> 00:23:07.140 for doing that,  
NOTE Confidence: 0.99325633

00:23:07.600 --> 00:23:08.560 but we are not quite  
NOTE Confidence: 0.99325633

00:23:08.560 --> 00:23:09.595 there yet. So what are  
NOTE Confidence: 0.99325633

00:23:09.595 --> 00:23:10.734 the clinical implications?  
NOTE Confidence: 0.98957765

00:23:11.355 --> 00:23:13.195 So I I'm eternally grateful  
NOTE Confidence: 0.98957765

00:23:13.195 --> 00:23:14.955 to Kelly, Mariana, and Chelsea  
NOTE Confidence: 0.98957765

00:23:14.955 --> 00:23:16.255 for helping with this table,  
NOTE Confidence: 0.989754

00:23:16.794 --> 00:23:18.335 which basically summarizes,  
NOTE Confidence: 0.88939536

00:23:19.274 --> 00:23:19.674 clinical,  
NOTE Confidence: 0.9997578

00:23:21.514 --> 00:23:22.014 wisdom



NOTE Confidence: 0.9729912  
00:23:22.740 --> 00:23:24.100 of, you know, what happens  
NOTE Confidence: 0.9729912  
00:23:24.100 --> 00:23:24.900 when you get into the  
NOTE Confidence: 0.9729912  
00:23:24.900 --> 00:23:26.260 room with with a toddler.  
NOTE Confidence: 0.9729912  
00:23:26.260 --> 00:23:27.780 The toddler's climbing the walls,  
NOTE Confidence: 0.9729912  
00:23:27.780 --> 00:23:29.400 not really responding to name,  
NOTE Confidence: 0.9729912  
00:23:29.700 --> 00:23:31.160 not really looking necessarily  
NOTE Confidence: 0.9351145  
00:23:31.540 --> 00:23:32.440 in in the eyes,  
NOTE Confidence: 0.9738749  
00:23:32.980 --> 00:23:35.140 and not playing so well  
NOTE Confidence: 0.9738749  
00:23:35.140 --> 00:23:36.585 that you could say, okay.  
NOTE Confidence: 0.9738749  
00:23:36.585 --> 00:23:37.945 They they are finding that  
NOTE Confidence: 0.9738749  
00:23:37.945 --> 00:23:38.445 domain.  
NOTE Confidence: 0.92114764  
00:23:39.065 --> 00:23:40.185 So how do you how  
NOTE Confidence: 0.92114764  
00:23:40.185 --> 00:23:41.625 do you separate? How do  
NOTE Confidence: 0.92114764  
00:23:41.625 --> 00:23:43.225 you make a differentiation whether  
NOTE Confidence: 0.92114764  
00:23:43.225 --> 00:23:44.925 on a no. These difficulties  
NOTE Confidence: 0.92114764

00:23:45.145 --> 00:23:45.965 are due to  
NOTE Confidence: 0.8614589

00:23:46.345 --> 00:23:47.484 social disability  
NOTE Confidence: 0.9995243

00:23:48.409 --> 00:23:49.070 or attentional  
NOTE Confidence: 0.97273195

00:23:49.450 --> 00:23:49.950 challenges.  
NOTE Confidence: 0.99916226

00:23:51.130 --> 00:23:52.250 I could spend an hour  
NOTE Confidence: 0.99916226

00:23:52.250 --> 00:23:53.690 talking about this table, but  
NOTE Confidence: 0.99916226

00:23:53.690 --> 00:23:55.070 I can only I can  
NOTE Confidence: 0.9644471

00:23:55.369 --> 00:23:56.830 plug some of these things.  
NOTE Confidence: 0.9644471

00:23:56.890 --> 00:23:57.789 So for instance,  
NOTE Confidence: 0.9978471

00:23:59.450 --> 00:24:01.470 young kids, preschoolers with autism,  
NOTE Confidence: 0.8053922

00:24:01.770 --> 00:24:02.990 ADHD have  
NOTE Confidence: 0.98897046

00:24:03.445 --> 00:24:04.744 often elevated scores  
NOTE Confidence: 0.9871165

00:24:05.205 --> 00:24:06.984 on screeners for autism.  
NOTE Confidence: 0.90842134

00:24:08.244 --> 00:24:09.465 It could be an AMCHAT,  
NOTE Confidence: 0.90842134

00:24:09.605 --> 00:24:10.105 SRS,  
NOTE Confidence: 0.9392201

00:24:10.805 --> 00:24:12.725 maybe even an ADOS based

NOTE Confidence: 0.9392201  
00:24:12.725 --> 00:24:13.765 on the work we do  
NOTE Confidence: 0.9392201  
00:24:13.765 --> 00:24:15.225 in our in our clinic.  
NOTE Confidence: 0.99517006  
00:24:16.359 --> 00:24:18.119 So, in the context of  
NOTE Confidence: 0.99517006  
00:24:18.119 --> 00:24:19.640 face to face interaction, they  
NOTE Confidence: 0.99517006  
00:24:19.640 --> 00:24:21.400 might not make eye contact.  
NOTE Confidence: 0.99517006  
00:24:21.400 --> 00:24:22.220 They may have  
NOTE Confidence: 0.9823988  
00:24:22.679 --> 00:24:23.960 a problem with they might  
NOTE Confidence: 0.9823988  
00:24:23.960 --> 00:24:25.080 be a little grabby. They  
NOTE Confidence: 0.9823988  
00:24:25.080 --> 00:24:26.039 might be getting in your  
NOTE Confidence: 0.9823988  
00:24:26.039 --> 00:24:27.240 space. They might be not  
NOTE Confidence: 0.9823988  
00:24:27.240 --> 00:24:28.715 looking at you and so  
NOTE Confidence: 0.9823988  
00:24:28.855 --> 00:24:30.455 forth. And and what we  
NOTE Confidence: 0.9823988  
00:24:30.455 --> 00:24:31.975 found the most important is  
NOTE Confidence: 0.9823988  
00:24:31.975 --> 00:24:33.195 to consider context  
NOTE Confidence: 0.9858444  
00:24:33.494 --> 00:24:34.835 and manipulate the,  
NOTE Confidence: 0.9937145

00:24:36.215 --> 00:24:36.715 environmental  
NOTE Confidence: 0.998466

00:24:37.015 --> 00:24:37.515 variables  
NOTE Confidence: 0.99461967

00:24:38.054 --> 00:24:39.255 to see whether we can  
NOTE Confidence: 0.99461967

00:24:39.255 --> 00:24:40.875 enhance the child's engagement  
NOTE Confidence: 0.91832477

00:24:41.760 --> 00:24:44.100 by, limiting number of distractions  
NOTE Confidence: 0.92078984

00:24:44.400 --> 00:24:46.160 by scaffolding in in in  
NOTE Confidence: 0.92078984

00:24:46.160 --> 00:24:46.900 some ways.  
NOTE Confidence: 0.93356067

00:24:48.320 --> 00:24:49.280 And if we can do  
NOTE Confidence: 0.93356067

00:24:49.280 --> 00:24:50.720 that, we can say safely,  
NOTE Confidence: 0.93356067

00:24:50.720 --> 00:24:51.760 okay. This child is not  
NOTE Confidence: 0.93356067

00:24:51.760 --> 00:24:52.560 really making a lot of  
NOTE Confidence: 0.93356067

00:24:52.560 --> 00:24:53.780 eye contact, but,  
NOTE Confidence: 0.9970622

00:24:54.565 --> 00:24:55.865 because he's so distracted  
NOTE Confidence: 0.98492306

00:24:56.165 --> 00:24:57.845 by everything. He's he needs  
NOTE Confidence: 0.98492306

00:24:57.845 --> 00:24:58.805 to grab everything at the  
NOTE Confidence: 0.98492306

00:24:58.805 --> 00:24:59.845 same time and,

NOTE Confidence: 0.94672436  
00:25:00.244 --> 00:25:01.145 climb the walls.  
NOTE Confidence: 0.9857008  
00:25:01.525 --> 00:25:03.365 So, his social engagement is  
NOTE Confidence: 0.9857008  
00:25:03.365 --> 00:25:03.845 a little,  
NOTE Confidence: 0.77547747  
00:25:04.325 --> 00:25:05.705 law on a lower side.  
NOTE Confidence: 0.96447355  
00:25:07.540 --> 00:25:09.220 Same goes with with language.  
NOTE Confidence: 0.96447355  
00:25:09.220 --> 00:25:10.820 We see language delay across  
NOTE Confidence: 0.96447355  
00:25:10.820 --> 00:25:12.119 developmental conditions.  
NOTE Confidence: 0.9223068  
00:25:13.300 --> 00:25:14.980 Again, what's important for us  
NOTE Confidence: 0.9223068  
00:25:14.980 --> 00:25:16.740 is ability to communicate without  
NOTE Confidence: 0.9223068  
00:25:16.740 --> 00:25:18.760 words in autism is profoundly  
NOTE Confidence: 0.9223068  
00:25:18.980 --> 00:25:19.480 affected  
NOTE Confidence: 0.6306635  
00:25:20.180 --> 00:25:20.655 and,  
NOTE Confidence: 0.8312772  
00:25:21.215 --> 00:25:21.715 and,  
NOTE Confidence: 0.9855953  
00:25:23.855 --> 00:25:25.535 scaffolding it in a context  
NOTE Confidence: 0.9855953  
00:25:25.535 --> 00:25:26.915 of social interaction  
NOTE Confidence: 0.92199516

00:25:27.215 --> 00:25:28.755 hardly ever makes it better,  
NOTE Confidence: 0.92199516

00:25:28.895 --> 00:25:30.095 where it whereas it makes  
NOTE Confidence: 0.92199516

00:25:30.095 --> 00:25:31.375 it much better for kids  
NOTE Confidence: 0.92199516

00:25:31.375 --> 00:25:33.635 with ADHD or other conditions.  
NOTE Confidence: 0.9713812

00:25:34.840 --> 00:25:36.059 Kids, with ADHD  
NOTE Confidence: 0.9855229

00:25:36.440 --> 00:25:37.899 often also show,  
NOTE Confidence: 0.9665607

00:25:38.519 --> 00:25:39.740 repetitive behaviors,  
NOTE Confidence: 0.9280004

00:25:41.399 --> 00:25:44.039 motor therapy, sensory interests, which  
NOTE Confidence: 0.9280004

00:25:44.039 --> 00:25:45.880 are often seen in autism,  
NOTE Confidence: 0.9280004

00:25:45.880 --> 00:25:47.734 and and that often makes  
NOTE Confidence: 0.9280004

00:25:47.734 --> 00:25:49.095 people think, oh, wow. This  
NOTE Confidence: 0.9280004

00:25:49.095 --> 00:25:50.875 kid must have ate, autism.  
NOTE Confidence: 0.9969413

00:25:52.135 --> 00:25:53.914 But, first of all,  
NOTE Confidence: 0.8341708

00:25:55.414 --> 00:25:56.615 therapy or or more or,  
NOTE Confidence: 0.8341708

00:25:56.934 --> 00:25:58.855 repetitive behaviors are not specific  
NOTE Confidence: 0.8341708

00:25:58.855 --> 00:25:59.515 to autism.

NOTE Confidence: 0.9573541  
00:25:59.970 --> 00:26:01.570 They're also present in multiple  
NOTE Confidence: 0.9573541  
00:26:01.570 --> 00:26:03.010 conditions. So in and of  
NOTE Confidence: 0.9573541  
00:26:03.010 --> 00:26:05.010 themselves, they are not good  
NOTE Confidence: 0.9573541  
00:26:05.010 --> 00:26:05.510 diagnostic  
NOTE Confidence: 0.99925566  
00:26:06.210 --> 00:26:06.710 indicator.  
NOTE Confidence: 0.99657196  
00:26:08.850 --> 00:26:10.450 So, all of this is  
NOTE Confidence: 0.99657196  
00:26:10.450 --> 00:26:10.929 not,  
NOTE Confidence: 0.88560694  
00:26:11.330 --> 00:26:12.290 is not really,  
NOTE Confidence: 0.9432009  
00:26:12.770 --> 00:26:13.909 a a matter of academic  
NOTE Confidence: 0.9432009  
00:26:14.130 --> 00:26:15.169 discussion because,  
NOTE Confidence: 0.9678465  
00:26:16.105 --> 00:26:18.365 children who have, dual diagnosis,  
NOTE Confidence: 0.9363319  
00:26:18.825 --> 00:26:19.965 autism and ADHD,  
NOTE Confidence: 0.9802338  
00:26:20.744 --> 00:26:22.264 typically do much worse than  
NOTE Confidence: 0.9802338  
00:26:22.264 --> 00:26:24.044 children who only have autism.  
NOTE Confidence: 0.93707424  
00:26:24.345 --> 00:26:26.105 And that's true of school  
NOTE Confidence: 0.93707424

00:26:26.105 --> 00:26:27.784 age children and also true  
NOTE Confidence: 0.93707424

00:26:27.784 --> 00:26:28.445 of children,  
NOTE Confidence: 0.9948136

00:26:29.080 --> 00:26:30.119 who are much younger, who  
NOTE Confidence: 0.9948136

00:26:30.119 --> 00:26:30.780 are preschoolers.  
NOTE Confidence: 0.99707675

00:26:31.800 --> 00:26:33.160 And for that reason, we  
NOTE Confidence: 0.99707675

00:26:33.160 --> 00:26:35.020 need to try to include  
NOTE Confidence: 0.99707675

00:26:35.080 --> 00:26:37.180 screenings for screening for ADHD,  
NOTE Confidence: 0.9864325

00:26:38.200 --> 00:26:40.460 for, even very young kids,  
NOTE Confidence: 0.9864325

00:26:40.760 --> 00:26:42.600 in order to identify potential  
NOTE Confidence: 0.9864325

00:26:42.600 --> 00:26:43.960 risk factors, which are going  
NOTE Confidence: 0.9864325

00:26:43.960 --> 00:26:44.700 to actually  
NOTE Confidence: 0.9947029

00:26:45.345 --> 00:26:46.705 affect their outcomes in a  
NOTE Confidence: 0.9947029

00:26:46.705 --> 00:26:48.645 very, very significant way.  
NOTE Confidence: 0.94143736

00:26:50.625 --> 00:26:51.125 So,  
NOTE Confidence: 0.96489775

00:26:54.385 --> 00:26:56.145 given the complexity of our  
NOTE Confidence: 0.96489775

00:26:56.145 --> 00:26:57.665 tasks in clinics on a



NOTE Confidence: 0.96489775  
00:26:57.665 --> 00:26:58.804 on a daily basis,  
NOTE Confidence: 0.9994661  
00:26:59.200 --> 00:27:00.640 we need to consider several  
NOTE Confidence: 0.9994661  
00:27:00.640 --> 00:27:01.140 things.  
NOTE Confidence: 0.9693744  
00:27:01.920 --> 00:27:03.680 Whatever we do, however we  
NOTE Confidence: 0.9693744  
00:27:03.680 --> 00:27:04.980 differ try to differentiate  
NOTE Confidence: 0.94760054  
00:27:05.359 --> 00:27:06.720 what we see is going  
NOTE Confidence: 0.94760054  
00:27:06.720 --> 00:27:08.020 to depend tremendously  
NOTE Confidence: 0.99646735  
00:27:08.400 --> 00:27:09.940 on the quality of information  
NOTE Confidence: 0.99646735  
00:27:10.080 --> 00:27:11.460 that's available to us.  
NOTE Confidence: 0.9062636  
00:27:12.105 --> 00:27:12.765 And yet,  
NOTE Confidence: 0.999346  
00:27:13.785 --> 00:27:14.765 across the world,  
NOTE Confidence: 0.99962837  
00:27:15.385 --> 00:27:17.565 we are facing tremendous pressure  
NOTE Confidence: 0.960907  
00:27:18.105 --> 00:27:20.665 to simplify diagnostic processes, to  
NOTE Confidence: 0.960907  
00:27:20.665 --> 00:27:22.184 do less, to do more  
NOTE Confidence: 0.960907  
00:27:22.184 --> 00:27:22.925 with less,  
NOTE Confidence: 0.98804355

00:27:23.865 --> 00:27:24.365 to,  
NOTE Confidence: 0.9885675

00:27:24.905 --> 00:27:27.165 use screening instruments instead of,  
NOTE Confidence: 0.97544986

00:27:28.720 --> 00:27:29.700 instead of more,  
NOTE Confidence: 0.94499934

00:27:30.240 --> 00:27:30.740 direct,  
NOTE Confidence: 0.9391749

00:27:31.279 --> 00:27:33.760 assessment methods, and use less  
NOTE Confidence: 0.9391749

00:27:33.760 --> 00:27:35.760 experienced clinicians to in to  
NOTE Confidence: 0.9391749

00:27:35.760 --> 00:27:38.100 interpret this data, make decisions  
NOTE Confidence: 0.84322023

00:27:38.400 --> 00:27:39.220 about diagnosis,  
NOTE Confidence: 0.9904094

00:27:39.679 --> 00:27:41.460 and, prescribe treatment.  
NOTE Confidence: 0.9996865

00:27:43.705 --> 00:27:44.765 Given the complexity  
NOTE Confidence: 0.9748723

00:27:45.304 --> 00:27:46.585 of of the of the  
NOTE Confidence: 0.9748723

00:27:46.585 --> 00:27:48.445 of the landscape and psychopathology  
NOTE Confidence: 0.8351657

00:27:48.904 --> 00:27:50.524 they are face faced with,  
NOTE Confidence: 0.9614573

00:27:51.225 --> 00:27:52.345 I would like to argue  
NOTE Confidence: 0.9614573

00:27:52.345 --> 00:27:53.544 that we need to stick  
NOTE Confidence: 0.9614573

00:27:53.544 --> 00:27:55.005 to the old school,

NOTE Confidence: 0.99970746  
00:27:56.450 --> 00:27:57.190 for now  
NOTE Confidence: 0.9222216  
00:27:57.490 --> 00:27:58.930 until we develop better measures  
NOTE Confidence: 0.9222216  
00:27:58.930 --> 00:28:00.150 or biological markers.  
NOTE Confidence: 0.98146075  
00:28:01.170 --> 00:28:02.530 Stick to the old school,  
NOTE Confidence: 0.98146075  
00:28:02.770 --> 00:28:04.950 assessments where we actually employ,  
NOTE Confidence: 0.9921922  
00:28:05.410 --> 00:28:06.869 clinicians who are highly,  
NOTE Confidence: 0.9998492  
00:28:07.490 --> 00:28:08.309 highly trained  
NOTE Confidence: 0.98308074  
00:28:08.770 --> 00:28:10.630 and are capable of assessing  
NOTE Confidence: 0.98450017  
00:28:11.635 --> 00:28:13.875 functioning across multiple areas of  
NOTE Confidence: 0.98450017  
00:28:13.875 --> 00:28:14.994 functioning. This this is the  
NOTE Confidence: 0.98450017  
00:28:14.994 --> 00:28:16.115 only way we can actually  
NOTE Confidence: 0.98450017  
00:28:16.115 --> 00:28:16.615 prescribe  
NOTE Confidence: 0.99708796  
00:28:16.994 --> 00:28:19.095 treatment. Treatment will depend  
NOTE Confidence: 0.9546439  
00:28:19.475 --> 00:28:21.554 on the child's individual profile  
NOTE Confidence: 0.9546439  
00:28:21.554 --> 00:28:23.234 of strength and weaknesses, and  
NOTE Confidence: 0.9546439

00:28:23.234 --> 00:28:24.535 I feel like I'm channeling  
NOTE Confidence: 0.9546439

00:28:24.674 --> 00:28:25.815 Sarah Sparrow here.  
NOTE Confidence: 0.8794894

00:28:26.250 --> 00:28:27.230 Right, Lori?  
NOTE Confidence: 0.9940218

00:28:29.290 --> 00:28:29.790 Amen.  
NOTE Confidence: 0.85557264

00:28:31.770 --> 00:28:33.690 Also a pervasive presence of  
NOTE Confidence: 0.85557264

00:28:33.690 --> 00:28:35.310 of co co occurring conditions  
NOTE Confidence: 0.85557264

00:28:35.450 --> 00:28:35.930 truly,  
NOTE Confidence: 0.9918571

00:28:36.570 --> 00:28:38.650 calls for, paying attention to  
NOTE Confidence: 0.9918571

00:28:38.650 --> 00:28:40.330 other dimensions that that we  
NOTE Confidence: 0.9918571

00:28:40.330 --> 00:28:40.730 don't,  
NOTE Confidence: 0.9634898

00:28:41.130 --> 00:28:42.965 typically, and and screen also  
NOTE Confidence: 0.9634898

00:28:42.965 --> 00:28:45.205 for emotional problems, attentional, and  
NOTE Confidence: 0.9634898

00:28:45.205 --> 00:28:46.345 regulatory functions.  
NOTE Confidence: 0.9848304

00:28:49.125 --> 00:28:49.625 Keeping  
NOTE Confidence: 0.9567781

00:28:50.085 --> 00:28:51.125 while we do all of  
NOTE Confidence: 0.9567781

00:28:51.125 --> 00:28:52.245 this, while we do all

NOTE Confidence: 0.9567781  
00:28:52.245 --> 00:28:53.285 this important work,  
NOTE Confidence: 0.9771531  
00:28:54.179 --> 00:28:55.539 in in our clinics, we  
NOTE Confidence: 0.9771531  
00:28:55.539 --> 00:28:56.039 also,  
NOTE Confidence: 0.9959844  
00:28:57.220 --> 00:28:58.259 give ourselves a bit of  
NOTE Confidence: 0.9959844  
00:28:58.259 --> 00:28:58.919 a break  
NOTE Confidence: 0.9706526  
00:28:59.220 --> 00:29:01.320 and, and remember that this  
NOTE Confidence: 0.9706526  
00:29:01.460 --> 00:29:03.639 uncertainty that we expect experience,  
NOTE Confidence: 0.9799646  
00:29:04.500 --> 00:29:05.240 is real.  
NOTE Confidence: 0.9901921  
00:29:05.620 --> 00:29:07.065 It's real for several reasons.  
NOTE Confidence: 0.9901921  
00:29:07.065 --> 00:29:08.365 One is that the diagnostic  
NOTE Confidence: 0.9901921  
00:29:08.424 --> 00:29:09.804 boundaries we are operating  
NOTE Confidence: 0.99938  
00:29:10.184 --> 00:29:10.684 with  
NOTE Confidence: 0.9878036  
00:29:11.304 --> 00:29:11.784 are,  
NOTE Confidence: 0.995934  
00:29:12.265 --> 00:29:12.924 are changing.  
NOTE Confidence: 0.9573021  
00:29:13.304 --> 00:29:14.665 Right? They're evolving. It's an  
NOTE Confidence: 0.9573021

00:29:14.665 --> 00:29:16.184 evolving science. They are still

NOTE Confidence: 0.9573021

00:29:16.184 --> 00:29:17.005 under development.

NOTE Confidence: 0.99314135

00:29:17.625 --> 00:29:18.665 And we need to remember

NOTE Confidence: 0.99314135

00:29:18.665 --> 00:29:19.165 that.

NOTE Confidence: 0.9942236

00:29:20.370 --> 00:29:21.110 These are

NOTE Confidence: 0.9858971

00:29:21.490 --> 00:29:22.150 not platonic

NOTE Confidence: 0.89158154

00:29:22.530 --> 00:29:24.150 forms, Plato's forms,

NOTE Confidence: 0.99919575

00:29:24.450 --> 00:29:26.050 that that we are referring

NOTE Confidence: 0.99919575

00:29:26.050 --> 00:29:26.550 to.

NOTE Confidence: 0.9898237

00:29:28.210 --> 00:29:28.710 Also,

NOTE Confidence: 0.9075847

00:29:30.530 --> 00:29:32.885 sometimes the source of uncertainty

NOTE Confidence: 0.9075847

00:29:32.945 --> 00:29:33.445 is

NOTE Confidence: 0.99870765

00:29:33.905 --> 00:29:34.645 the changes

NOTE Confidence: 0.9989311

00:29:35.105 --> 00:29:35.845 in the presentation

NOTE Confidence: 0.9655967

00:29:36.145 --> 00:29:37.665 over time in very young

NOTE Confidence: 0.9655967

00:29:37.665 --> 00:29:38.165 kids.

NOTE Confidence: 0.9940277  
00:29:40.865 --> 00:29:42.065 And that's something to be  
NOTE Confidence: 0.9940277  
00:29:42.065 --> 00:29:42.565 expected  
NOTE Confidence: 0.97414726  
00:29:43.345 --> 00:29:44.705 because we are trying to  
NOTE Confidence: 0.97414726  
00:29:44.705 --> 00:29:46.865 nail down or pinpoint some  
NOTE Confidence: 0.97414726  
00:29:46.865 --> 00:29:47.605 kind of  
NOTE Confidence: 0.92806244  
00:29:48.210 --> 00:29:49.970 constellation of features in the  
NOTE Confidence: 0.92806244  
00:29:49.970 --> 00:29:52.049 system, your developmental system that's  
NOTE Confidence: 0.92806244  
00:29:52.049 --> 00:29:53.110 rapidly changing,  
NOTE Confidence: 0.998968  
00:29:53.809 --> 00:29:55.350 right, in terms of brain  
NOTE Confidence: 0.99395466  
00:29:55.809 --> 00:29:56.309 connectivity,  
NOTE Confidence: 0.99239665  
00:29:56.770 --> 00:29:58.210 brain structure, brain  
NOTE Confidence: 0.9189956  
00:29:58.610 --> 00:30:00.710 you know, how behavior, environment  
NOTE Confidence: 0.9189956  
00:30:00.929 --> 00:30:02.630 shapes shapes these important,  
NOTE Confidence: 0.97555757  
00:30:03.090 --> 00:30:03.590 determinants  
NOTE Confidence: 0.9787546  
00:30:04.215 --> 00:30:04.875 of outcomes.  
NOTE Confidence: 0.9746574

00:30:05.815 --> 00:30:07.674 And, also, we are changing  
NOTE Confidence: 0.9970021

00:30:08.135 --> 00:30:08.875 the kids.  
NOTE Confidence: 0.9829567

00:30:09.415 --> 00:30:10.295 You know, when a child  
NOTE Confidence: 0.9829567

00:30:10.295 --> 00:30:11.495 comes to to to the  
NOTE Confidence: 0.9829567

00:30:11.495 --> 00:30:11.995 clinic  
NOTE Confidence: 0.9511128

00:30:12.375 --> 00:30:13.815 and we prescribe treatment and  
NOTE Confidence: 0.9511128

00:30:13.815 --> 00:30:14.855 we see them again and  
NOTE Confidence: 0.9511128

00:30:14.855 --> 00:30:15.755 they're fabulous,  
NOTE Confidence: 0.9256016

00:30:16.615 --> 00:30:18.635 we probably changed the kid.  
NOTE Confidence: 0.99176294

00:30:19.130 --> 00:30:20.090 It's not that we've made  
NOTE Confidence: 0.99176294

00:30:20.090 --> 00:30:21.370 a mistake the first time  
NOTE Confidence: 0.99176294

00:30:21.370 --> 00:30:21.870 around.  
NOTE Confidence: 0.99153453

00:30:23.370 --> 00:30:24.330 You know, there's a very  
NOTE Confidence: 0.99153453

00:30:24.330 --> 00:30:25.930 interesting example from the studies  
NOTE Confidence: 0.99153453

00:30:25.930 --> 00:30:27.610 of baby siblings of children  
NOTE Confidence: 0.99153453

00:30:27.610 --> 00:30:28.650 with autism. We have a



NOTE Confidence: 0.99153453  
00:30:28.650 --> 00:30:30.190 consortium that's sort of,  
NOTE Confidence: 0.89763397  
00:30:30.730 --> 00:30:32.410 in in the US or  
NOTE Confidence: 0.89763397  
00:30:32.410 --> 00:30:33.870 actually international consortium.  
NOTE Confidence: 0.99564034  
00:30:34.475 --> 00:30:35.435 And we look at the  
NOTE Confidence: 0.99564034  
00:30:35.435 --> 00:30:36.975 babies across time,  
NOTE Confidence: 0.98364985  
00:30:37.755 --> 00:30:39.535 several thousands of them. Right?  
NOTE Confidence: 0.81958103  
00:30:40.075 --> 00:30:41.855 It's stunning because  
NOTE Confidence: 0.9984057  
00:30:42.235 --> 00:30:43.215 once the child  
NOTE Confidence: 0.9594118  
00:30:43.595 --> 00:30:45.275 is detected once we detect  
NOTE Confidence: 0.9594118  
00:30:45.275 --> 00:30:46.415 that the child has difficulties,  
NOTE Confidence: 0.9594118  
00:30:46.555 --> 00:30:47.915 twelve months, fourteen months, sixteen  
NOTE Confidence: 0.9594118  
00:30:47.915 --> 00:30:49.615 months, we prescribe treatment.  
NOTE Confidence: 0.99866056  
00:30:50.290 --> 00:30:51.330 And then when we look  
NOTE Confidence: 0.99866056  
00:30:51.330 --> 00:30:52.230 at this group,  
NOTE Confidence: 0.96000975  
00:30:52.770 --> 00:30:53.910 thousands of babies,  
NOTE Confidence: 0.9926942

00:30:54.290 --> 00:30:55.890 they are so doing so  
NOTE Confidence: 0.9926942

00:30:55.890 --> 00:30:57.670 much better than general population  
NOTE Confidence: 0.9926942

00:30:57.730 --> 00:30:59.330 of kids with autism. So  
NOTE Confidence: 0.9926942

00:30:59.330 --> 00:31:00.070 much better.  
NOTE Confidence: 0.8307761

00:31:00.850 --> 00:31:01.875 We're changing reality. There's  
NOTE Confidence: 0.959441

00:31:02.515 --> 00:31:04.115 there's also possible that there  
NOTE Confidence: 0.959441

00:31:04.115 --> 00:31:05.395 are some protective factors that  
NOTE Confidence: 0.959441

00:31:05.395 --> 00:31:06.755 are kicking in. And another  
NOTE Confidence: 0.959441

00:31:06.755 --> 00:31:08.775 example is, girls with autism.  
NOTE Confidence: 0.9848998

00:31:09.235 --> 00:31:10.195 When we see them when  
NOTE Confidence: 0.9848998

00:31:10.195 --> 00:31:11.395 they're very young, we see  
NOTE Confidence: 0.9848998

00:31:11.395 --> 00:31:12.835 quite a few girls who  
NOTE Confidence: 0.9848998

00:31:12.835 --> 00:31:13.975 have, you know, prototypical  
NOTE Confidence: 0.9970542

00:31:14.275 --> 00:31:14.775 presentation  
NOTE Confidence: 0.9643156

00:31:15.155 --> 00:31:15.895 in a toddler  
NOTE Confidence: 0.94580775

00:31:16.355 --> 00:31:17.415 of autism. But

NOTE Confidence: 0.95614713

00:31:17.750 --> 00:31:18.790 there is a there's a

NOTE Confidence: 0.95614713

00:31:18.790 --> 00:31:20.790 significant group of girls who

NOTE Confidence: 0.95614713

00:31:20.790 --> 00:31:22.310 actually do better over time

NOTE Confidence: 0.95614713

00:31:22.310 --> 00:31:23.050 than boys.

NOTE Confidence: 0.94164366

00:31:23.990 --> 00:31:25.430 As if, you know, the

NOTE Confidence: 0.94164366

00:31:25.430 --> 00:31:27.270 protective some protective factors were

NOTE Confidence: 0.94164366

00:31:27.270 --> 00:31:29.350 kicking in or compensatory factors

NOTE Confidence: 0.94164366

00:31:29.350 --> 00:31:30.595 were kicking kicking in, and

NOTE Confidence: 0.94164366

00:31:30.595 --> 00:31:31.335 their trajectories

NOTE Confidence: 0.9740501

00:31:31.635 --> 00:31:32.995 are going to diverge from

NOTE Confidence: 0.9740501

00:31:32.995 --> 00:31:34.195 those that we see in

NOTE Confidence: 0.9740501

00:31:34.195 --> 00:31:34.695 voice.

NOTE Confidence: 0.96633554

00:31:35.875 --> 00:31:37.154 When in doubt, always,

NOTE Confidence: 0.9642526

00:31:37.475 --> 00:31:39.414 fall back on provisional diagnosis.

NOTE Confidence: 0.9642526

00:31:39.554 --> 00:31:40.215 We use

NOTE Confidence: 0.9931841

00:31:40.515 --> 00:31:41.635 what do we like? We  
NOTE Confidence: 0.9931841

00:31:41.635 --> 00:31:42.034 like,  
NOTE Confidence: 0.73833096

00:31:42.515 --> 00:31:44.934 un specifying your developmental condition,  
NOTE Confidence: 0.91174775

00:31:45.550 --> 00:31:46.930 treat symptoms, reevaluate,  
NOTE Confidence: 0.9892094

00:31:47.310 --> 00:31:47.810 and,  
NOTE Confidence: 0.9719963

00:31:48.350 --> 00:31:50.210 most importantly, support family  
NOTE Confidence: 0.99042875

00:31:50.830 --> 00:31:51.890 throughout the process.  
NOTE Confidence: 0.89169174

00:31:52.910 --> 00:31:54.910 Your uncertainty should not be.  
NOTE Confidence: 0.89169174

00:31:54.910 --> 00:31:55.970 There are uncertainty.  
NOTE Confidence: 0.93728155

00:31:57.390 --> 00:31:58.910 Okay. So, how much time  
NOTE Confidence: 0.93728155

00:31:58.910 --> 00:31:59.730 do I have?  
NOTE Confidence: 0.8344941

00:32:00.794 --> 00:32:01.774 Twenty five minutes.  
NOTE Confidence: 0.94495755

00:32:02.154 --> 00:32:03.134 Oh my god.  
NOTE Confidence: 0.96474385

00:32:05.115 --> 00:32:06.794 Okay. So I really zoomed  
NOTE Confidence: 0.96474385

00:32:06.794 --> 00:32:08.335 through it. Alright. So,  
NOTE Confidence: 0.9469929

00:32:09.995 --> 00:32:11.434 alright. So this is great.

NOTE Confidence: 0.9469929  
00:32:11.434 --> 00:32:12.754 Fantastic. So I can slow  
NOTE Confidence: 0.9469929  
00:32:12.754 --> 00:32:13.375 it down.  
NOTE Confidence: 0.9850632  
00:32:14.634 --> 00:32:15.134 So  
NOTE Confidence: 0.99824446  
00:32:15.700 --> 00:32:17.000 what are the alternatives?  
NOTE Confidence: 0.97313267  
00:32:18.180 --> 00:32:18.680 Right?  
NOTE Confidence: 0.9861837  
00:32:19.780 --> 00:32:20.920 What are the alternatives?  
NOTE Confidence: 0.99432665  
00:32:21.380 --> 00:32:23.060 I told you about, methods  
NOTE Confidence: 0.99432665  
00:32:23.060 --> 00:32:23.560 that  
NOTE Confidence: 0.8704252  
00:32:23.940 --> 00:32:25.320 are capitalized on differences.  
NOTE Confidence: 0.99817216  
00:32:26.420 --> 00:32:26.920 Right?  
NOTE Confidence: 0.9963395  
00:32:27.795 --> 00:32:30.375 Defining boundaries, capitalizing on differences,  
NOTE Confidence: 0.9763275  
00:32:30.995 --> 00:32:32.835 comparing groups, and hoping for  
NOTE Confidence: 0.9763275  
00:32:32.835 --> 00:32:34.835 the largest separation of of  
NOTE Confidence: 0.9763275  
00:32:34.835 --> 00:32:35.335 distributions,  
NOTE Confidence: 0.9991963  
00:32:37.475 --> 00:32:38.535 in terms of diagnosis.  
NOTE Confidence: 0.99960244

00:32:39.235 --> 00:32:41.720 So another approach is to  
NOTE Confidence: 0.99960244

00:32:41.720 --> 00:32:42.860 focus on similarities.  
NOTE Confidence: 0.96002406

00:32:43.800 --> 00:32:45.160 Right? We already talk about  
NOTE Confidence: 0.96002406

00:32:45.160 --> 00:32:45.960 the fact that,  
NOTE Confidence: 0.8792141

00:32:47.240 --> 00:32:48.220 there are similarities  
NOTE Confidence: 0.9780309

00:32:48.680 --> 00:32:49.580 in in,  
NOTE Confidence: 0.953952

00:32:50.680 --> 00:32:52.280 same symptoms might be present  
NOTE Confidence: 0.953952

00:32:52.280 --> 00:32:53.900 across multiple conditions.  
NOTE Confidence: 0.9801762

00:32:54.825 --> 00:32:55.325 Right?  
NOTE Confidence: 0.9912178

00:32:55.865 --> 00:32:56.745 And so,  
NOTE Confidence: 0.9532012

00:32:57.225 --> 00:32:58.345 we can focus on that  
NOTE Confidence: 0.9532012

00:32:58.345 --> 00:32:59.385 and try to understand what  
NOTE Confidence: 0.9532012

00:32:59.385 --> 00:33:00.205 is that about.  
NOTE Confidence: 0.9943463

00:33:00.505 --> 00:33:01.005 Right?  
NOTE Confidence: 0.98072976

00:33:01.784 --> 00:33:02.825 I mean, there there's there's  
NOTE Confidence: 0.98072976

00:33:02.825 --> 00:33:03.725 several assumptions,

NOTE Confidence: 0.99850225  
00:33:05.385 --> 00:33:06.845 associated with this approach.  
NOTE Confidence: 0.9416446  
00:33:07.625 --> 00:33:09.779 First, that symptoms are distributed  
NOTE Confidence: 0.9416446  
00:33:09.779 --> 00:33:10.600 on a continuum,  
NOTE Confidence: 0.93179184  
00:33:11.460 --> 00:33:12.760 and there are some  
NOTE Confidence: 0.8270634  
00:33:13.539 --> 00:33:15.320 some symptoms like social engagement,  
NOTE Confidence: 0.9640806  
00:33:15.620 --> 00:33:16.440 social motivation,  
NOTE Confidence: 0.9694163  
00:33:18.980 --> 00:33:20.120 selective attention,  
NOTE Confidence: 0.74776983  
00:33:20.900 --> 00:33:22.200 variability, nonverbal  
NOTE Confidence: 0.8826039  
00:33:22.659 --> 00:33:24.345 is distributed on a continuum  
NOTE Confidence: 0.8826039  
00:33:24.345 --> 00:33:25.785 with with some very low  
NOTE Confidence: 0.8826039  
00:33:25.785 --> 00:33:27.245 scores and very high scores,  
NOTE Confidence: 0.9823005  
00:33:27.545 --> 00:33:28.605 something in the middle.  
NOTE Confidence: 0.98501205  
00:33:28.905 --> 00:33:31.145 And different disorders might be  
NOTE Confidence: 0.98501205  
00:33:31.145 --> 00:33:32.825 falling onto different kind of,  
NOTE Confidence: 0.98100907  
00:33:33.705 --> 00:33:35.225 place in this in this  
NOTE Confidence: 0.98100907

00:33:35.225 --> 00:33:36.205 in this continuum.  
NOTE Confidence: 0.9970785

00:33:36.600 --> 00:33:38.059 And there's also an assumption  
NOTE Confidence: 0.9970785

00:33:38.120 --> 00:33:39.480 in this approach that the  
NOTE Confidence: 0.9970785

00:33:39.480 --> 00:33:39.980 symptoms,  
NOTE Confidence: 0.99493873

00:33:40.600 --> 00:33:42.520 seen across different conditions are  
NOTE Confidence: 0.99493873

00:33:42.520 --> 00:33:43.980 driven by the same psychopathology.  
NOTE Confidence: 0.95023155

00:33:44.840 --> 00:33:46.760 Now these two points may  
NOTE Confidence: 0.95023155

00:33:46.760 --> 00:33:47.820 seem very simple,  
NOTE Confidence: 0.9761236

00:33:48.360 --> 00:33:49.559 and straightforward, but they are  
NOTE Confidence: 0.9761236

00:33:49.559 --> 00:33:51.615 not. They're extremely complicated, and  
NOTE Confidence: 0.9761236

00:33:51.615 --> 00:33:52.655 there's a lot of work  
NOTE Confidence: 0.9761236

00:33:52.655 --> 00:33:53.615 going on to try to  
NOTE Confidence: 0.9761236

00:33:53.615 --> 00:33:54.435 figure out  
NOTE Confidence: 0.9921034

00:33:54.735 --> 00:33:56.735 which symptom dimensions actually fall  
NOTE Confidence: 0.9921034

00:33:56.735 --> 00:33:58.435 under these these these categories.  
NOTE Confidence: 0.95303464

00:33:59.135 --> 00:34:00.095 So if we were to,



NOTE Confidence: 0.95303464  
00:34:00.095 --> 00:34:01.375 for instance, think about  
NOTE Confidence: 0.92556643  
00:34:02.870 --> 00:34:04.310 can you see that? Yep.  
NOTE Confidence: 0.92556643  
00:34:04.310 --> 00:34:05.350 I can see that. So  
NOTE Confidence: 0.92556643  
00:34:05.350 --> 00:34:06.070 if you if if you  
NOTE Confidence: 0.92556643  
00:34:06.070 --> 00:34:07.590 can print for instance, think  
NOTE Confidence: 0.92556643  
00:34:07.590 --> 00:34:09.350 about two dimensions. Right? You  
NOTE Confidence: 0.92556643  
00:34:09.350 --> 00:34:11.050 know, social engagement and repetitive  
NOTE Confidence: 0.92556643  
00:34:11.190 --> 00:34:12.550 behaviors, and this is a  
NOTE Confidence: 0.92556643  
00:34:12.550 --> 00:34:14.310 zero. You can imagine that  
NOTE Confidence: 0.92556643  
00:34:14.310 --> 00:34:15.770 if we take several disorders,  
NOTE Confidence: 0.97543967  
00:34:16.935 --> 00:34:18.475 if you take autism, ADHD,  
NOTE Confidence: 0.97543967  
00:34:18.614 --> 00:34:19.515 intellectual disability,  
NOTE Confidence: 0.97842366  
00:34:20.375 --> 00:34:20.875 individuals  
NOTE Confidence: 0.9931651  
00:34:21.335 --> 00:34:22.315 from different,  
NOTE Confidence: 0.95791817  
00:34:23.015 --> 00:34:24.775 different individuals might fall into  
NOTE Confidence: 0.95791817

00:34:24.775 --> 00:34:25.275 different,  
NOTE Confidence: 0.99787676

00:34:25.655 --> 00:34:26.795 parts of this distribution.  
NOTE Confidence: 0.9839613

00:34:27.175 --> 00:34:28.535 Right? And this is the  
NOTE Confidence: 0.9839613

00:34:28.535 --> 00:34:29.035 simplest,  
NOTE Confidence: 0.9769426

00:34:29.570 --> 00:34:30.230 two dimensional,  
NOTE Confidence: 0.99894613

00:34:31.330 --> 00:34:31.830 representation  
NOTE Confidence: 0.98627937

00:34:32.290 --> 00:34:33.510 of these of these,  
NOTE Confidence: 0.97792727

00:34:33.969 --> 00:34:34.450 possible,  
NOTE Confidence: 0.9602624

00:34:34.930 --> 00:34:35.430 dimensions.  
NOTE Confidence: 0.9613278

00:34:36.370 --> 00:34:38.290 But, in reality, we're probably  
NOTE Confidence: 0.9613278

00:34:38.290 --> 00:34:40.210 looking at many, many, many  
NOTE Confidence: 0.9613278

00:34:40.210 --> 00:34:40.710 more.  
NOTE Confidence: 0.9159836

00:34:41.170 --> 00:34:42.855 Now this trust diagnostic and  
NOTE Confidence: 0.9159836

00:34:42.855 --> 00:34:45.015 dimensional approach is mostly right  
NOTE Confidence: 0.9159836

00:34:45.015 --> 00:34:46.395 now used in research.  
NOTE Confidence: 0.92998314

00:34:47.255 --> 00:34:48.295 It has not I don't

NOTE Confidence: 0.92998314

00:34:48.295 --> 00:34:50.375 think unless unless I miss

NOTE Confidence: 0.92998314

00:34:50.375 --> 00:34:51.815 something, has not trickled down

NOTE Confidence: 0.92998314

00:34:51.815 --> 00:34:53.035 yet to clinical,

NOTE Confidence: 0.99882066

00:34:53.655 --> 00:34:55.355 practice or clinical applications.

NOTE Confidence: 0.9896319

00:34:56.660 --> 00:34:57.460 Just to give you some

NOTE Confidence: 0.9896319

00:34:57.620 --> 00:34:59.300 like, an example of of,

NOTE Confidence: 0.9896319

00:34:59.300 --> 00:35:00.980 you know, how this work

NOTE Confidence: 0.9896319

00:35:00.980 --> 00:35:02.100 can be done, how it's

NOTE Confidence: 0.9896319

00:35:02.100 --> 00:35:03.460 done, how it might inform

NOTE Confidence: 0.9896319

00:35:03.460 --> 00:35:04.440 clinical practice

NOTE Confidence: 0.954895

00:35:05.140 --> 00:35:06.900 is, I'll I'll I'll walk

NOTE Confidence: 0.954895

00:35:06.900 --> 00:35:07.620 you through,

NOTE Confidence: 0.92057705

00:35:08.020 --> 00:35:08.920 some of the,

NOTE Confidence: 0.99929416

00:35:10.055 --> 00:35:10.555 recommendations

NOTE Confidence: 0.90061516

00:35:10.934 --> 00:35:13.414 or frameworks, research frameworks that

NOTE Confidence: 0.90061516

00:35:13.414 --> 00:35:15.035 were advanced by the National  
NOTE Confidence: 0.90061516

00:35:15.174 --> 00:35:16.775 Institutes of Mental Health.  
NOTE Confidence: 0.91192067

00:35:18.694 --> 00:35:19.434 They identify  
NOTE Confidence: 0.99977696

00:35:19.815 --> 00:35:21.035 several important  
NOTE Confidence: 0.99962807

00:35:21.575 --> 00:35:22.075 domains  
NOTE Confidence: 0.9314527

00:35:22.619 --> 00:35:23.680 of, psychopathology.  
NOTE Confidence: 0.8772133

00:35:24.539 --> 00:35:26.380 And within each domain, there's  
NOTE Confidence: 0.8772133

00:35:26.380 --> 00:35:27.519 specific dimensions.  
NOTE Confidence: 0.88817596

00:35:28.539 --> 00:35:30.880 So, you know, negative positive  
NOTE Confidence: 0.88817596

00:35:30.940 --> 00:35:33.440 valence, cognitive systems, social processing,  
NOTE Confidence: 0.9550485

00:35:35.019 --> 00:35:36.460 and so forth. And within  
NOTE Confidence: 0.9550485

00:35:36.460 --> 00:35:37.765 each of them, are there  
NOTE Confidence: 0.9550485

00:35:37.765 --> 00:35:38.265 specific  
NOTE Confidence: 0.925121

00:35:39.605 --> 00:35:41.364 groups or dimensions or of  
NOTE Confidence: 0.925121

00:35:41.364 --> 00:35:42.965 symptoms that can be considered  
NOTE Confidence: 0.925121

00:35:42.965 --> 00:35:44.905 or important in psychopathology?

NOTE Confidence: 0.9972326  
00:35:46.005 --> 00:35:46.885 One of these,  
NOTE Confidence: 0.99412245  
00:35:47.364 --> 00:35:48.565 one of these domains is  
NOTE Confidence: 0.99412245  
00:35:48.565 --> 00:35:49.225 a sensory  
NOTE Confidence: 0.9626546  
00:35:49.605 --> 00:35:51.285 motor domain, and sensory motor  
NOTE Confidence: 0.9626546  
00:35:51.285 --> 00:35:51.785 domain  
NOTE Confidence: 0.99338806  
00:35:52.290 --> 00:35:53.890 includes, many different things that  
NOTE Confidence: 0.99338806  
00:35:53.890 --> 00:35:55.170 has to do with with  
NOTE Confidence: 0.99338806  
00:35:55.170 --> 00:35:56.610 motor planning, habits,  
NOTE Confidence: 0.9602635  
00:35:58.530 --> 00:35:59.650 and so forth. But it  
NOTE Confidence: 0.9602635  
00:35:59.650 --> 00:36:01.410 also includes something that we  
NOTE Confidence: 0.9602635  
00:36:01.410 --> 00:36:03.650 call a repetitive movements or  
NOTE Confidence: 0.9602635  
00:36:03.650 --> 00:36:05.105 motors stereotypies. And I'm going  
NOTE Confidence: 0.9602635  
00:36:05.105 --> 00:36:06.105 to talk about this for  
NOTE Confidence: 0.9602635  
00:36:06.105 --> 00:36:06.724 a moment  
NOTE Confidence: 0.9693068  
00:36:07.105 --> 00:36:08.625 just to give you, this  
NOTE Confidence: 0.9693068

00:36:08.625 --> 00:36:09.744 kind of work as an  
NOTE Confidence: 0.9693068

00:36:09.744 --> 00:36:11.025 example of what what we  
NOTE Confidence: 0.9693068

00:36:11.025 --> 00:36:12.065 can do and maybe where  
NOTE Confidence: 0.9693068

00:36:12.065 --> 00:36:13.105 we're gonna go with our  
NOTE Confidence: 0.9693068

00:36:13.105 --> 00:36:13.605 field.  
NOTE Confidence: 0.97763133

00:36:14.305 --> 00:36:14.805 So,  
NOTE Confidence: 0.95291734

00:36:15.425 --> 00:36:16.885 complex motor stereotypies,  
NOTE Confidence: 0.97730994

00:36:17.505 --> 00:36:18.005 involve,  
NOTE Confidence: 0.9381894

00:36:18.864 --> 00:36:19.364 repetitive,  
NOTE Confidence: 0.9997553

00:36:20.480 --> 00:36:20.980 habitual  
NOTE Confidence: 0.9953103

00:36:21.440 --> 00:36:23.859 movements of of fingers, hands,  
NOTE Confidence: 0.99609965

00:36:24.799 --> 00:36:26.020 other body parts.  
NOTE Confidence: 0.8556562

00:36:27.119 --> 00:36:27.599 They're,  
NOTE Confidence: 0.9174416

00:36:28.640 --> 00:36:29.859 they need to be distinguished  
NOTE Confidence: 0.9174416

00:36:29.920 --> 00:36:31.760 from so called simple motor  
NOTE Confidence: 0.9174416

00:36:31.760 --> 00:36:33.440 therapies that could be nail

NOTE Confidence: 0.9174416  
00:36:33.440 --> 00:36:34.420 biting or  
NOTE Confidence: 0.91244084  
00:36:34.799 --> 00:36:35.040 or,  
NOTE Confidence: 0.9290604  
00:36:37.094 --> 00:36:38.455 similar things that we see  
NOTE Confidence: 0.9290604  
00:36:38.455 --> 00:36:39.495 in in very young or  
NOTE Confidence: 0.9290604  
00:36:39.495 --> 00:36:41.275 thumb sucking or related,  
NOTE Confidence: 0.98830354  
00:36:42.614 --> 00:36:43.515 related behaviors.  
NOTE Confidence: 0.73700905  
00:36:44.775 --> 00:36:46.555 Motor steatibis are present,  
NOTE Confidence: 0.95809865  
00:36:47.015 --> 00:36:48.535 in autism, and they're also  
NOTE Confidence: 0.95809865  
00:36:48.535 --> 00:36:50.315 present in other, conditions.  
NOTE Confidence: 0.8126168  
00:36:51.380 --> 00:36:52.680 They are distributed in a  
NOTE Confidence: 0.9853572  
00:36:53.060 --> 00:36:54.440 spectrum of severity.  
NOTE Confidence: 0.9954503  
00:36:54.980 --> 00:36:56.580 Some are so severe that  
NOTE Confidence: 0.9954503  
00:36:56.580 --> 00:36:57.300 they cause,  
NOTE Confidence: 0.7701727  
00:36:57.940 --> 00:36:58.440 injury,  
NOTE Confidence: 0.9633143  
00:36:59.219 --> 00:37:00.580 self injury, and some of  
NOTE Confidence: 0.9633143

00:37:00.580 --> 00:37:02.360 them are completely benign,  
NOTE Confidence: 0.90571475

00:37:03.060 --> 00:37:04.200 present, but completely,  
NOTE Confidence: 0.9981545

00:37:04.725 --> 00:37:05.225 benign.  
NOTE Confidence: 0.99754435

00:37:05.605 --> 00:37:06.505 There's an ongoing  
NOTE Confidence: 0.99062645

00:37:06.965 --> 00:37:08.645 discussion in the field whether,  
NOTE Confidence: 0.9612613

00:37:08.965 --> 00:37:09.465 these,  
NOTE Confidence: 0.9244826

00:37:10.565 --> 00:37:12.505 repetitive movements are purposeless  
NOTE Confidence: 0.9594726

00:37:13.525 --> 00:37:14.725 or whether we call them  
NOTE Confidence: 0.9594726

00:37:14.725 --> 00:37:16.245 purposeless only because we don't  
NOTE Confidence: 0.9594726

00:37:16.245 --> 00:37:17.385 understand their function.  
NOTE Confidence: 0.9747371

00:37:18.410 --> 00:37:18.910 And,  
NOTE Confidence: 0.9943272

00:37:20.010 --> 00:37:20.750 their function  
NOTE Confidence: 0.9208005

00:37:21.290 --> 00:37:23.210 in theory could involve many  
NOTE Confidence: 0.9208005

00:37:23.210 --> 00:37:24.989 many very helpful things  
NOTE Confidence: 0.9088225

00:37:25.290 --> 00:37:26.910 like regulation of arousal,  
NOTE Confidence: 0.86675084

00:37:27.690 --> 00:37:28.190 and,



NOTE Confidence: 0.98925346  
00:37:28.650 --> 00:37:29.150 reactivity.  
NOTE Confidence: 0.9994765  
00:37:30.204 --> 00:37:31.244 And we don't know much  
NOTE Confidence: 0.9994765  
00:37:31.244 --> 00:37:32.704 about the underlying  
NOTE Confidence: 0.9772756  
00:37:33.005 --> 00:37:34.364 etiology, but we know it's  
NOTE Confidence: 0.9772756  
00:37:34.364 --> 00:37:35.984 it's a biological phenomenon.  
NOTE Confidence: 0.89291024  
00:37:36.285 --> 00:37:38.045 There's some genetic markers for  
NOTE Confidence: 0.89291024  
00:37:38.045 --> 00:37:39.265 for for stereotypies.  
NOTE Confidence: 0.9719457  
00:37:40.525 --> 00:37:42.045 So, give you a couple  
NOTE Confidence: 0.9719457  
00:37:42.045 --> 00:37:43.520 of examples. This is this  
NOTE Confidence: 0.9719457  
00:37:43.520 --> 00:37:44.960 is a beautiful little girl  
NOTE Confidence: 0.9719457  
00:37:44.960 --> 00:37:45.360 who,  
NOTE Confidence: 0.8472791  
00:37:46.080 --> 00:37:47.760 came to us through our  
NOTE Confidence: 0.8472791  
00:37:47.760 --> 00:37:49.219 complex motor therapies  
NOTE Confidence: 0.8641098  
00:37:49.680 --> 00:37:50.180 complex  
NOTE Confidence: 0.82613313  
00:37:52.960 --> 00:37:53.940 complex neurodevelopmental  
NOTE Confidence: 0.9941146

00:37:54.400 --> 00:37:56.145 condition program. Sorry about that.

NOTE Confidence: 0.95693237

00:37:57.425 --> 00:37:58.545 And she came to us

NOTE Confidence: 0.95693237

00:37:58.545 --> 00:37:59.585 when she was about twelve

NOTE Confidence: 0.95693237

00:37:59.585 --> 00:38:00.705 months old. This is her

NOTE Confidence: 0.95693237

00:38:00.705 --> 00:38:02.165 six at six months.

NOTE Confidence: 0.9841344

00:38:03.825 --> 00:38:05.105 And she started doing these

NOTE Confidence: 0.9841344

00:38:05.105 --> 00:38:05.925 little things

NOTE Confidence: 0.72893715

00:38:08.465 --> 00:38:08.965 and,

NOTE Confidence: 0.99531245

00:38:09.745 --> 00:38:10.800 moving her feet

NOTE Confidence: 0.8884699

00:38:11.680 --> 00:38:12.820 when they're excited.

NOTE Confidence: 0.9916109

00:38:15.040 --> 00:38:16.980 She's clearly not perturbed.

NOTE Confidence: 0.9283073

00:38:17.840 --> 00:38:19.140 If anything, she's happy.

NOTE Confidence: 0.98890716

00:38:20.320 --> 00:38:21.700 But it worried the parents.

NOTE Confidence: 0.9976711

00:38:22.160 --> 00:38:23.440 This was her a little

NOTE Confidence: 0.9976711

00:38:23.440 --> 00:38:23.715 bit

NOTE Confidence: 0.99002576

00:38:25.075 --> 00:38:26.355 later when she could sit

NOTE Confidence: 0.99002576  
00:38:26.355 --> 00:38:27.335 on her own  
NOTE Confidence: 0.94499314  
00:38:28.915 --> 00:38:29.955 when she came to see  
NOTE Confidence: 0.94499314  
00:38:29.955 --> 00:38:31.655 us, and this was her  
NOTE Confidence: 0.85323566  
00:38:33.635 --> 00:38:34.675 Do you wanna go sit  
NOTE Confidence: 0.85323566  
00:38:34.675 --> 00:38:35.969 at the table too? So  
NOTE Confidence: 0.85323566  
00:38:35.969 --> 00:38:37.910 motor stereotypies here involve  
NOTE Confidence: 0.918813  
00:38:38.290 --> 00:38:40.450 hands and, happy feet, happy  
NOTE Confidence: 0.918813  
00:38:40.450 --> 00:38:40.950 hands,  
NOTE Confidence: 0.97306484  
00:38:41.410 --> 00:38:44.150 movements, also adding some, composition  
NOTE Confidence: 0.97306484  
00:38:44.369 --> 00:38:46.150 of of, face grimacing,  
NOTE Confidence: 0.9262422  
00:38:47.250 --> 00:38:48.230 of of posturing.  
NOTE Confidence: 0.9479644  
00:38:49.170 --> 00:38:50.630 This child does not have,  
NOTE Confidence: 0.68832153  
00:38:51.945 --> 00:38:52.765 any neurological  
NOTE Confidence: 0.9304859  
00:38:53.065 --> 00:38:54.905 condition other than than motor  
NOTE Confidence: 0.9304859  
00:38:54.905 --> 00:38:55.885 motor stereotypy.  
NOTE Confidence: 0.9531513

00:38:56.265 --> 00:38:57.485 No no epilepsy.  
NOTE Confidence: 0.9954877

00:39:00.105 --> 00:39:00.505 So,  
NOTE Confidence: 0.9981984

00:39:01.065 --> 00:39:02.285 we wanted to understand,  
NOTE Confidence: 0.9862102

00:39:02.745 --> 00:39:04.185 this phenomenon a little better,  
NOTE Confidence: 0.9862102

00:39:04.185 --> 00:39:05.385 and we've been working with  
NOTE Confidence: 0.9862102

00:39:05.385 --> 00:39:07.050 with Tom and his group.  
NOTE Confidence: 0.82713103

00:39:07.690 --> 00:39:09.450 Tom has truly pioneered the  
NOTE Confidence: 0.82713103

00:39:09.450 --> 00:39:11.130 research on motor stereotypical here  
NOTE Confidence: 0.82713103

00:39:11.130 --> 00:39:12.410 at the child study center.  
NOTE Confidence: 0.82713103

00:39:12.410 --> 00:39:13.469 We started talking  
NOTE Confidence: 0.8959255

00:39:13.930 --> 00:39:14.890 what might what might this  
NOTE Confidence: 0.8959255

00:39:14.890 --> 00:39:16.030 look like in toddlers.  
NOTE Confidence: 0.97550845

00:39:16.650 --> 00:39:17.930 Not too many people actually  
NOTE Confidence: 0.97550845

00:39:17.930 --> 00:39:19.210 look at this phenomenon in  
NOTE Confidence: 0.97550845

00:39:19.210 --> 00:39:19.710 toddlers.  
NOTE Confidence: 0.99240035

00:39:20.010 --> 00:39:21.210 So we wanted to ask

NOTE Confidence: 0.99240035  
00:39:21.210 --> 00:39:21.790 the question,  
NOTE Confidence: 0.941835  
00:39:22.205 --> 00:39:23.025 what are toddlers like,  
NOTE Confidence: 0.9981105  
00:39:23.725 --> 00:39:24.864 and what is the underlying  
NOTE Confidence: 0.71197844  
00:39:25.165 --> 00:39:26.145 potentially biology?  
NOTE Confidence: 0.9757707  
00:39:26.765 --> 00:39:28.525 So we took we leveraged  
NOTE Confidence: 0.9757707  
00:39:28.525 --> 00:39:30.364 findings from over seven hundred  
NOTE Confidence: 0.9757707  
00:39:30.364 --> 00:39:31.645 toddlers who came through our  
NOTE Confidence: 0.9757707  
00:39:31.645 --> 00:39:32.145 clinics,  
NOTE Confidence: 0.8752321  
00:39:32.525 --> 00:39:34.045 and we, were able to  
NOTE Confidence: 0.8752321  
00:39:34.045 --> 00:39:36.045 evaluate their motorist their tippies  
NOTE Confidence: 0.8752321  
00:39:36.045 --> 00:39:37.025 based on direct  
NOTE Confidence: 0.99866176  
00:39:37.325 --> 00:39:37.825 assessment.  
NOTE Confidence: 0.97540027  
00:39:38.820 --> 00:39:40.260 And, the first thing that  
NOTE Confidence: 0.97540027  
00:39:40.260 --> 00:39:41.700 we we found was quite  
NOTE Confidence: 0.97540027  
00:39:41.700 --> 00:39:43.080 interesting was that the prevalence  
NOTE Confidence: 0.97540027

00:39:43.220 --> 00:39:44.200 is is actually,  
NOTE Confidence: 0.95054686

00:39:44.739 --> 00:39:46.600 distribution is kind of interesting.  
NOTE Confidence: 0.9805343

00:39:47.220 --> 00:39:48.120 Sixty percent,  
NOTE Confidence: 0.8867917

00:39:48.980 --> 00:39:50.500 of kids with autism had  
NOTE Confidence: 0.8867917

00:39:50.500 --> 00:39:51.700 mother's third tip is so  
NOTE Confidence: 0.8867917

00:39:51.700 --> 00:39:52.440 not everyone.  
NOTE Confidence: 0.96254313

00:39:52.905 --> 00:39:54.745 Right? Thirty percent of kids  
NOTE Confidence: 0.96254313

00:39:54.745 --> 00:39:56.685 without autism, with other conditions,  
NOTE Confidence: 0.96254313

00:39:56.905 --> 00:39:58.665 had motor stereotypies, and about  
NOTE Confidence: 0.96254313

00:39:58.665 --> 00:39:59.405 ten percent  
NOTE Confidence: 0.9988795

00:39:59.864 --> 00:40:01.565 of kids without anything  
NOTE Confidence: 0.93846625

00:40:02.185 --> 00:40:04.205 also showed some stereotype behaviors.  
NOTE Confidence: 0.99944067

00:40:04.745 --> 00:40:05.805 So that was interesting.  
NOTE Confidence: 0.96808434

00:40:07.810 --> 00:40:09.410 What we also did, we  
NOTE Confidence: 0.96808434

00:40:09.410 --> 00:40:11.270 we controlling for the diagnostic  
NOTE Confidence: 0.95877427

00:40:11.810 --> 00:40:13.489 grouping. We also look for

NOTE Confidence: 0.95877427  
00:40:13.489 --> 00:40:13.989 association  
NOTE Confidence: 0.9988136  
00:40:14.770 --> 00:40:15.750 between presence  
NOTE Confidence: 0.8037277  
00:40:16.210 --> 00:40:17.270 of motor stereotypies  
NOTE Confidence: 0.95418584  
00:40:18.369 --> 00:40:18.690 and,  
NOTE Confidence: 0.9987361  
00:40:19.250 --> 00:40:19.750 developmental  
NOTE Confidence: 0.92546237  
00:40:20.050 --> 00:40:22.625 outcomes both concurrently and prospectively.  
NOTE Confidence: 0.90274745  
00:40:23.165 --> 00:40:24.525 And it was also very  
NOTE Confidence: 0.90274745  
00:40:24.525 --> 00:40:26.125 interesting because the presence of  
NOTE Confidence: 0.90274745  
00:40:26.125 --> 00:40:28.545 motor stereotyping was associated with  
NOTE Confidence: 0.90274745  
00:40:28.765 --> 00:40:30.625 a low lower cognitive skills,  
NOTE Confidence: 0.9611977  
00:40:30.925 --> 00:40:32.545 a low lower language skills,  
NOTE Confidence: 0.975132  
00:40:33.005 --> 00:40:34.385 less social skills.  
NOTE Confidence: 0.98249096  
00:40:35.130 --> 00:40:36.430 And it was true,  
NOTE Confidence: 0.977342  
00:40:37.849 --> 00:40:39.869 both concurrently and also prospectively,  
NOTE Confidence: 0.96290636  
00:40:41.450 --> 00:40:44.089 which suggested something something very  
NOTE Confidence: 0.96290636

00:40:44.089 --> 00:40:44.589 interesting,  
NOTE Confidence: 0.885744

00:40:45.210 --> 00:40:46.670 to us that that  
NOTE Confidence: 0.9097488

00:40:46.969 --> 00:40:48.349 seeing a child with moderate  
NOTE Confidence: 0.9097488

00:40:48.410 --> 00:40:49.789 stereotyping may signal  
NOTE Confidence: 0.9520914

00:40:50.364 --> 00:40:51.725 that we actually should be  
NOTE Confidence: 0.9520914

00:40:51.725 --> 00:40:53.325 paying attention even though the  
NOTE Confidence: 0.9520914

00:40:53.325 --> 00:40:55.085 child may just have simple  
NOTE Confidence: 0.9520914

00:40:55.085 --> 00:40:56.285 motor stereotyping. We need to  
NOTE Confidence: 0.9520914

00:40:56.285 --> 00:40:57.745 actually pay attention to  
NOTE Confidence: 0.87714154

00:40:58.045 --> 00:40:59.565 what is else is happening  
NOTE Confidence: 0.87714154

00:40:59.565 --> 00:41:00.465 in their development.  
NOTE Confidence: 0.9521371

00:41:01.565 --> 00:41:02.605 Now a lot of,  
NOTE Confidence: 0.9197155

00:41:02.925 --> 00:41:04.530 effort went into discussion. What  
NOTE Confidence: 0.9197155

00:41:04.530 --> 00:41:06.290 is the relationship between mother  
NOTE Confidence: 0.9197155

00:41:06.290 --> 00:41:07.650 stereotypies and and, let's say,  
NOTE Confidence: 0.9197155

00:41:07.650 --> 00:41:08.150 cognition



NOTE Confidence: 0.9394905

00:41:09.330 --> 00:41:11.989 or, language or social functioning?

NOTE Confidence: 0.96618766

00:41:12.610 --> 00:41:14.370 And some people propose that

NOTE Confidence: 0.96618766

00:41:14.370 --> 00:41:16.335 mother stereotypes actually cause them.

NOTE Confidence: 0.96618766

00:41:16.335 --> 00:41:18.175 There's a causal relationship. They

NOTE Confidence: 0.96618766

00:41:18.175 --> 00:41:19.875 prevent the child from engaging

NOTE Confidence: 0.96618766

00:41:19.935 --> 00:41:22.035 into something that's more adaptive

NOTE Confidence: 0.96618766

00:41:22.094 --> 00:41:23.455 and so forth. We see

NOTE Confidence: 0.96618766

00:41:23.455 --> 00:41:25.695 absolutely no evidence for that.

NOTE Confidence: 0.96618766

00:41:25.695 --> 00:41:26.435 If anything,

NOTE Confidence: 0.9894598

00:41:27.455 --> 00:41:28.815 we think that what is

NOTE Confidence: 0.9894598

00:41:28.815 --> 00:41:30.494 really happening is that the

NOTE Confidence: 0.9894598

00:41:30.494 --> 00:41:31.555 neural circuitry

NOTE Confidence: 0.9898803

00:41:32.010 --> 00:41:32.830 that's responsible

NOTE Confidence: 0.8967069

00:41:33.130 --> 00:41:34.590 or involved in producing,

NOTE Confidence: 0.7238959

00:41:35.450 --> 00:41:37.370 motor cell TPC is also

NOTE Confidence: 0.7238959

00:41:37.370 --> 00:41:38.670 involved in controlling  
NOTE Confidence: 0.9143491

00:41:39.530 --> 00:41:40.030 cognition,  
NOTE Confidence: 0.9991019

00:41:40.330 --> 00:41:41.550 attention, executive  
NOTE Confidence: 0.99009293

00:41:41.850 --> 00:41:42.910 function, and language.  
NOTE Confidence: 0.9985416

00:41:43.850 --> 00:41:45.425 So multiple functions  
NOTE Confidence: 0.64138067

00:41:45.805 --> 00:41:46.625 are subserved  
NOTE Confidence: 0.9984922

00:41:47.405 --> 00:41:48.305 by the same  
NOTE Confidence: 0.7897385

00:41:49.405 --> 00:41:51.344 by the same complex and,  
NOTE Confidence: 0.9156573

00:41:52.125 --> 00:41:54.065 subcortical to cortical circuitry.  
NOTE Confidence: 0.99933124

00:41:54.525 --> 00:41:55.025 And  
NOTE Confidence: 0.91498595

00:41:55.645 --> 00:41:57.505 perhaps any kind of alteration  
NOTE Confidence: 0.91498595

00:41:57.645 --> 00:41:59.245 within this when the within  
NOTE Confidence: 0.91498595

00:41:59.245 --> 00:42:01.140 this network can produce a  
NOTE Confidence: 0.91498595

00:42:01.140 --> 00:42:02.200 broad spectrum  
NOTE Confidence: 0.9872917

00:42:02.819 --> 00:42:03.800 of developmental,  
NOTE Confidence: 0.9395026

00:42:04.739 --> 00:42:05.880 outcomes, including,

NOTE Confidence: 0.40905645  
00:42:06.339 --> 00:42:06.839 motors.  
NOTE Confidence: 0.99574405  
00:42:08.099 --> 00:42:08.500 So,  
NOTE Confidence: 0.9670354  
00:42:08.900 --> 00:42:10.099 so this is really the  
NOTE Confidence: 0.9670354  
00:42:10.099 --> 00:42:11.700 first paper of this kind  
NOTE Confidence: 0.9670354  
00:42:11.700 --> 00:42:13.380 in in toddlers, but we  
NOTE Confidence: 0.9670354  
00:42:13.380 --> 00:42:15.000 we we try to recommend  
NOTE Confidence: 0.9670354  
00:42:15.060 --> 00:42:15.560 that,  
NOTE Confidence: 0.9727985  
00:42:16.395 --> 00:42:17.315 a presence of,  
NOTE Confidence: 0.7916309  
00:42:17.755 --> 00:42:19.915 moderate stereotypies should really, trigger  
NOTE Confidence: 0.7916309  
00:42:19.915 --> 00:42:21.695 monitoring, developmental monitoring.  
NOTE Confidence: 0.9486364  
00:42:22.235 --> 00:42:23.855 And, if there are,  
NOTE Confidence: 0.9194857  
00:42:24.635 --> 00:42:26.335 if there are any persistent  
NOTE Confidence: 0.9194857  
00:42:26.555 --> 00:42:28.619 patterns of delays, also intervention  
NOTE Confidence: 0.9194857  
00:42:28.619 --> 00:42:30.559 focus not on motor stereotypies,  
NOTE Confidence: 0.9194857  
00:42:30.779 --> 00:42:31.980 but on the delays that  
NOTE Confidence: 0.9194857

00:42:31.980 --> 00:42:33.440 we see in other domains.  
NOTE Confidence: 0.92539567

00:42:34.059 --> 00:42:35.819 Intervening on stereotypes, it's a  
NOTE Confidence: 0.92539567

00:42:35.819 --> 00:42:37.599 whole different thing because  
NOTE Confidence: 0.9317617

00:42:38.219 --> 00:42:40.059 a motor stereotypes typically are  
NOTE Confidence: 0.9317617

00:42:40.059 --> 00:42:42.005 not unless they are lead  
NOTE Confidence: 0.9317617

00:42:42.005 --> 00:42:42.985 to self injury,  
NOTE Confidence: 0.9914284

00:42:43.285 --> 00:42:44.425 they're actually not,  
NOTE Confidence: 0.99078625

00:42:45.285 --> 00:42:46.485 impinging upon the child's,  
NOTE Confidence: 0.91631454

00:42:48.165 --> 00:42:50.725 happiness or well-being or or,  
NOTE Confidence: 0.91631454

00:42:50.885 --> 00:42:51.945 they're not distressing.  
NOTE Confidence: 0.99692297

00:42:52.645 --> 00:42:53.145 So,  
NOTE Confidence: 0.97684133

00:42:53.525 --> 00:42:54.885 unless they are distressing, we  
NOTE Confidence: 0.97684133

00:42:54.885 --> 00:42:55.925 need to be very, very  
NOTE Confidence: 0.97684133

00:42:55.925 --> 00:42:58.239 careful and very judicial in,  
NOTE Confidence: 0.97684133

00:42:58.560 --> 00:42:59.060 considering,  
NOTE Confidence: 0.9718783

00:42:59.760 --> 00:43:00.260 treatment.

NOTE Confidence: 0.99512184  
00:43:00.960 --> 00:43:02.340 And in in that consideration,  
NOTE Confidence: 0.99512184  
00:43:02.560 --> 00:43:03.460 we need to take,  
NOTE Confidence: 0.89505625  
00:43:03.920 --> 00:43:05.380 really, really seriously,  
NOTE Confidence: 0.99024516  
00:43:06.880 --> 00:43:08.080 we need to understand very  
NOTE Confidence: 0.99024516  
00:43:08.080 --> 00:43:08.580 seriously,  
NOTE Confidence: 0.9993633  
00:43:09.120 --> 00:43:09.780 the function  
NOTE Confidence: 0.98393136  
00:43:10.080 --> 00:43:12.080 and the, and and what  
NOTE Confidence: 0.98393136  
00:43:12.080 --> 00:43:13.614 what really is the family  
NOTE Confidence: 0.98393136  
00:43:13.614 --> 00:43:14.535 take on it or the  
NOTE Confidence: 0.98393136  
00:43:14.535 --> 00:43:15.974 child's take on what's happening  
NOTE Confidence: 0.98393136  
00:43:15.974 --> 00:43:17.035 with their own body.  
NOTE Confidence: 0.9965881  
00:43:18.375 --> 00:43:19.755 So it's not an automatic  
NOTE Confidence: 0.9965881  
00:43:19.895 --> 00:43:21.035 target for treatment.  
NOTE Confidence: 0.9945692  
00:43:21.734 --> 00:43:22.214 So,  
NOTE Confidence: 0.97650397  
00:43:23.015 --> 00:43:24.855 with things like stereotypies, which  
NOTE Confidence: 0.97650397

00:43:24.855 --> 00:43:26.135 we think might be a  
NOTE Confidence: 0.97650397

00:43:26.135 --> 00:43:28.340 dimension that cuts across multiple,  
NOTE Confidence: 0.7955762

00:43:28.880 --> 00:43:29.380 disorders,  
NOTE Confidence: 0.9231267

00:43:30.160 --> 00:43:31.600 maybe driven by the same,  
NOTE Confidence: 0.9836289

00:43:32.000 --> 00:43:33.440 mechanisms. We we don't know  
NOTE Confidence: 0.9836289

00:43:33.440 --> 00:43:34.640 yet. We are collecting some  
NOTE Confidence: 0.9836289

00:43:34.640 --> 00:43:35.620 genetic data,  
NOTE Confidence: 0.99011195

00:43:36.160 --> 00:43:37.520 on on our cohort. We  
NOTE Confidence: 0.99011195

00:43:37.520 --> 00:43:38.720 might know a little bit  
NOTE Confidence: 0.99011195

00:43:38.720 --> 00:43:39.220 more,  
NOTE Confidence: 0.9991902

00:43:40.000 --> 00:43:40.500 later.  
NOTE Confidence: 0.98558825

00:43:41.565 --> 00:43:43.244 Tom's earlier work has shown  
NOTE Confidence: 0.98558825

00:43:43.244 --> 00:43:44.545 that there are some overlaps  
NOTE Confidence: 0.98558825

00:43:44.685 --> 00:43:45.185 between,  
NOTE Confidence: 0.97691965

00:43:45.565 --> 00:43:47.244 risk genes for autism and  
NOTE Confidence: 0.97691965

00:43:47.244 --> 00:43:48.224 complex motor

NOTE Confidence: 0.5991425  
00:43:48.525 --> 00:43:48.605 therapies,  
NOTE Confidence: 0.7662611  
00:43:50.125 --> 00:43:51.665 in children without autism.  
NOTE Confidence: 0.95680946  
00:43:52.204 --> 00:43:53.820 So lots to come. This  
NOTE Confidence: 0.95680946  
00:43:53.820 --> 00:43:55.500 is really definitely a space  
NOTE Confidence: 0.95680946  
00:43:55.500 --> 00:43:56.780 that that requires a lot  
NOTE Confidence: 0.95680946  
00:43:56.780 --> 00:43:57.440 of attention.  
NOTE Confidence: 0.9710425  
00:43:58.460 --> 00:43:59.580 But before we even go  
NOTE Confidence: 0.9710425  
00:43:59.580 --> 00:44:01.020 to underlying biology, we have  
NOTE Confidence: 0.9710425  
00:44:01.020 --> 00:44:02.300 to measure them using the  
NOTE Confidence: 0.9710425  
00:44:02.300 --> 00:44:03.040 same instruments.  
NOTE Confidence: 0.9990955  
00:44:04.140 --> 00:44:05.760 Everyone measures them differently.  
NOTE Confidence: 0.9933964  
00:44:06.094 --> 00:44:07.614 It's really, really hard to  
NOTE Confidence: 0.9933964  
00:44:07.614 --> 00:44:08.355 put together,  
NOTE Confidence: 0.9891803  
00:44:09.055 --> 00:44:11.535 some sensible conclusions from studies  
NOTE Confidence: 0.9891803  
00:44:11.535 --> 00:44:13.295 where where the phenomenon is  
NOTE Confidence: 0.9891803

00:44:13.295 --> 00:44:13.795 measured,  
NOTE Confidence: 0.8975854

00:44:14.494 --> 00:44:15.934 by parent report, by a  
NOTE Confidence: 0.8975854

00:44:15.934 --> 00:44:17.635 checklist of of two items,  
NOTE Confidence: 0.8975854

00:44:17.775 --> 00:44:18.835 by observe  
NOTE Confidence: 0.99942255

00:44:19.375 --> 00:44:19.875 observation  
NOTE Confidence: 0.9165635

00:44:20.255 --> 00:44:21.234 and so forth.  
NOTE Confidence: 0.97173285

00:44:24.520 --> 00:44:26.359 What's also very important is  
NOTE Confidence: 0.97173285

00:44:26.359 --> 00:44:27.880 for us to, we owe  
NOTE Confidence: 0.97173285

00:44:27.880 --> 00:44:29.160 it to our families and  
NOTE Confidence: 0.97173285

00:44:29.160 --> 00:44:30.680 to the kids to understand  
NOTE Confidence: 0.97173285

00:44:30.680 --> 00:44:31.900 their functional significance  
NOTE Confidence: 0.9661919

00:44:32.359 --> 00:44:33.900 because that's a highly neglected  
NOTE Confidence: 0.9661919

00:44:33.960 --> 00:44:35.640 area, right now, and and  
NOTE Confidence: 0.9661919

00:44:35.640 --> 00:44:36.684 we are trying to get  
NOTE Confidence: 0.9661919

00:44:36.684 --> 00:44:38.224 into that space as well.  
NOTE Confidence: 0.9705758

00:44:39.085 --> 00:44:40.364 And and be very, very



NOTE Confidence: 0.9705758  
00:44:40.364 --> 00:44:42.065 careful in terms of interventions.  
NOTE Confidence: 0.99814487  
00:44:44.605 --> 00:44:45.105 So  
NOTE Confidence: 0.9562641  
00:44:49.020 --> 00:44:50.060 with that, I would like  
NOTE Confidence: 0.9562641  
00:44:50.060 --> 00:44:50.940 to thank you. I would  
NOTE Confidence: 0.9562641  
00:44:50.940 --> 00:44:51.820 like to thank thank you  
NOTE Confidence: 0.9562641  
00:44:51.820 --> 00:44:53.360 for your attention and  
NOTE Confidence: 0.9531449  
00:44:53.739 --> 00:44:54.239 acknowledge,  
NOTE Confidence: 0.94794273  
00:44:55.180 --> 00:44:56.540 all the families to come  
NOTE Confidence: 0.94794273  
00:44:56.540 --> 00:44:57.280 through our,  
NOTE Confidence: 0.84573317  
00:44:57.820 --> 00:44:59.760 studies and our funding agencies.  
NOTE Confidence: 0.89913625  
00:45:00.380 --> 00:45:02.080 Amazing, amazing team,  
NOTE Confidence: 0.9642969  
00:45:02.864 --> 00:45:04.385 in my lab and the  
NOTE Confidence: 0.9642969  
00:45:04.385 --> 00:45:04.885 clinic.  
NOTE Confidence: 0.99624467  
00:45:05.665 --> 00:45:06.165 And,  
NOTE Confidence: 0.99974144  
00:45:06.465 --> 00:45:07.665 thank you very much for  
NOTE Confidence: 0.99974144

00:45:07.665 --> 00:45:08.325 your attention.  
NOTE Confidence: 0.8716

00:45:16.109 --> 00:45:17.309 Well, thank you very much,  
NOTE Confidence: 0.8716

00:45:17.469 --> 00:45:18.829 Kasia, especially for giving the  
NOTE Confidence: 0.8716

00:45:18.829 --> 00:45:20.450 talk. Everybody's on an incredibly  
NOTE Confidence: 0.8716

00:45:20.670 --> 00:45:22.690 warm room. This is  
NOTE Confidence: 0.885569

00:45:23.950 --> 00:45:25.309 I'm I'm surprised that no  
NOTE Confidence: 0.885569

00:45:25.309 --> 00:45:26.450 one's falling asleep.  
NOTE Confidence: 0.7437502

00:45:26.989 --> 00:45:28.190 Well, it's I've seen some  
NOTE Confidence: 0.7437502

00:45:28.190 --> 00:45:29.125 ice closed.  
NOTE Confidence: 0.6920406

00:45:31.744 --> 00:45:33.125 Questions for doctor Habashkin.  
NOTE Confidence: 0.97696805

00:45:37.265 --> 00:45:38.704 Thank you. Thank you, Kasia.  
NOTE Confidence: 0.97696805

00:45:38.704 --> 00:45:39.605 I have a comparative  
NOTE Confidence: 0.9497301

00:45:39.984 --> 00:45:41.184 question. So as you know,  
NOTE Confidence: 0.9497301

00:45:41.184 --> 00:45:42.244 I'm a primatologist  
NOTE Confidence: 0.7904405

00:45:43.184 --> 00:45:43.924 and in  
NOTE Confidence: 0.99960893

00:45:44.310 --> 00:45:44.810 monkey

NOTE Confidence: 0.9849261

00:45:45.430 --> 00:45:46.790 literature, at least with monkeys

NOTE Confidence: 0.9849261

00:45:46.790 --> 00:45:49.050 that exhibit self injurious behavior,

NOTE Confidence: 0.97014296

00:45:49.430 --> 00:45:50.550 there have been studies showing

NOTE Confidence: 0.97014296

00:45:50.550 --> 00:45:52.170 that they direct their biting

NOTE Confidence: 0.9836957

00:45:52.550 --> 00:45:54.150 to acupressure points and that

NOTE Confidence: 0.9836957

00:45:54.150 --> 00:45:56.070 lowers heart rate. So that

NOTE Confidence: 0.9836957

00:45:56.070 --> 00:45:57.770 supports the arousal reduction.

NOTE Confidence: 0.98827595

00:45:58.325 --> 00:45:59.785 I'm not aware of any

NOTE Confidence: 0.98827595

00:45:59.845 --> 00:46:02.085 research into stereotypies, but monkeys

NOTE Confidence: 0.98827595

00:46:02.085 --> 00:46:04.085 do exhibit stereotypical behaviors as

NOTE Confidence: 0.98827595

00:46:04.085 --> 00:46:05.445 well. And I'm just wondering,

NOTE Confidence: 0.98827595

00:46:05.445 --> 00:46:06.805 is there any work that's

NOTE Confidence: 0.98827595

00:46:06.805 --> 00:46:08.505 starting to examine this arousal

NOTE Confidence: 0.98827595

00:46:08.565 --> 00:46:09.545 reduction hypothesis

NOTE Confidence: 0.9969151

00:46:10.085 --> 00:46:10.745 in children?

NOTE Confidence: 0.94234353

00:46:12.250 --> 00:46:13.870 This is absolutely fascinating.  
NOTE Confidence: 0.97381145

00:46:14.410 --> 00:46:15.210 I I did not know  
NOTE Confidence: 0.97381145

00:46:15.210 --> 00:46:16.810 about that. Well, we,  
NOTE Confidence: 0.906949

00:46:18.250 --> 00:46:19.930 there's very, very few studies  
NOTE Confidence: 0.906949

00:46:19.930 --> 00:46:22.010 which try to evaluate Matthew  
NOTE Confidence: 0.906949

00:46:22.010 --> 00:46:23.450 Goodwin comes to mind from  
NOTE Confidence: 0.906949

00:46:23.450 --> 00:46:26.035 Northwestern who tried to monitor  
NOTE Confidence: 0.906949

00:46:26.035 --> 00:46:27.655 arousal throughout the day  
NOTE Confidence: 0.94789904

00:46:28.035 --> 00:46:29.475 in people with autism who  
NOTE Confidence: 0.94789904

00:46:29.475 --> 00:46:29.875 are,  
NOTE Confidence: 0.91951966

00:46:30.675 --> 00:46:31.995 moving around and doing their  
NOTE Confidence: 0.91951966

00:46:32.195 --> 00:46:33.975 going be, about their lives  
NOTE Confidence: 0.91951966

00:46:34.195 --> 00:46:34.995 and try to,  
NOTE Confidence: 0.93681806

00:46:35.555 --> 00:46:37.500 identify some patterns in in  
NOTE Confidence: 0.93681806

00:46:37.500 --> 00:46:39.340 arousal changes, whether there's some  
NOTE Confidence: 0.93681806

00:46:39.340 --> 00:46:40.460 kind of rise be right

NOTE Confidence: 0.93681806  
00:46:40.460 --> 00:46:40.960 before,  
NOTE Confidence: 0.8958114  
00:46:41.420 --> 00:46:42.860 what's happened after the the  
NOTE Confidence: 0.8958114  
00:46:42.860 --> 00:46:44.540 start of the. It's really,  
NOTE Confidence: 0.8958114  
00:46:44.540 --> 00:46:46.140 really hard. Yeah. There was  
NOTE Confidence: 0.8958114  
00:46:46.140 --> 00:46:47.340 there was one study from  
NOTE Confidence: 0.8958114  
00:46:47.340 --> 00:46:49.020 our colleagues from Netherlands in  
NOTE Confidence: 0.8958114  
00:46:49.020 --> 00:46:49.520 the  
NOTE Confidence: 0.9623297  
00:46:50.060 --> 00:46:51.885 nineties, I would say. Really  
NOTE Confidence: 0.9623297  
00:46:51.885 --> 00:46:54.145 good study. Maybe ten patients.  
NOTE Confidence: 0.9641693  
00:46:55.405 --> 00:46:58.125 Matthew did maybe similar number  
NOTE Confidence: 0.9641693  
00:46:58.125 --> 00:46:59.565 of so not not really.  
NOTE Confidence: 0.9641693  
00:46:59.565 --> 00:47:01.405 There's not much. We're we  
NOTE Confidence: 0.9641693  
00:47:01.405 --> 00:47:02.225 are recording,  
NOTE Confidence: 0.95205  
00:47:03.565 --> 00:47:04.385 skin conductance  
NOTE Confidence: 0.9942928  
00:47:04.685 --> 00:47:06.205 throughout their visits when they  
NOTE Confidence: 0.9942928

00:47:06.205 --> 00:47:07.410 come to our clinic.  
NOTE Confidence: 0.64340776

00:47:08.510 --> 00:47:09.650 It's a better analyze  
NOTE Confidence: 0.7588011

00:47:10.110 --> 00:47:12.050 data if anyone is interested.  
NOTE Confidence: 0.9831224

00:47:14.989 --> 00:47:16.190 Yes. A lot of work  
NOTE Confidence: 0.9831224

00:47:16.190 --> 00:47:17.010 needs to happen.  
NOTE Confidence: 0.58815646

00:47:27.614 --> 00:47:28.275 K. K. K.  
NOTE Confidence: 0.9608851

00:47:29.135 --> 00:47:30.494 Thank you so much. I  
NOTE Confidence: 0.9608851

00:47:30.494 --> 00:47:31.695 am wondering if you put  
NOTE Confidence: 0.9608851

00:47:31.695 --> 00:47:33.075 on an ethics hat  
NOTE Confidence: 0.9577467

00:47:33.614 --> 00:47:34.114 and  
NOTE Confidence: 0.9945848

00:47:34.619 --> 00:47:35.279 talk about,  
NOTE Confidence: 0.9992976

00:47:35.980 --> 00:47:37.519 to whom it's impairing  
NOTE Confidence: 0.9479196

00:47:38.619 --> 00:47:41.099 these stereotype behaviors and what  
NOTE Confidence: 0.9479196

00:47:41.099 --> 00:47:42.400 movement we've made  
NOTE Confidence: 0.9703398

00:47:43.099 --> 00:47:43.599 societally  
NOTE Confidence: 0.9724529

00:47:45.420 --> 00:47:45.500 to,

NOTE Confidence: 0.9997723  
00:47:46.219 --> 00:47:47.119 be more accepting  
NOTE Confidence: 0.9996254  
00:47:47.579 --> 00:47:49.519 of these behaviors that  
NOTE Confidence: 0.99785167  
00:47:50.045 --> 00:47:51.185 are not impairing,  
NOTE Confidence: 0.99133927  
00:47:52.445 --> 00:47:53.425 to the child.  
NOTE Confidence: 0.9972894  
00:47:53.805 --> 00:47:55.025 They might be socially  
NOTE Confidence: 0.9956585  
00:47:55.565 --> 00:47:57.245 stigmatizing, but they're not impairing.  
NOTE Confidence: 0.9956585  
00:47:57.245 --> 00:47:58.285 And so there's a real  
NOTE Confidence: 0.9956585  
00:47:58.285 --> 00:48:00.145 ethical dilemma about targets  
NOTE Confidence: 0.9778974  
00:48:00.765 --> 00:48:01.425 of treatment.  
NOTE Confidence: 0.994847  
00:48:01.960 --> 00:48:02.920 And maybe you could tell  
NOTE Confidence: 0.994847  
00:48:02.920 --> 00:48:04.120 us what's happening in the  
NOTE Confidence: 0.994847  
00:48:04.120 --> 00:48:05.739 autism world about  
NOTE Confidence: 0.9995544  
00:48:06.680 --> 00:48:08.540 taking an ethics lens  
NOTE Confidence: 0.9907036  
00:48:08.840 --> 00:48:10.460 to targets of behavior.  
NOTE Confidence: 0.980347  
00:48:11.239 --> 00:48:12.600 This is an excellent question.  
NOTE Confidence: 0.980347

00:48:12.600 --> 00:48:14.300 It's about, is it ethical  
NOTE Confidence: 0.980347

00:48:14.435 --> 00:48:15.875 to to intervene if the  
NOTE Confidence: 0.980347

00:48:15.875 --> 00:48:17.015 symptoms are not  
NOTE Confidence: 0.9861404

00:48:17.315 --> 00:48:19.415 interfering with the child's well-being?  
NOTE Confidence: 0.99954635

00:48:19.715 --> 00:48:20.915 And this is exactly the  
NOTE Confidence: 0.99954635

00:48:20.915 --> 00:48:22.275 argument that has been raised  
NOTE Confidence: 0.99954635

00:48:22.275 --> 00:48:23.815 by the autism advocates  
NOTE Confidence: 0.925879

00:48:24.435 --> 00:48:24.935 who,  
NOTE Confidence: 0.99724305

00:48:25.715 --> 00:48:26.215 who  
NOTE Confidence: 0.9512581

00:48:27.075 --> 00:48:28.114 bring up the issue. You  
NOTE Confidence: 0.9512581

00:48:28.114 --> 00:48:30.135 know, these behaviors help me.  
NOTE Confidence: 0.9512581

00:48:30.195 --> 00:48:31.310 When I walk into,  
NOTE Confidence: 0.98107916

00:48:31.690 --> 00:48:33.370 this, you know, very busy  
NOTE Confidence: 0.98107916

00:48:33.370 --> 00:48:35.770 environment and I engage in  
NOTE Confidence: 0.98107916

00:48:35.770 --> 00:48:37.230 something that's comforting,  
NOTE Confidence: 0.9974772

00:48:37.770 --> 00:48:39.050 it helps me stay in



NOTE Confidence: 0.9974772  
00:48:39.050 --> 00:48:39.790 that environment.  
NOTE Confidence: 0.9913026  
00:48:40.489 --> 00:48:42.270 So they they point clearly  
NOTE Confidence: 0.99569327  
00:48:43.325 --> 00:48:45.085 to functional significance of these  
NOTE Confidence: 0.99569327  
00:48:45.085 --> 00:48:45.585 behaviors.  
NOTE Confidence: 0.9817786  
00:48:46.045 --> 00:48:47.085 I think in science, we  
NOTE Confidence: 0.9817786  
00:48:47.085 --> 00:48:49.244 are behind that because we've  
NOTE Confidence: 0.9817786  
00:48:49.244 --> 00:48:50.864 taken the the the perspective  
NOTE Confidence: 0.9817786  
00:48:51.005 --> 00:48:52.444 of looking from the outside  
NOTE Confidence: 0.9817786  
00:48:52.444 --> 00:48:52.944 in  
NOTE Confidence: 0.96639305  
00:48:53.484 --> 00:48:54.605 and saying, you know, this  
NOTE Confidence: 0.96639305  
00:48:54.605 --> 00:48:55.424 looks weird.  
NOTE Confidence: 0.97680634  
00:48:56.430 --> 00:48:57.469 And and can we can  
NOTE Confidence: 0.97680634  
00:48:57.469 --> 00:48:59.170 we normalize it? Right?  
NOTE Confidence: 0.9582292  
00:48:59.550 --> 00:49:01.170 And and I think, thankfully,  
NOTE Confidence: 0.9754847  
00:49:01.469 --> 00:49:03.170 the field is moving from  
NOTE Confidence: 0.9754847

00:49:03.230 --> 00:49:04.849 from from from this approach.

NOTE Confidence: 0.9754847

00:49:05.070 --> 00:49:06.270 And it applies to children

NOTE Confidence: 0.9754847

00:49:06.270 --> 00:49:07.469 with autism, but it also

NOTE Confidence: 0.9754847

00:49:07.469 --> 00:49:08.989 applies to children with with,

NOTE Confidence: 0.9754847

00:49:09.230 --> 00:49:09.730 motorist

NOTE Confidence: 0.7790245

00:49:10.109 --> 00:49:12.185 who have no no other,

NOTE Confidence: 0.97043335

00:49:12.625 --> 00:49:14.145 cognitive or or language or

NOTE Confidence: 0.97043335

00:49:14.145 --> 00:49:15.045 other difficulties

NOTE Confidence: 0.9497684

00:49:15.664 --> 00:49:17.105 and who will display these

NOTE Confidence: 0.9497684

00:49:17.105 --> 00:49:18.464 behaviors. And we are seeing

NOTE Confidence: 0.9497684

00:49:18.464 --> 00:49:19.844 them. We are seeing them

NOTE Confidence: 0.97860044

00:49:20.145 --> 00:49:21.505 in in our through our

NOTE Confidence: 0.97860044

00:49:21.505 --> 00:49:22.005 program.

NOTE Confidence: 0.957689

00:49:22.545 --> 00:49:24.145 Some of them, especially when

NOTE Confidence: 0.957689

00:49:24.145 --> 00:49:25.184 we see them as older

NOTE Confidence: 0.957689

00:49:25.184 --> 00:49:27.000 kids, Kelly, you can say

NOTE Confidence: 0.957689  
00:49:27.000 --> 00:49:28.380 something more about that.  
NOTE Confidence: 0.91899794  
00:49:28.760 --> 00:49:30.040 They they they developed their  
NOTE Confidence: 0.91899794  
00:49:30.040 --> 00:49:31.080 own way of saying about  
NOTE Confidence: 0.91899794  
00:49:31.080 --> 00:49:32.200 it. So, you know, I  
NOTE Confidence: 0.91899794  
00:49:32.200 --> 00:49:33.400 I was born like that.  
NOTE Confidence: 0.91899794  
00:49:33.400 --> 00:49:34.460 Like, we ask, you  
NOTE Confidence: 0.97460705  
00:49:35.320 --> 00:49:36.440 know, how does it feel?  
NOTE Confidence: 0.97460705  
00:49:36.440 --> 00:49:37.480 You know? What what do  
NOTE Confidence: 0.97460705  
00:49:37.480 --> 00:49:38.440 you think about it? You  
NOTE Confidence: 0.97460705  
00:49:38.440 --> 00:49:39.340 know? How do you,  
NOTE Confidence: 0.8626699  
00:49:39.880 --> 00:49:40.780 like, negotiate  
NOTE Confidence: 0.9414412  
00:49:41.400 --> 00:49:42.280 your life in the in  
NOTE Confidence: 0.9414412  
00:49:42.280 --> 00:49:42.735 the classroom?  
NOTE Confidence: 0.9502993  
00:49:43.215 --> 00:49:44.735 Room? And she's they would  
NOTE Confidence: 0.9502993  
00:49:44.735 --> 00:49:45.535 say just, you know, I  
NOTE Confidence: 0.9502993

00:49:45.535 --> 00:49:46.595 was born like that.  
NOTE Confidence: 0.9870459

00:49:47.935 --> 00:49:48.435 And,  
NOTE Confidence: 0.77433604

00:49:49.055 --> 00:49:50.015 and kind of try to  
NOTE Confidence: 0.77433604

00:49:50.015 --> 00:49:51.315 send send their ground,  
NOTE Confidence: 0.83133096

00:49:51.695 --> 00:49:52.595 you know, governing.  
NOTE Confidence: 0.9531907

00:49:54.895 --> 00:49:55.535 So so,  
NOTE Confidence: 0.99871635

00:49:56.540 --> 00:49:57.440 I I think  
NOTE Confidence: 0.963421

00:49:57.820 --> 00:49:59.520 as a society, we have  
NOTE Confidence: 0.963421

00:49:59.739 --> 00:50:01.040 a lot to do  
NOTE Confidence: 0.9331205

00:50:01.660 --> 00:50:03.020 to be able to accept  
NOTE Confidence: 0.9331205

00:50:03.020 --> 00:50:04.619 people for who they are  
NOTE Confidence: 0.9331205

00:50:04.619 --> 00:50:06.300 if they are different because  
NOTE Confidence: 0.9331205

00:50:06.300 --> 00:50:07.440 we really don't  
NOTE Confidence: 0.99361634

00:50:08.300 --> 00:50:10.460 our our our tolerance for  
NOTE Confidence: 0.99361634

00:50:10.460 --> 00:50:10.960 otherness  
NOTE Confidence: 0.9242341

00:50:11.715 --> 00:50:13.255 is extremely limited,

NOTE Confidence: 0.9907056  
00:50:13.635 --> 00:50:15.015 and we see it across  
NOTE Confidence: 0.9686147  
00:50:16.515 --> 00:50:18.535 multiple phenomena, not just psychopathology.  
NOTE Confidence: 0.959428  
00:50:19.715 --> 00:50:20.755 And and we need to  
NOTE Confidence: 0.959428  
00:50:20.755 --> 00:50:22.135 create space where  
NOTE Confidence: 0.9947805  
00:50:22.915 --> 00:50:24.275 people can be who they  
NOTE Confidence: 0.9947805  
00:50:24.275 --> 00:50:24.775 are.  
NOTE Confidence: 0.9755344  
00:50:34.270 --> 00:50:35.489 Thank you so much.  
NOTE Confidence: 0.96939063  
00:50:37.150 --> 00:50:39.070 Now transitioning to putting on  
NOTE Confidence: 0.96939063  
00:50:39.070 --> 00:50:40.210 a clinical hat,  
NOTE Confidence: 0.99904805  
00:50:40.665 --> 00:50:41.645 I am wondering  
NOTE Confidence: 0.98434883  
00:50:42.185 --> 00:50:42.985 I have a lot of  
NOTE Confidence: 0.98434883  
00:50:42.985 --> 00:50:44.265 parents that I've been working  
NOTE Confidence: 0.98434883  
00:50:44.265 --> 00:50:45.785 with over this year that  
NOTE Confidence: 0.98434883  
00:50:45.785 --> 00:50:46.605 will say,  
NOTE Confidence: 0.9460306  
00:50:47.145 --> 00:50:48.105 we have a picture of  
NOTE Confidence: 0.9460306

00:50:48.105 --> 00:50:48.605 ADHD  
NOTE Confidence: 0.9915115  
00:50:48.985 --> 00:50:49.485 and  
NOTE Confidence: 0.9989141  
00:50:49.785 --> 00:50:50.285 some  
NOTE Confidence: 0.8863209  
00:50:50.825 --> 00:50:52.285 autistic like traits,  
NOTE Confidence: 0.9444355  
00:50:53.090 --> 00:50:54.530 and parents will say, well,  
NOTE Confidence: 0.9444355  
00:50:54.530 --> 00:50:55.650 is it autism or is  
NOTE Confidence: 0.9444355  
00:50:55.650 --> 00:50:56.770 it not? What does it  
NOTE Confidence: 0.9444355  
00:50:56.770 --> 00:50:58.469 mean? What are these extra  
NOTE Confidence: 0.9444355  
00:50:58.530 --> 00:51:00.770 stereotypical behaviors or what what  
NOTE Confidence: 0.9444355  
00:51:00.770 --> 00:51:02.469 do the extra things mean?  
NOTE Confidence: 0.9975233  
00:51:02.930 --> 00:51:04.610 I'm wondering what you might  
NOTE Confidence: 0.9975233  
00:51:04.610 --> 00:51:04.785 be  
NOTE Confidence: 0.96832424  
00:51:06.145 --> 00:51:07.585 able to say or what  
NOTE Confidence: 0.96832424  
00:51:07.585 --> 00:51:08.864 would you say to the  
NOTE Confidence: 0.96832424  
00:51:08.864 --> 00:51:10.785 parents in that situation, and  
NOTE Confidence: 0.96832424  
00:51:10.785 --> 00:51:12.385 what could be helpful for

NOTE Confidence: 0.96832424  
00:51:12.385 --> 00:51:13.744 us as clinicians to be  
NOTE Confidence: 0.96832424  
00:51:13.744 --> 00:51:15.605 able to educate them about?  
NOTE Confidence: 0.9782562  
00:51:17.280 --> 00:51:18.320 You know, it's it's a  
NOTE Confidence: 0.9782562  
00:51:18.320 --> 00:51:20.480 very important question. We want  
NOTE Confidence: 0.9782562  
00:51:20.480 --> 00:51:20.980 certainty.  
NOTE Confidence: 0.9914877  
00:51:22.320 --> 00:51:23.940 We really don't like uncertainty.  
NOTE Confidence: 0.9914877  
00:51:24.080 --> 00:51:25.280 We don't we don't like  
NOTE Confidence: 0.9914877  
00:51:25.280 --> 00:51:27.120 to be sort of, one  
NOTE Confidence: 0.9914877  
00:51:27.120 --> 00:51:28.580 foot here, one foot there.  
NOTE Confidence: 0.9601043  
00:51:31.055 --> 00:51:32.815 From you know, everyone is  
NOTE Confidence: 0.9601043  
00:51:32.815 --> 00:51:34.174 different. Right? So so with  
NOTE Confidence: 0.9601043  
00:51:34.174 --> 00:51:35.535 different families, you you take  
NOTE Confidence: 0.9601043  
00:51:35.535 --> 00:51:36.515 a different approach.  
NOTE Confidence: 0.9419195  
00:51:37.214 --> 00:51:38.734 What's important for us is  
NOTE Confidence: 0.9419195  
00:51:38.734 --> 00:51:39.934 that when we see families  
NOTE Confidence: 0.9419195

00:51:39.934 --> 00:51:41.934 for diagnostic evaluation and and

NOTE Confidence: 0.9419195

00:51:41.934 --> 00:51:43.234 we know there are complex

NOTE Confidence: 0.9419195

00:51:43.295 --> 00:51:44.275 questions ahead,

NOTE Confidence: 0.9692969

00:51:46.100 --> 00:51:47.380 Every moment we spend with

NOTE Confidence: 0.9692969

00:51:47.380 --> 00:51:48.180 them, it's a it's a

NOTE Confidence: 0.9692969

00:51:48.180 --> 00:51:48.680 psychoeducational

NOTE Confidence: 0.9976207

00:51:49.140 --> 00:51:49.640 moment.

NOTE Confidence: 0.9757177

00:51:50.340 --> 00:51:51.540 Right? We discuss, you know,

NOTE Confidence: 0.9757177

00:51:51.540 --> 00:51:52.660 what are your concerns? What

NOTE Confidence: 0.9757177

00:51:52.660 --> 00:51:53.380 do you think it it

NOTE Confidence: 0.9757177

00:51:53.380 --> 00:51:55.060 might be? Right? And, you

NOTE Confidence: 0.9757177

00:51:55.060 --> 00:51:56.100 know, tell me about your

NOTE Confidence: 0.9757177

00:51:56.100 --> 00:51:57.719 family. Tell me about,

NOTE Confidence: 0.98078686

00:51:58.605 --> 00:51:59.565 who else in the family

NOTE Confidence: 0.98078686

00:51:59.565 --> 00:52:00.685 may have x, y, and

NOTE Confidence: 0.98078686

00:52:00.685 --> 00:52:02.605 z. Right? And and sort



NOTE Confidence: 0.98078686  
00:52:02.605 --> 00:52:04.285 of try to open them  
NOTE Confidence: 0.98078686  
00:52:04.285 --> 00:52:05.265 up to the  
NOTE Confidence: 0.9912747  
00:52:05.645 --> 00:52:06.945 to the various possibilities  
NOTE Confidence: 0.94593495  
00:52:07.325 --> 00:52:09.265 and the fact that, development  
NOTE Confidence: 0.94593495  
00:52:09.405 --> 00:52:10.765 is a beautiful thing. It's  
NOTE Confidence: 0.94593495  
00:52:10.765 --> 00:52:11.515 a nonlinear.  
NOTE Confidence: 0.9973207  
00:52:12.039 --> 00:52:13.319 And and we often use  
NOTE Confidence: 0.9973207  
00:52:13.319 --> 00:52:14.940 that argument with with families,  
NOTE Confidence: 0.9973207  
00:52:15.079 --> 00:52:16.299 which is a great thing  
NOTE Confidence: 0.88470966  
00:52:16.599 --> 00:52:18.440 because that means possibilities are  
NOTE Confidence: 0.88470966  
00:52:18.440 --> 00:52:18.940 endless.  
NOTE Confidence: 0.8714641  
00:52:27.944 --> 00:52:28.444 Tasha,  
NOTE Confidence: 0.99747974  
00:52:34.025 --> 00:52:34.905 thank you so much for  
NOTE Confidence: 0.99747974  
00:52:34.905 --> 00:52:35.724 a great presentation.  
NOTE Confidence: 0.94194686  
00:52:37.145 --> 00:52:38.765 Since you spoke about,  
NOTE Confidence: 0.9996544

00:52:39.780 --> 00:52:40.280 ADHD  
NOTE Confidence: 0.9902633

00:52:40.580 --> 00:52:41.719 versus autism,  
NOTE Confidence: 0.98917466

00:52:42.260 --> 00:52:43.540 can you comment a little  
NOTE Confidence: 0.98917466

00:52:43.540 --> 00:52:45.620 bit about, any updates on  
NOTE Confidence: 0.98917466

00:52:45.620 --> 00:52:47.960 the theory of mind research  
NOTE Confidence: 0.98917466

00:52:48.180 --> 00:52:50.420 and how ADHD and autism  
NOTE Confidence: 0.98917466

00:52:50.420 --> 00:52:51.940 might be different with regard  
NOTE Confidence: 0.98917466

00:52:51.940 --> 00:52:53.540 to this theory of mind,  
NOTE Confidence: 0.97504365

00:52:53.860 --> 00:52:54.360 field?  
NOTE Confidence: 0.9997442

00:52:56.815 --> 00:52:58.515 That's an excellent question.  
NOTE Confidence: 0.9629967

00:53:00.255 --> 00:53:02.095 I am I am more  
NOTE Confidence: 0.9629967

00:53:02.095 --> 00:53:03.635 focused on low kids  
NOTE Confidence: 0.9930201

00:53:04.335 --> 00:53:04.835 than  
NOTE Confidence: 0.992995

00:53:06.255 --> 00:53:08.219 older kids, and I have  
NOTE Confidence: 0.992995

00:53:08.219 --> 00:53:09.440 less of an understanding  
NOTE Confidence: 0.9973534

00:53:09.739 --> 00:53:11.040 of the theory of mind

NOTE Confidence: 0.9972103  
00:53:11.420 --> 00:53:11.920 differentiation.  
NOTE Confidence: 0.96891314  
00:53:13.900 --> 00:53:14.960 In the nineties,  
NOTE Confidence: 0.99023974  
00:53:16.860 --> 00:53:18.219 and the odds, there was  
NOTE Confidence: 0.99023974  
00:53:18.219 --> 00:53:19.980 a strong emphasis on the  
NOTE Confidence: 0.99023974  
00:53:19.980 --> 00:53:21.980 theory of mind impairment in  
NOTE Confidence: 0.99023974  
00:53:21.980 --> 00:53:22.800 in autism.  
NOTE Confidence: 0.9715662  
00:53:24.435 --> 00:53:25.795 It's the the picture is  
NOTE Confidence: 0.9715662  
00:53:25.795 --> 00:53:27.015 probably not as straightforward  
NOTE Confidence: 0.9873616  
00:53:27.875 --> 00:53:29.315 as we thought it was,  
NOTE Confidence: 0.9873616  
00:53:29.635 --> 00:53:30.375 back then.  
NOTE Confidence: 0.9982586  
00:53:30.755 --> 00:53:32.515 So, I'm not up to  
NOTE Confidence: 0.9982586  
00:53:32.515 --> 00:53:33.955 speed on this literature in  
NOTE Confidence: 0.9982586  
00:53:33.955 --> 00:53:35.415 terms of more sophisticated  
NOTE Confidence: 0.9902379  
00:53:37.839 --> 00:53:39.059 levels of differentiation.  
NOTE Confidence: 0.99049175  
00:53:41.680 --> 00:53:42.960 Maybe someone else is in  
NOTE Confidence: 0.99049175

00:53:42.960 --> 00:53:43.619 the audience.  
NOTE Confidence: 0.9895811

00:53:49.040 --> 00:53:50.160 Well, I think the message  
NOTE Confidence: 0.9895811

00:53:50.160 --> 00:53:51.599 of resisting the urge to  
NOTE Confidence: 0.9895811

00:53:51.599 --> 00:53:52.960 other people is a wonderful  
NOTE Confidence: 0.9895811

00:53:52.960 --> 00:53:53.445 message  
NOTE Confidence: 0.948074

00:53:53.844 --> 00:53:55.364 to end the twenty twenty  
NOTE Confidence: 0.948074

00:53:55.364 --> 00:53:56.885 four grand round series on.  
NOTE Confidence: 0.948074

00:53:56.885 --> 00:53:57.685 So if there are no  
NOTE Confidence: 0.948074

00:53:57.685 --> 00:53:59.785 further questions for doctor Vashka,  
NOTE Confidence: 0.948074

00:53:59.844 --> 00:54:00.665 I'd like to,  
NOTE Confidence: 0.9911158

00:54:00.965 --> 00:54:02.005 thank you very much for  
NOTE Confidence: 0.9911158

00:54:02.005 --> 00:54:02.985 a wonderful presentation.