

WEBVTT

NOTE duration:"00:52:18"

NOTE recognizability:0.867

NOTE language:en-us

NOTE Confidence: 0.808715486666667

00:00:00.000 --> 00:00:03.006 Well, why don't we go ahead

NOTE Confidence: 0.884185724

00:00:03.020 --> 00:00:05.820 and let's say get started?

NOTE Confidence: 0.884185724

00:00:05.820 --> 00:00:10.114 On so I'm really glad to see see all of you

NOTE Confidence: 0.884185724

00:00:10.114 --> 00:00:12.578 here and thanks so much for joining us.

NOTE Confidence: 0.884185724

00:00:12.580 --> 00:00:13.633 We're trying these.

NOTE Confidence: 0.884185724

00:00:13.633 --> 00:00:15.894 We actually have a mixed metaphor here.

NOTE Confidence: 0.884185724

00:00:15.900 --> 00:00:19.420 We're trying these fireside chats.

NOTE Confidence: 0.884185724

00:00:19.420 --> 00:00:22.520 And a series of these just to give a chance

NOTE Confidence: 0.884185724

00:00:22.595 --> 00:00:24.676 to have more smaller group discussions

NOTE Confidence: 0.884185724

00:00:24.676 --> 00:00:27.620 and meeting with members of our faculty.

NOTE Confidence: 0.884185724

00:00:27.620 --> 00:00:29.839 And we've got several of them planned,

NOTE Confidence: 0.884185724

00:00:29.840 --> 00:00:31.681 but the mixed metaphor is that we

NOTE Confidence: 0.884185724

00:00:31.681 --> 00:00:33.680 think of these as salon type events,

NOTE Confidence: 0.884185724

00:00:33.680 --> 00:00:36.848 so they're fireside jets salon type  
NOTE Confidence: 0.884185724

00:00:36.848 --> 00:00:39.582 events that bring members of the faculty  
NOTE Confidence: 0.884185724

00:00:39.582 --> 00:00:41.868 together who are working at intersections  
NOTE Confidence: 0.884185724

00:00:41.868 --> 00:00:44.860 of science and care and and you'll really,  
NOTE Confidence: 0.884185724

00:00:44.860 --> 00:00:47.296 I hope we also really would  
NOTE Confidence: 0.884185724

00:00:47.296 --> 00:00:49.430 value your input for this.  
NOTE Confidence: 0.884185724

00:00:49.430 --> 00:00:50.950 So as we're sitting  
NOTE Confidence: 0.884185724

00:00:50.950 --> 00:00:52.110 around this virtual table,  
NOTE Confidence: 0.884185724

00:00:52.110 --> 00:00:53.868 there's three members of our faculty.  
NOTE Confidence: 0.884185724

00:00:53.870 --> 00:00:56.782 I think you know who work with babies  
NOTE Confidence: 0.884185724

00:00:56.782 --> 00:01:00.128 and toddlers with autism and and develop  
NOTE Confidence: 0.884185724

00:01:00.128 --> 00:01:02.673 known disabilities and doctor Kashiwabara.  
NOTE Confidence: 0.884185724

00:01:02.680 --> 00:01:05.347 Cotrip and wife who is the beauty  
NOTE Confidence: 0.884185724

00:01:05.347 --> 00:01:07.575 professor of Charles Skytree and  
NOTE Confidence: 0.884185724

00:01:07.575 --> 00:01:10.090 directs the social and Affective  
NOTE Confidence: 0.884185724

00:01:10.090 --> 00:01:13.144 Neuroscience Autism program and

NOTE Confidence: 0.884185724

00:01:13.144 --> 00:01:15.808 director of the Yale Toddler Disability

NOTE Confidence: 0.884185724

00:01:15.808 --> 00:01:17.140 Developmental Disabilities Clinic.

NOTE Confidence: 0.884185724

00:01:17.140 --> 00:01:18.820 Then we have Suzanne Mccardie.

NOTE Confidence: 0.884185724

00:01:18.820 --> 00:01:21.920 Suzanne can you wife?

NOTE Confidence: 0.884185724

00:01:21.920 --> 00:01:23.240 Research scientist and Co.

NOTE Confidence: 0.884185724

00:01:23.240 --> 00:01:25.220 Director of the Yale Social and

NOTE Confidence: 0.884185724

00:01:25.284 --> 00:01:26.852 Affective Neuroscience of Autism

NOTE Confidence: 0.884185724

00:01:26.852 --> 00:01:28.812 program and then Kelly Kelly.

NOTE Confidence: 0.884185724

00:01:28.820 --> 00:01:30.014 Doctor Kelly Powell,

NOTE Confidence: 0.884185724

00:01:30.014 --> 00:01:32.800 who is an assistant professor and Co.

NOTE Confidence: 0.884185724

00:01:32.800 --> 00:01:35.850 Director of the the Toddler

NOTE Confidence: 0.884185724

00:01:35.850 --> 00:01:37.680 Developmental Disabilities Clinic.

NOTE Confidence: 0.884185724

00:01:37.680 --> 00:01:38.496 So this group,

NOTE Confidence: 0.884185724

00:01:38.496 --> 00:01:39.856 they're going to talk about

NOTE Confidence: 0.884185724

00:01:39.856 --> 00:01:40.959 some innovations in the lab,

NOTE Confidence: 0.884185724

00:01:40.960 --> 00:01:42.568 especially around emotional development

NOTE Confidence: 0.884185724

00:01:42.568 --> 00:01:44.980 and how they partner with families.

NOTE Confidence: 0.884185724

00:01:44.980 --> 00:01:45.700 And it's just,

NOTE Confidence: 0.884185724

00:01:45.700 --> 00:01:47.380 I know I have heard things that

NOTE Confidence: 0.884185724

00:01:47.437 --> 00:01:48.897 they're going to talk about,

NOTE Confidence: 0.884185724

00:01:48.900 --> 00:01:50.260 and it's really very exciting

NOTE Confidence: 0.884185724

00:01:50.260 --> 00:01:52.120 and I'm glad we can do this.

NOTE Confidence: 0.884185724

00:01:52.120 --> 00:01:54.492 Salon Slash Fireside Chat

NOTE Confidence: 0.884185724

00:01:54.492 --> 00:01:56.919 because we're a small group,

NOTE Confidence: 0.884185724

00:01:56.920 --> 00:01:58.895 we're going to really actually

NOTE Confidence: 0.884185724

00:01:58.895 --> 00:02:00.475 encourage comments and questions

NOTE Confidence: 0.884185724

00:02:00.480 --> 00:02:01.671 during the presentation.

NOTE Confidence: 0.884185724

00:02:01.671 --> 00:02:04.450 I'll monitor the chat and I'll also

NOTE Confidence: 0.884185724

00:02:04.522 --> 00:02:07.036 monitor the raising your virtual hand.

NOTE Confidence: 0.884185724

00:02:07.040 --> 00:02:08.600 And then at the end we'll just tap.

NOTE Confidence: 0.884185724

00:02:08.600 --> 00:02:10.240 We'll have also time for

NOTE Confidence: 0.884185724  
00:02:10.240 --> 00:02:10.896 additional questions,  
NOTE Confidence: 0.884185724  
00:02:10.900 --> 00:02:12.934 but if you want to just put  
NOTE Confidence: 0.884185724  
00:02:12.934 --> 00:02:14.056 something in the chat or raise  
NOTE Confidence: 0.884185724  
00:02:14.056 --> 00:02:15.239 your hand while we're talking,  
NOTE Confidence: 0.884185724  
00:02:15.240 --> 00:02:16.638 that'd be great.  
NOTE Confidence: 0.884185724  
00:02:16.640 --> 00:02:18.410 So Kasha can I turn to you.  
NOTE Confidence: 0.818487255  
00:02:19.950 --> 00:02:22.908 OK, well welcome and thank you  
NOTE Confidence: 0.818487255  
00:02:22.908 --> 00:02:26.018 very much for joining us today  
NOTE Confidence: 0.818487255  
00:02:26.018 --> 00:02:29.144 and thank you Linda and Susanna  
NOTE Confidence: 0.818487255  
00:02:29.144 --> 00:02:31.709 for organizing this gathering.  
NOTE Confidence: 0.818487255  
00:02:31.710 --> 00:02:33.070 Let me let me just.  
NOTE Confidence: 0.86402729125  
00:02:35.170 --> 00:02:39.426 Share my screen so we can move  
NOTE Confidence: 0.86402729125  
00:02:39.426 --> 00:02:42.110 towards. The actual presentation.  
NOTE Confidence: 0.95232837  
00:02:45.820 --> 00:02:47.938 I'm sorry, I'm just going to.  
NOTE Confidence: 0.95232837  
00:02:47.940 --> 00:02:49.280 Unshared injured when we're  
NOTE Confidence: 0.95232837

00:02:49.280 --> 00:02:50.955 doing because there's one step.  
NOTE Confidence: 0.95232837

00:02:50.960 --> 00:02:52.200 No, it's going good.  
NOTE Confidence: 0.891114184705882

00:02:55.350 --> 00:02:57.678 We all have learned that there are multiple  
NOTE Confidence: 0.891114184705882

00:02:57.678 --> 00:02:59.924 steps that we now need to take all right.  
NOTE Confidence: 0.891114184705882

00:02:59.930 --> 00:03:02.100 So now by now you should be  
NOTE Confidence: 0.891114184705882

00:03:02.100 --> 00:03:04.449 seeing my screen and the title.  
NOTE Confidence: 0.891114184705882

00:03:04.449 --> 00:03:06.450 Is that looks great.  
NOTE Confidence: 0.891114184705882

00:03:06.450 --> 00:03:08.450 Kasha everybody's there.  
NOTE Confidence: 0.891114184705882

00:03:08.450 --> 00:03:12.220 OK perfect so so again thank you.  
NOTE Confidence: 0.891114184705882

00:03:12.220 --> 00:03:14.680 Thank you for being here today  
NOTE Confidence: 0.891114184705882

00:03:14.764 --> 00:03:16.980 and I'm done here with Susan  
NOTE Confidence: 0.891114184705882

00:03:16.980 --> 00:03:18.950 Susan McCartney and Kelly Powell.  
NOTE Confidence: 0.891114184705882

00:03:18.950 --> 00:03:21.956 And I will tell you a little bit about.  
NOTE Confidence: 0.891114184705882

00:03:21.960 --> 00:03:25.365 Most recent developments in our  
NOTE Confidence: 0.891114184705882

00:03:25.365 --> 00:03:28.089 research and clinical program.  
NOTE Confidence: 0.891114184705882

00:03:28.090 --> 00:03:29.368 We're going to.

NOTE Confidence: 0.891114184705882

00:03:29.368 --> 00:03:32.350 I'll start as well by talking about

NOTE Confidence: 0.891114184705882

00:03:32.350 --> 00:03:34.875 very recent sort of innovations

NOTE Confidence: 0.891114184705882

00:03:34.875 --> 00:03:37.400 involving both the questions we

NOTE Confidence: 0.891114184705882

00:03:37.480 --> 00:03:39.976 are asking and also the methods

NOTE Confidence: 0.891114184705882

00:03:39.976 --> 00:03:42.130 we're using to study them.

NOTE Confidence: 0.891114184705882

00:03:42.130 --> 00:03:44.874 Susan will talk a little bit about emotional

NOTE Confidence: 0.891114184705882

00:03:44.874 --> 00:03:46.850 development in children with autism,

NOTE Confidence: 0.891114184705882

00:03:46.850 --> 00:03:49.210 focusing particularly on joy,

NOTE Confidence: 0.891114184705882

00:03:49.210 --> 00:03:53.384 and Karen Kelly will talk about sort of

NOTE Confidence: 0.891114184705882

00:03:53.384 --> 00:03:55.603 a long term partnerships that we have

NOTE Confidence: 0.891114184705882

00:03:55.603 --> 00:03:57.540 established many years ago with parents.

NOTE Confidence: 0.891114184705882

00:03:57.540 --> 00:03:59.860 And and now we want to take take

NOTE Confidence: 0.891114184705882

00:03:59.860 --> 00:04:01.669 it to the next level.

NOTE Confidence: 0.916511069285714

00:04:04.380 --> 00:04:08.440 So some of our most exciting research

NOTE Confidence: 0.916511069285714

00:04:08.440 --> 00:04:12.774 work has been focused lately on

NOTE Confidence: 0.916511069285714

00:04:12.774 --> 00:04:17.460 identifying perinatal markers of autism.

NOTE Confidence: 0.916511069285714

00:04:17.460 --> 00:04:20.637 And this work is based on on a basic

NOTE Confidence: 0.916511069285714

00:04:20.637 --> 00:04:24.298 premise or or hypothesis that autism is

NOTE Confidence: 0.916511069285714

00:04:24.298 --> 00:04:27.998 caused by alterations in genetic makeup.

NOTE Confidence: 0.916511069285714

00:04:27.998 --> 00:04:31.610 And then these genes begin to

NOTE Confidence: 0.916511069285714

00:04:31.717 --> 00:04:34.840 impact how neurons develop,

NOTE Confidence: 0.916511069285714

00:04:34.840 --> 00:04:38.654 communicate for networks very early

NOTE Confidence: 0.916511069285714

00:04:38.654 --> 00:04:42.536 during during first weeks of gestation.

NOTE Confidence: 0.916511069285714

00:04:42.540 --> 00:04:45.116 So by the time babies are born,

NOTE Confidence: 0.916511069285714

00:04:45.120 --> 00:04:46.948 it is quite possible.

NOTE Confidence: 0.916511069285714

00:04:46.948 --> 00:04:49.690 That their brains are tuned up

NOTE Confidence: 0.916511069285714

00:04:49.781 --> 00:04:52.784 somewhat differently than in those

NOTE Confidence: 0.916511069285714

00:04:52.784 --> 00:04:55.196 who do not eventually develop autism,

NOTE Confidence: 0.916511069285714

00:04:55.200 --> 00:04:57.684 and this differential tune up is

NOTE Confidence: 0.916511069285714

00:04:57.684 --> 00:05:00.742 going to affect how the children are

NOTE Confidence: 0.916511069285714

00:05:00.742 --> 00:05:04.930 going to develop social relationships.



NOTE Confidence: 0.916511069285714  
00:05:04.930 --> 00:05:08.549 Now, in order to to study this,  
NOTE Confidence: 0.916511069285714  
00:05:08.550 --> 00:05:10.334 we are currently recruiting  
NOTE Confidence: 0.916511069285714  
00:05:10.334 --> 00:05:12.564 a sample of children who,  
NOTE Confidence: 0.916511069285714  
00:05:12.570 --> 00:05:14.082 due to genetic factors,  
NOTE Confidence: 0.916511069285714  
00:05:14.082 --> 00:05:16.842 are at risk for developing autism and  
NOTE Confidence: 0.916511069285714  
00:05:16.842 --> 00:05:19.344 we are studying their brain connectivity  
NOTE Confidence: 0.916511069285714  
00:05:19.350 --> 00:05:23.529 very shortly after birth and then we.  
NOTE Confidence: 0.916511069285714  
00:05:23.530 --> 00:05:26.186 Try to link it up with later outcomes  
NOTE Confidence: 0.916511069285714  
00:05:26.186 --> 00:05:28.939 to see if indeed there are any  
NOTE Confidence: 0.916511069285714  
00:05:28.939 --> 00:05:31.699 differences in how the brains are tuned  
NOTE Confidence: 0.916511069285714  
00:05:31.700 --> 00:05:34.773 at birth and what kind of effects  
NOTE Confidence: 0.916511069285714  
00:05:34.773 --> 00:05:38.149 they may have on later development.  
NOTE Confidence: 0.916511069285714  
00:05:38.150 --> 00:05:41.542 This kind of work would not be possible  
NOTE Confidence: 0.916511069285714  
00:05:41.542 --> 00:05:44.079 without coming together with a very  
NOTE Confidence: 0.916511069285714  
00:05:44.079 --> 00:05:47.429 large with a very strong group of experts.  
NOTE Confidence: 0.916511069285714

00:05:47.430 --> 00:05:50.400 We've partner in these studies with  
NOTE Confidence: 0.916511069285714

00:05:50.400 --> 00:05:52.928 foremost experts in imaging taught  
NOTE Confidence: 0.916511069285714

00:05:52.928 --> 00:05:55.712 Constable desk in China House with  
NOTE Confidence: 0.916511069285714

00:05:55.712 --> 00:05:58.600 our colleague and friend Laura Ment,  
NOTE Confidence: 0.916511069285714

00:05:58.600 --> 00:06:01.858 who's a pediatric neurologist and also  
NOTE Confidence: 0.916511069285714

00:06:01.858 --> 00:06:04.663 with our colleague and determine of  
NOTE Confidence: 0.916511069285714

00:06:04.663 --> 00:06:06.618 the statistics department Joe Chang,  
NOTE Confidence: 0.916511069285714

00:06:06.620 --> 00:06:07.769 who is a.  
NOTE Confidence: 0.916511069285714

00:06:07.769 --> 00:06:10.067 World expert in data science and  
NOTE Confidence: 0.916511069285714

00:06:10.067 --> 00:06:13.096 you know the the work we are doing  
NOTE Confidence: 0.916511069285714

00:06:13.096 --> 00:06:15.903 here in terms of studying, mapping,  
NOTE Confidence: 0.916511069285714

00:06:15.903 --> 00:06:19.018 functional connectivity from fetal to  
NOTE Confidence: 0.916511069285714

00:06:19.018 --> 00:06:22.579 neonatal period in high risk babies  
NOTE Confidence: 0.916511069285714

00:06:22.580 --> 00:06:25.856 would not be really possible without  
NOTE Confidence: 0.916511069285714

00:06:25.856 --> 00:06:28.568 this group of experts coming together.  
NOTE Confidence: 0.916511069285714

00:06:28.568 --> 00:06:30.680 And and that Yale is one of the

NOTE Confidence: 0.916511069285714

00:06:30.738 --> 00:06:32.388 few places when it's possible.

NOTE Confidence: 0.883017661333333

00:06:34.450 --> 00:06:36.683 And and you know the testament to

NOTE Confidence: 0.883017661333333

00:06:36.683 --> 00:06:38.898 that is that they're probably less

NOTE Confidence: 0.883017661333333

00:06:38.898 --> 00:06:41.663 than a handful of groups around the

NOTE Confidence: 0.883017661333333

00:06:41.740 --> 00:06:44.698 world that are studying autism during

NOTE Confidence: 0.883017661333333

00:06:44.698 --> 00:06:46.670 such early developmental periods.

NOTE Confidence: 0.946448025

00:06:50.090 --> 00:06:53.626 So how do we? How do we study

NOTE Confidence: 0.946448025

00:06:53.630 --> 00:06:56.010 brain development in young AIDS

NOTE Confidence: 0.946448025

00:06:56.010 --> 00:06:58.390 or brain connectivity in neonates?

NOTE Confidence: 0.946448025

00:06:58.390 --> 00:07:01.911 We are studying it using approach called

NOTE Confidence: 0.946448025

00:07:01.911 --> 00:07:04.510 resting state functional neuroimaging,

NOTE Confidence: 0.946448025

00:07:04.510 --> 00:07:07.275 which allows us to study

NOTE Confidence: 0.946448025

00:07:07.275 --> 00:07:08.934 intrinsic brain connectivity

NOTE Confidence: 0.946448025

00:07:08.934 --> 00:07:11.290 patterns while babies are asleep.

NOTE Confidence: 0.946448025

00:07:11.290 --> 00:07:14.790 It's a very safe and noninvasive approach,

NOTE Confidence: 0.946448025

00:07:14.790 --> 00:07:17.980 and the way we do it is we bring babies  
NOTE Confidence: 0.946448025

00:07:18.071 --> 00:07:21.263 to our imaging center and we feed them.  
NOTE Confidence: 0.946448025

00:07:21.270 --> 00:07:23.298 We burp them, we wrap them,  
NOTE Confidence: 0.946448025

00:07:23.300 --> 00:07:25.330 make sure they are comfortable,  
NOTE Confidence: 0.946448025

00:07:25.330 --> 00:07:28.246 and then we wait for them to fall asleep.  
NOTE Confidence: 0.946448025

00:07:28.250 --> 00:07:29.288 When they do,  
NOTE Confidence: 0.946448025

00:07:29.288 --> 00:07:32.370 we very gently slide them into the scanner,  
NOTE Confidence: 0.946448025

00:07:32.370 --> 00:07:34.127 and while they are taking a nap,  
NOTE Confidence: 0.946448025

00:07:34.130 --> 00:07:37.314 we're taking measurements of their  
NOTE Confidence: 0.946448025

00:07:37.314 --> 00:07:39.244 brain structure and and measure  
NOTE Confidence: 0.946448025

00:07:39.244 --> 00:07:41.298 how there is brain structure  
NOTE Confidence: 0.946448025

00:07:41.298 --> 00:07:42.898 collective with one another.  
NOTE Confidence: 0.946448025

00:07:42.900 --> 00:07:44.540 And after half an hour we are done.  
NOTE Confidence: 0.946448025

00:07:44.540 --> 00:07:46.668 Babies are waking up and they go home.  
NOTE Confidence: 0.939128849166667

00:07:48.810 --> 00:07:52.058 This kind of research provides us with  
NOTE Confidence: 0.939128849166667

00:07:52.058 --> 00:07:54.949 incredible amount of information about.

NOTE Confidence: 0.939128849166667

00:07:54.950 --> 00:07:57.240 Functional into infrastructure of the

NOTE Confidence: 0.939128849166667

00:07:57.240 --> 00:07:59.530 brain that supports the functions

NOTE Confidence: 0.939128849166667

00:07:59.600 --> 00:08:01.856 that are very important for autism,

NOTE Confidence: 0.939128849166667

00:08:01.860 --> 00:08:03.920 and these include salience detection,

NOTE Confidence: 0.939128849166667

00:08:03.920 --> 00:08:07.336 emotion processing, allostatic regulation,

NOTE Confidence: 0.939128849166667

00:08:07.336 --> 00:08:11.606 language and and social attention.

NOTE Confidence: 0.939128849166667

00:08:11.610 --> 00:08:14.586 So in the study that we're just

NOTE Confidence: 0.939128849166667

00:08:14.586 --> 00:08:16.426 about to submit for publication,

NOTE Confidence: 0.939128849166667

00:08:16.430 --> 00:08:19.658 probably this afternoon.

NOTE Confidence: 0.939128849166667

00:08:19.660 --> 00:08:21.585 We examine a brain connectivity

NOTE Confidence: 0.939128849166667

00:08:21.585 --> 00:08:25.034 in in in in this group of neonates

NOTE Confidence: 0.939128849166667

00:08:25.034 --> 00:08:26.958 with and without autism.

NOTE Confidence: 0.939128849166667

00:08:26.960 --> 00:08:29.404 But the first question was, you know,

NOTE Confidence: 0.939128849166667

00:08:29.404 --> 00:08:32.380 brain is a very large and complex organ.

NOTE Confidence: 0.939128849166667

00:08:32.380 --> 00:08:34.570 So the question is which?

NOTE Confidence: 0.939128849166667

00:08:34.570 --> 00:08:36.377 Where do we start, where, where?  
NOTE Confidence: 0.939128849166667

00:08:36.377 --> 00:08:38.459 Which brain areas are we are?  
NOTE Confidence: 0.939128849166667

00:08:38.460 --> 00:08:41.472 Are we going to focus on and for  
NOTE Confidence: 0.939128849166667

00:08:41.472 --> 00:08:45.154 this first study from for this first  
NOTE Confidence: 0.939128849166667

00:08:45.154 --> 00:08:47.546 analysis from our prospective study,  
NOTE Confidence: 0.939128849166667

00:08:47.546 --> 00:08:48.512 we selected.  
NOTE Confidence: 0.939128849166667

00:08:48.512 --> 00:08:50.927 A specific brain area that's  
NOTE Confidence: 0.939128849166667

00:08:50.927 --> 00:08:53.958 located on either side of the brain  
NOTE Confidence: 0.939128849166667

00:08:53.958 --> 00:08:55.606 that's called anterior insula.  
NOTE Confidence: 0.939128849166667

00:08:55.610 --> 00:08:58.520 You can see it here in blue.  
NOTE Confidence: 0.858087455

00:09:01.330 --> 00:09:03.586 You can see it here in in blue.  
NOTE Confidence: 0.858087455

00:09:03.590 --> 00:09:06.705 The reason why we focused on zero  
NOTE Confidence: 0.858087455

00:09:06.705 --> 00:09:09.469 then on anterior insula is that.  
NOTE Confidence: 0.858087455

00:09:09.470 --> 00:09:12.790 Unlike many other cortical structure,  
NOTE Confidence: 0.858087455

00:09:12.790 --> 00:09:15.150 in solar matures extremely early,  
NOTE Confidence: 0.858087455

00:09:15.150 --> 00:09:17.460 it's structurally ready to go already

NOTE Confidence: 0.858087455

00:09:17.460 --> 00:09:19.829 in the second trimester of pregnancy

NOTE Confidence: 0.858087455

00:09:19.830 --> 00:09:22.620 and shows very advanced functional

NOTE Confidence: 0.858087455

00:09:22.620 --> 00:09:25.920 maturity even before babies are born.

NOTE Confidence: 0.858087455

00:09:25.920 --> 00:09:28.380 Which suggests that this particular brain

NOTE Confidence: 0.858087455

00:09:28.380 --> 00:09:32.550 area is very important for survival.

NOTE Confidence: 0.858087455

00:09:32.550 --> 00:09:35.436 What's also important that insula is

NOTE Confidence: 0.858087455

00:09:35.436 --> 00:09:37.998 also heavily connected with other

NOTE Confidence: 0.858087455

00:09:37.998 --> 00:09:40.376 cortical and subcortical structures,

NOTE Confidence: 0.858087455

00:09:40.376 --> 00:09:43.806 which means that it facilitates

NOTE Confidence: 0.858087455

00:09:43.810 --> 00:09:46.595 communication between the structure and

NOTE Confidence: 0.858087455

00:09:46.595 --> 00:09:48.823 internal integration of information

NOTE Confidence: 0.858087455

00:09:48.823 --> 00:09:51.220 across the variety of structures.

NOTE Confidence: 0.872452911428571

00:09:53.450 --> 00:09:54.018 Functionally,

NOTE Confidence: 0.872452911428571

00:09:54.018 --> 00:09:57.426 it's involved heavily in emotion processing,

NOTE Confidence: 0.872452911428571

00:09:57.430 --> 00:09:59.725 facilitate salience detection,

NOTE Confidence: 0.872452911428571

00:09:59.725 --> 00:10:02.785 integration of sensory information,  
NOTE Confidence: 0.872452911428571

00:10:02.790 --> 00:10:04.998 and preparation from action.  
NOTE Confidence: 0.872452911428571

00:10:04.998 --> 00:10:08.710 So, in a way, insula is like a very  
NOTE Confidence: 0.872452911428571

00:10:08.710 --> 00:10:10.660 important communicative habits you can.  
NOTE Confidence: 0.872452911428571

00:10:10.660 --> 00:10:13.084 You can compare it to an airport in  
NOTE Confidence: 0.872452911428571

00:10:13.084 --> 00:10:15.870 Atlanta if everything goes well in Atlanta,  
NOTE Confidence: 0.872452911428571

00:10:15.870 --> 00:10:17.055 everything goes well with the  
NOTE Confidence: 0.872452911428571

00:10:17.055 --> 00:10:18.003 rest of the country,  
NOTE Confidence: 0.872452911428571

00:10:18.010 --> 00:10:20.250 but if something is off in Atlanta,  
NOTE Confidence: 0.872452911428571

00:10:20.250 --> 00:10:22.150 we feel it at other.  
NOTE Confidence: 0.872452911428571

00:10:22.150 --> 00:10:23.182 There was as well,  
NOTE Confidence: 0.872452911428571

00:10:23.182 --> 00:10:25.225 and for that reason it is very  
NOTE Confidence: 0.872452911428571

00:10:25.225 --> 00:10:26.949 important to understand whether  
NOTE Confidence: 0.872452911428571

00:10:26.949 --> 00:10:30.490 insulin functions tunes sort of in  
NOTE Confidence: 0.872452911428571

00:10:30.490 --> 00:10:33.566 a typical way shortly after birth.  
NOTE Confidence: 0.872452911428571

00:10:33.566 --> 00:10:35.576 In kids who have genetic



NOTE Confidence: 0.872452911428571  
00:10:35.576 --> 00:10:37.799 risk for developing autism.  
NOTE Confidence: 0.872452911428571  
00:10:37.800 --> 00:10:38.686 More recently,  
NOTE Confidence: 0.872452911428571  
00:10:38.686 --> 00:10:40.901 people suggested that insula also  
NOTE Confidence: 0.872452911428571  
00:10:40.901 --> 00:10:43.660 plays a critical role in development  
NOTE Confidence: 0.872452911428571  
00:10:43.660 --> 00:10:45.920 of social bonding and motivation,  
NOTE Confidence: 0.872452911428571  
00:10:45.920 --> 00:10:49.544 which is very important for our  
NOTE Confidence: 0.872452911428571  
00:10:49.544 --> 00:10:51.960 question relating to autism.  
NOTE Confidence: 0.872452911428571  
00:10:51.960 --> 00:10:53.822 Now, there have been a number of  
NOTE Confidence: 0.872452911428571  
00:10:53.822 --> 00:10:55.600 studies in older kids with autism,  
NOTE Confidence: 0.872452911428571  
00:10:55.600 --> 00:10:58.129 school age kids,  
NOTE Confidence: 0.872452911428571  
00:10:58.129 --> 00:11:00.658 adolescents that involve.  
NOTE Confidence: 0.872452911428571  
00:11:00.660 --> 00:11:02.880 Examining connectivity of of this  
NOTE Confidence: 0.872452911428571  
00:11:02.880 --> 00:11:05.100 brain regions with other regions,  
NOTE Confidence: 0.872452911428571  
00:11:05.100 --> 00:11:07.602 and there's a consensus that in  
NOTE Confidence: 0.872452911428571  
00:11:07.602 --> 00:11:09.791 older kids with autism insula  
NOTE Confidence: 0.872452911428571

00:11:09.791 --> 00:11:11.991 is under connected does not  
NOTE Confidence: 0.872452911428571

00:11:11.991 --> 00:11:14.220 communicate as much as this.  
NOTE Confidence: 0.872452911428571

00:11:14.220 --> 00:11:18.119 This should be with other brain areas,  
NOTE Confidence: 0.872452911428571

00:11:18.120 --> 00:11:19.428 but of course because these studies  
NOTE Confidence: 0.872452911428571

00:11:19.428 --> 00:11:20.878 have been done on all the kids,  
NOTE Confidence: 0.872452911428571

00:11:20.880 --> 00:11:24.252 we don't really know whether these  
NOTE Confidence: 0.872452911428571

00:11:24.252 --> 00:11:26.112 kind of differences are primary  
NOTE Confidence: 0.872452911428571

00:11:26.112 --> 00:11:28.352 in autism or whether they emerge  
NOTE Confidence: 0.872452911428571

00:11:28.352 --> 00:11:30.746 secondary is an effect of having it.  
NOTE Confidence: 0.872452911428571

00:11:30.750 --> 00:11:31.590 Social disability.  
NOTE Confidence: 0.932946684285714

00:11:33.640 --> 00:11:35.719 So in order to sort it out,  
NOTE Confidence: 0.932946684285714

00:11:35.720 --> 00:11:39.698 we enrolled a group of kids.  
NOTE Confidence: 0.932946684285714

00:11:39.700 --> 00:11:42.685 Babies, neonates, newborns who do  
NOTE Confidence: 0.932946684285714

00:11:42.685 --> 00:11:46.552 not have any family members with what  
NOTE Confidence: 0.932946684285714

00:11:46.552 --> 00:11:49.296 autism we call them low risk sample,  
NOTE Confidence: 0.932946684285714

00:11:49.300 --> 00:11:52.140 and we recruited a group of babies who

NOTE Confidence: 0.932946684285714

00:11:52.140 --> 00:11:54.939 have an older sibling with autism.

NOTE Confidence: 0.932946684285714

00:11:54.940 --> 00:11:59.004 So which means that they have elevated risk

NOTE Confidence: 0.932946684285714

00:11:59.004 --> 00:12:02.660 for developing autism if in low risk sample.

NOTE Confidence: 0.932946684285714

00:12:02.660 --> 00:12:06.872 We expect about 1% of kids to develop autism.

NOTE Confidence: 0.932946684285714

00:12:06.880 --> 00:12:09.196 In high risk. Example, we expect.

NOTE Confidence: 0.932946684285714

00:12:09.200 --> 00:12:13.016 About 20 or so percent of kids to

NOTE Confidence: 0.932946684285714

00:12:13.016 --> 00:12:15.940 develop about this and what we did.

NOTE Confidence: 0.932946684285714

00:12:15.940 --> 00:12:17.765 We examined using seed based

NOTE Confidence: 0.932946684285714

00:12:17.765 --> 00:12:19.639 functional connectivity approach.

NOTE Confidence: 0.932946684285714

00:12:19.640 --> 00:12:22.776 We examine brain activation

NOTE Confidence: 0.932946684285714

00:12:22.776 --> 00:12:25.128 or coactivation patterns.

NOTE Confidence: 0.932946684285714

00:12:25.130 --> 00:12:26.622 In both sample and,

NOTE Confidence: 0.932946684285714

00:12:26.622 --> 00:12:29.514 what we found was what we expected

NOTE Confidence: 0.932946684285714

00:12:29.514 --> 00:12:32.349 that in silicon EXPAREL strongly

NOTE Confidence: 0.932946684285714

00:12:32.350 --> 00:12:33.910 with other areas of the brain,

NOTE Confidence: 0.932946684285714

00:12:33.910 --> 00:12:36.070 including anterior cingulate cortex,  
NOTE Confidence: 0.932946684285714

00:12:36.070 --> 00:12:40.473 which in which it forms the salience network  
NOTE Confidence: 0.932946684285714

00:12:40.473 --> 00:12:44.218 as well as amygdala and and hippocampus,  
NOTE Confidence: 0.932946684285714

00:12:44.220 --> 00:12:45.772 which are very important  
NOTE Confidence: 0.932946684285714

00:12:45.772 --> 00:12:47.324 structure from motion processing,  
NOTE Confidence: 0.932946684285714

00:12:47.330 --> 00:12:50.420 learning, and memory.  
NOTE Confidence: 0.932946684285714

00:12:50.420 --> 00:12:51.624 What we did next.  
NOTE Confidence: 0.932946684285714

00:12:51.624 --> 00:12:53.430 We compared the strength of the  
NOTE Confidence: 0.932946684285714

00:12:53.497 --> 00:12:55.646 activation in these two groups to see  
NOTE Confidence: 0.932946684285714

00:12:55.646 --> 00:12:57.649 if there are any differences amongst  
NOTE Confidence: 0.932946684285714

00:12:57.649 --> 00:13:00.447 those who do or don't have risk for  
NOTE Confidence: 0.932946684285714

00:13:00.447 --> 00:13:03.436 autism and what we found was that  
NOTE Confidence: 0.932946684285714

00:13:03.436 --> 00:13:06.964 babies who are carrying genetic risk  
NOTE Confidence: 0.932946684285714

00:13:06.964 --> 00:13:09.544 for autism show hyperactivation.  
NOTE Confidence: 0.932946684285714

00:13:09.550 --> 00:13:12.825 Of the connectivity between anterior  
NOTE Confidence: 0.932946684285714

00:13:12.825 --> 00:13:16.158 insula and amygdala and amygdala is

NOTE Confidence: 0.932946684285714

00:13:16.158 --> 00:13:17.982 another structure that tremendously

NOTE Confidence: 0.932946684285714

00:13:17.982 --> 00:13:20.110 important for emotion processing,

NOTE Confidence: 0.932946684285714

00:13:20.110 --> 00:13:21.409 learning, and memory.

NOTE Confidence: 0.932946684285714

00:13:21.409 --> 00:13:23.574 It's also heavily connected with

NOTE Confidence: 0.932946684285714

00:13:23.574 --> 00:13:25.230 other brain structures,

NOTE Confidence: 0.932946684285714

00:13:25.230 --> 00:13:29.100 so if insula is like Atlanta.

NOTE Confidence: 0.932946684285714

00:13:29.100 --> 00:13:30.591 Magalys like Chicago.

NOTE Confidence: 0.932946684285714

00:13:30.591 --> 00:13:33.573 So imagine that something wrong goes

NOTE Confidence: 0.932946684285714

00:13:33.573 --> 00:13:36.328 wrong with both of these airports.

NOTE Confidence: 0.932946684285714

00:13:36.330 --> 00:13:38.678 Communication across the entire

NOTE Confidence: 0.932946684285714

00:13:38.678 --> 00:13:41.026 country or entire brain.

NOTE Confidence: 0.932946684285714

00:13:41.030 --> 00:13:42.209 In this case,

NOTE Confidence: 0.932946684285714

00:13:42.209 --> 00:13:45.259 that might be quite disrupted in

NOTE Confidence: 0.932946684285714

00:13:45.259 --> 00:13:48.997 ways that are difficult to predict.

NOTE Confidence: 0.932946684285714

00:13:49.000 --> 00:13:51.050 So.

NOTE Confidence: 0.932946684285714

00:13:51.050 --> 00:13:53.297 But we also did we follow these  
NOTE Confidence: 0.932946684285714

00:13:53.297 --> 00:13:55.480 babies we we scanned them at  
NOTE Confidence: 0.932946684285714

00:13:55.480 --> 00:13:57.766 birth and we follow them again.  
NOTE Confidence: 0.932946684285714

00:13:57.770 --> 00:14:00.129 When they were about 18 months old.  
NOTE Confidence: 0.932946684285714

00:14:00.130 --> 00:14:02.746 And at that point we evaluated.  
NOTE Confidence: 0.932946684285714

00:14:02.750 --> 00:14:05.230 What is the severity?  
NOTE Confidence: 0.932946684285714

00:14:05.230 --> 00:14:07.710 Of behaviors we typically  
NOTE Confidence: 0.932946684285714

00:14:07.710 --> 00:14:09.760 associate with autism.  
NOTE Confidence: 0.932946684285714

00:14:09.760 --> 00:14:11.902 And then we correlated the strength  
NOTE Confidence: 0.932946684285714

00:14:11.902 --> 00:14:13.680 of the connectivity between ends,  
NOTE Confidence: 0.932946684285714

00:14:13.680 --> 00:14:15.336 insula, and amygdala.  
NOTE Confidence: 0.932946684285714

00:14:15.336 --> 00:14:18.648 With that measure of of social  
NOTE Confidence: 0.932946684285714

00:14:18.648 --> 00:14:21.190 vulnerabilities in our sound when all  
NOTE Confidence: 0.932946684285714

00:14:21.190 --> 00:14:23.706 we saw was something very interesting  
NOTE Confidence: 0.932946684285714

00:14:23.706 --> 00:14:26.838 and and encouraging in some ways.  
NOTE Confidence: 0.932946684285714

00:14:26.840 --> 00:14:29.745 Is that there was a very strong

NOTE Confidence: 0.932946684285714  
00:14:29.745 --> 00:14:30.990 association between lower  
NOTE Confidence: 0.932946684285714  
00:14:31.069 --> 00:14:33.544 connectivity at birth and higher  
NOTE Confidence: 0.932946684285714  
00:14:33.544 --> 00:14:35.904 autism symptoms at 18 months.  
NOTE Confidence: 0.854864896666666  
00:14:38.490 --> 00:14:42.066 So this was a striking and and novel  
NOTE Confidence: 0.854864896666666  
00:14:42.066 --> 00:14:44.875 presentation novel novel discovery of  
NOTE Confidence: 0.854864896666666  
00:14:44.875 --> 00:14:48.505 weakening of the very important circuitry  
NOTE Confidence: 0.854864896666666  
00:14:48.510 --> 00:14:50.794 that supports emotion processing,  
NOTE Confidence: 0.854864896666666  
00:14:50.794 --> 00:14:53.827 stealing detection and learning in autism.  
NOTE Confidence: 0.854864896666666  
00:14:53.827 --> 00:14:56.900 What we also demonstrate for the first  
NOTE Confidence: 0.854864896666666  
00:14:56.978 --> 00:14:59.680 time that some of the hyper activations  
NOTE Confidence: 0.854864896666666  
00:14:59.680 --> 00:15:02.807 that we see in older kids with autism  
NOTE Confidence: 0.854864896666666  
00:15:02.810 --> 00:15:05.981 may in fact be present already at  
NOTE Confidence: 0.854864896666666  
00:15:05.981 --> 00:15:09.040 birth when babies are just entering.  
NOTE Confidence: 0.854864896666666  
00:15:09.040 --> 00:15:11.931 The game of figuring out what their  
NOTE Confidence: 0.854864896666666  
00:15:11.931 --> 00:15:15.078 social and non social environment is.  
NOTE Confidence: 0.854864896666666

00:15:15.080 --> 00:15:18.300 So we are very, very excited about now.

NOTE Confidence: 0.8548648966666666

00:15:18.300 --> 00:15:21.390 This study we are working on,

NOTE Confidence: 0.8548648966666666

00:15:21.390 --> 00:15:23.715 continuing it, accruing the samples.

NOTE Confidence: 0.8548648966666666

00:15:23.720 --> 00:15:24.632 But as always,

NOTE Confidence: 0.8548648966666666

00:15:24.632 --> 00:15:26.760 we are also thinking about the future.

NOTE Confidence: 0.8548648966666666

00:15:26.760 --> 00:15:28.640 What is the what are the next step?

NOTE Confidence: 0.8548648966666666

00:15:28.640 --> 00:15:31.940 How how do we want to capitalize or

NOTE Confidence: 0.8548648966666666

00:15:31.940 --> 00:15:36.149 leverage this finding for future discovery?

NOTE Confidence: 0.8548648966666666

00:15:36.150 --> 00:15:38.439 And and one of the lines of

NOTE Confidence: 0.8548648966666666

00:15:38.439 --> 00:15:40.773 research they would like to pursue

NOTE Confidence: 0.8548648966666666

00:15:40.773 --> 00:15:42.903 is to actually evaluate empirical.

NOTE Confidence: 0.8548648966666666

00:15:42.910 --> 00:15:46.210 What is the specific impairment?

NOTE Confidence: 0.8548648966666666

00:15:46.210 --> 00:15:48.874 How is the specific impairment at

NOTE Confidence: 0.8548648966666666

00:15:48.874 --> 00:15:51.271 birth affect development of social

NOTE Confidence: 0.8548648966666666

00:15:51.271 --> 00:15:53.427 motivation and social bonding?

NOTE Confidence: 0.8548648966666666

00:15:53.430 --> 00:15:55.476 Because there's a hypothesis that there



NOTE Confidence: 0.8548648966666666

00:15:55.476 --> 00:15:58.107 are some links between monula and those two,

NOTE Confidence: 0.8548648966666666

00:15:58.110 --> 00:16:01.458 but but we would like to be able to

NOTE Confidence: 0.8548648966666666

00:16:01.458 --> 00:16:04.529 show it and paper in our samples.

NOTE Confidence: 0.8548648966666666

00:16:04.530 --> 00:16:06.889 The second thing that we would like

NOTE Confidence: 0.8548648966666666

00:16:06.889 --> 00:16:10.130 to do is to expand our investigation,

NOTE Confidence: 0.8548648966666666

00:16:10.130 --> 00:16:11.870 broaden our investigation so so

NOTE Confidence: 0.8548648966666666

00:16:11.870 --> 00:16:13.262 when we scan babies,

NOTE Confidence: 0.8548648966666666

00:16:13.270 --> 00:16:16.546 we collect information from the entire brain.

NOTE Confidence: 0.8548648966666666

00:16:16.550 --> 00:16:18.452 There's tons of information and and

NOTE Confidence: 0.8548648966666666

00:16:18.452 --> 00:16:21.308 and we know that kids without this and

NOTE Confidence: 0.8548648966666666

00:16:21.308 --> 00:16:23.208 not only have social difficulties,

NOTE Confidence: 0.8548648966666666

00:16:23.210 --> 00:16:25.014 but actually they have.

NOTE Confidence: 0.8548648966666666

00:16:25.014 --> 00:16:28.082 A lot of concurring conditions that have

NOTE Confidence: 0.8548648966666666

00:16:28.082 --> 00:16:31.430 to do with with regulation of attention,

NOTE Confidence: 0.8548648966666666

00:16:31.430 --> 00:16:33.314 regulation of emotions,

NOTE Confidence: 0.8548648966666666

00:16:33.314 --> 00:16:35.878 language development, cognitive processing.  
NOTE Confidence: 0.8548648966666666

00:16:35.878 --> 00:16:39.802 And each of them contributes independently  
NOTE Confidence: 0.8548648966666666

00:16:39.802 --> 00:16:43.566 to long term outcomes in our kids.  
NOTE Confidence: 0.8548648966666666

00:16:43.570 --> 00:16:44.580 So what?  
NOTE Confidence: 0.74677244625

00:16:46.700 --> 00:16:50.270 Investigate if we can detect mechanisms or  
NOTE Confidence: 0.74677244625

00:16:50.270 --> 00:16:53.138 predictors of of these outcomes as well,  
NOTE Confidence: 0.74677244625

00:16:53.140 --> 00:16:55.684 but the idea of hopefully identifying  
NOTE Confidence: 0.74677244625

00:16:55.684 --> 00:16:58.979 better ways of intervening or understanding  
NOTE Confidence: 0.74677244625

00:16:58.979 --> 00:17:03.860 the underlying mechanisms. And finally.  
NOTE Confidence: 0.74677244625

00:17:03.860 --> 00:17:07.935 The the circuitry between amygdala  
NOTE Confidence: 0.74677244625

00:17:07.935 --> 00:17:12.275 and insula identify here is is very  
NOTE Confidence: 0.74677244625

00:17:12.275 --> 00:17:15.570 well conserved and and develops very,  
NOTE Confidence: 0.74677244625

00:17:15.570 --> 00:17:18.410 very early in during pregnancy,  
NOTE Confidence: 0.74677244625

00:17:18.410 --> 00:17:21.146 and so we would like to download extent.  
NOTE Confidence: 0.74677244625

00:17:21.150 --> 00:17:24.386 Our imaging findings in newborns to  
NOTE Confidence: 0.74677244625

00:17:24.386 --> 00:17:26.566 the last trimester of pregnancy,

NOTE Confidence: 0.74677244625

00:17:26.570 --> 00:17:29.594 and to better understand the developmental

NOTE Confidence: 0.74677244625

00:17:29.594 --> 00:17:33.204 dynamic of this of this circuitry.

NOTE Confidence: 0.74677244625

00:17:33.204 --> 00:17:36.715 And also to see if there are

NOTE Confidence: 0.74677244625

00:17:36.715 --> 00:17:38.407 potentially any alterations that

NOTE Confidence: 0.74677244625

00:17:38.407 --> 00:17:40.920 that occur already before birth.

NOTE Confidence: 0.74677244625

00:17:40.920 --> 00:17:43.107 And and I can talk a little bit more

NOTE Confidence: 0.74677244625

00:17:43.107 --> 00:17:45.317 about it if you have questions further.

NOTE Confidence: 0.8174241015625

00:17:48.290 --> 00:17:51.398 So, so this is a tremendously

NOTE Confidence: 0.8174241015625

00:17:51.398 --> 00:17:55.133 exciting and and but part of part

NOTE Confidence: 0.8174241015625

00:17:55.133 --> 00:17:58.774 of the excitement of our work has

NOTE Confidence: 0.8174241015625

00:17:58.774 --> 00:18:01.379 to do with constant innovation.

NOTE Confidence: 0.8174241015625

00:18:01.380 --> 00:18:06.490 In terms of developing better methods of.

NOTE Confidence: 0.8174241015625

00:18:06.490 --> 00:18:10.288 Recording and quantifying.

NOTE Confidence: 0.8174241015625

00:18:10.290 --> 00:18:13.005 Characteristics that are related to

NOTE Confidence: 0.8174241015625

00:18:13.005 --> 00:18:15.720 neurodevelopmental office to the new

NOTE Confidence: 0.8174241015625

00:18:15.795 --> 00:18:20.370 developmental disorders including autism.  
NOTE Confidence: 0.8174241015625

00:18:20.370 --> 00:18:22.386 And I would like to just tell you  
NOTE Confidence: 0.8174241015625

00:18:22.386 --> 00:18:23.988 very briefly about two of these.  
NOTE Confidence: 0.8174241015625

00:18:23.990 --> 00:18:25.638 These these new developments.  
NOTE Confidence: 0.8174241015625

00:18:25.638 --> 00:18:29.044 So if you know past three years we've  
NOTE Confidence: 0.8174241015625

00:18:29.044 --> 00:18:31.066 spent under pandemic conditions,  
NOTE Confidence: 0.8174241015625

00:18:31.066 --> 00:18:34.790 we've been all affected by them in  
NOTE Confidence: 0.8174241015625

00:18:34.881 --> 00:18:37.671 in so many different ways personally  
NOTE Confidence: 0.8174241015625

00:18:37.671 --> 00:18:39.490 and and and professionally,  
NOTE Confidence: 0.8174241015625

00:18:39.490 --> 00:18:42.850 and our research was affected to some extent,  
NOTE Confidence: 0.8174241015625

00:18:42.850 --> 00:18:44.887 probably less than than in other groups,  
NOTE Confidence: 0.8174241015625

00:18:44.890 --> 00:18:46.418 but we had to.  
NOTE Confidence: 0.8174241015625

00:18:46.418 --> 00:18:48.710 We decided very early in the  
NOTE Confidence: 0.8174241015625

00:18:48.808 --> 00:18:51.478 pandemic that we are going to.  
NOTE Confidence: 0.8174241015625

00:18:51.480 --> 00:18:53.304 Spend this time innovating,  
NOTE Confidence: 0.8174241015625

00:18:53.304 --> 00:18:57.030 developing new labs and and this work it was.

NOTE Confidence: 0.8174241015625

00:18:57.030 --> 00:19:01.254 It has been really led by Doctor Angelina

NOTE Confidence: 0.8174241015625

00:19:01.254 --> 00:19:04.640 Verneti who is our former postdoc.

NOTE Confidence: 0.8174241015625

00:19:04.640 --> 00:19:06.848 She came here five years ago and now

NOTE Confidence: 0.8174241015625

00:19:06.848 --> 00:19:09.249 she's an associate research scientist,

NOTE Confidence: 0.8174241015625

00:19:09.250 --> 00:19:11.926 and so we validated 22 specific

NOTE Confidence: 0.8174241015625

00:19:11.926 --> 00:19:14.441 methods for studying outcomes in our

NOTE Confidence: 0.8174241015625

00:19:14.441 --> 00:19:16.716 our babies home with kind of art.

NOTE Confidence: 0.8174241015625

00:19:16.720 --> 00:19:20.000 One of them involves recording

NOTE Confidence: 0.8174241015625

00:19:20.000 --> 00:19:22.220 gaze behaviors or attention.

NOTE Confidence: 0.8174241015625

00:19:22.220 --> 00:19:24.440 During the life interaction

NOTE Confidence: 0.8174241015625

00:19:24.440 --> 00:19:26.052 face to face interaction,

NOTE Confidence: 0.8174241015625

00:19:26.052 --> 00:19:28.828 some of you might be familiar with

NOTE Confidence: 0.8174241015625

00:19:28.828 --> 00:19:31.330 the work we do in in our lab that

NOTE Confidence: 0.8174241015625

00:19:31.413 --> 00:19:33.377 involves studying attention by

NOTE Confidence: 0.8174241015625

00:19:33.377 --> 00:19:35.672 presenting children with with various

NOTE Confidence: 0.8174241015625

00:19:35.672 --> 00:19:38.317 images on the flat computer screen,  
NOTE Confidence: 0.8174241015625

00:19:38.320 --> 00:19:40.960 presenting them with videos  
NOTE Confidence: 0.8174241015625

00:19:40.960 --> 00:19:42.940 with speech stimuli.  
NOTE Confidence: 0.8174241015625

00:19:42.940 --> 00:19:44.998 A variety of emotional stimuli and  
NOTE Confidence: 0.8174241015625

00:19:44.998 --> 00:19:47.077 recording where they are looking and  
NOTE Confidence: 0.8174241015625

00:19:47.077 --> 00:19:49.338 then based on the patterns of looking,  
NOTE Confidence: 0.8174241015625

00:19:49.340 --> 00:19:53.096 inferring what's happening in their brain.  
NOTE Confidence: 0.8174241015625

00:19:53.100 --> 00:19:57.230 We've been very successful with this work.  
NOTE Confidence: 0.8174241015625

00:19:57.230 --> 00:19:59.270 To a number of discoveries,  
NOTE Confidence: 0.8174241015625

00:19:59.270 --> 00:20:00.950 but it always sort of.  
NOTE Confidence: 0.8174241015625

00:20:00.950 --> 00:20:03.497 There was an always a question in sort of  
NOTE Confidence: 0.8174241015625

00:20:03.497 --> 00:20:07.022 in the back of our mind is what happens if.  
NOTE Confidence: 0.8174241015625

00:20:07.022 --> 00:20:10.825 How can we better evaluate the trials  
NOTE Confidence: 0.8174241015625

00:20:10.825 --> 00:20:13.915 attentional choices when they are actually  
NOTE Confidence: 0.8174241015625

00:20:13.915 --> 00:20:16.318 interacting with someone face to face?  
NOTE Confidence: 0.8174241015625

00:20:16.320 --> 00:20:19.002 And this technology has become available

NOTE Confidence: 0.8174241015625

00:20:19.002 --> 00:20:22.425 in the past couple of years and we were

NOTE Confidence: 0.8174241015625

00:20:22.425 --> 00:20:24.630 able to purchase it and establish the

NOTE Confidence: 0.8174241015625

00:20:24.697 --> 00:20:27.065 entire lab and the way it looks that

NOTE Confidence: 0.8174241015625

00:20:27.065 --> 00:20:29.779 the kiddo is sitting either in a hard cut,

NOTE Confidence: 0.8174241015625

00:20:29.780 --> 00:20:32.618 high high chair or parents lab

NOTE Confidence: 0.8174241015625

00:20:32.618 --> 00:20:35.699 across the table from an examiner,

NOTE Confidence: 0.8174241015625

00:20:35.700 --> 00:20:37.380 with or without toys.

NOTE Confidence: 0.8174241015625

00:20:37.380 --> 00:20:39.060 And there's a low.

NOTE Confidence: 0.8174241015625

00:20:39.060 --> 00:20:41.165 Low eye tracking setup that's

NOTE Confidence: 0.8174241015625

00:20:41.165 --> 00:20:43.796 designed to to capture the child's

NOTE Confidence: 0.8174241015625

00:20:43.796 --> 00:20:46.462 attention as they look at the

NOTE Confidence: 0.8174241015625

00:20:46.462 --> 00:20:48.617 person who's interacting with them,

NOTE Confidence: 0.8174241015625

00:20:48.620 --> 00:20:51.360 and it may look like that this

NOTE Confidence: 0.8174241015625

00:20:51.360 --> 00:20:55.046 morning I had to wear my hat and

NOTE Confidence: 0.8174241015625

00:20:55.046 --> 00:20:59.798 my coat and my mittens and a scarf.

NOTE Confidence: 0.8174241015625

00:20:59.800 --> 00:21:03.460 I bet you are a cold this morning too.  
NOTE Confidence: 0.8174241015625

00:21:03.460 --> 00:21:06.796 Every Dieter cooked OHA dinosaur coat.  
NOTE Confidence: 0.8174241015625

00:21:06.800 --> 00:21:08.413 I have a blue coat.  
NOTE Confidence: 0.8174241015625

00:21:08.413 --> 00:21:12.306 And I also heard that it might snow.  
NOTE Confidence: 0.8174241015625

00:21:12.310 --> 00:21:13.898 I have my old friend.  
NOTE Confidence: 0.8174241015625

00:21:13.898 --> 00:21:15.750 You have your own life hat.  
NOTE Confidence: 0.8174241015625

00:21:15.750 --> 00:21:17.500 So as you can see,  
NOTE Confidence: 0.8174241015625

00:21:17.500 --> 00:21:20.776 as the child is interacting with.  
NOTE Confidence: 0.8174241015625

00:21:20.780 --> 00:21:23.138 With mom or in this case,  
NOTE Confidence: 0.8174241015625

00:21:23.140 --> 00:21:24.478 Megan the examiner,  
NOTE Confidence: 0.8174241015625

00:21:24.478 --> 00:21:27.600 we are able to track very precisely  
NOTE Confidence: 0.8174241015625

00:21:27.685 --> 00:21:29.590 where the child is looking  
NOTE Confidence: 0.8174241015625

00:21:29.590 --> 00:21:31.495 at all times and the  
NOTE Confidence: 0.855869700333333

00:21:31.582 --> 00:21:34.012 significance of that is that when  
NOTE Confidence: 0.855869700333333

00:21:34.012 --> 00:21:36.633 we then take the amount of time,  
NOTE Confidence: 0.855869700333333

00:21:36.633 --> 00:21:38.950 the proportion of time the kids spent



NOTE Confidence: 0.855869700333333

00:21:39.015 --> 00:21:41.694 looking at the examiner's face and we

NOTE Confidence: 0.855869700333333

00:21:41.694 --> 00:21:44.400 correlated with severity of autism symptoms,

NOTE Confidence: 0.855869700333333

00:21:44.400 --> 00:21:45.918 we see that there's a very,

NOTE Confidence: 0.855869700333333

00:21:45.920 --> 00:21:47.585 very strong association.

NOTE Confidence: 0.855869700333333

00:21:47.585 --> 00:21:50.570 Between the two, let's looking at the face,

NOTE Confidence: 0.855869700333333

00:21:50.570 --> 00:21:53.470 higher severity of autism symptoms

NOTE Confidence: 0.855869700333333

00:21:53.470 --> 00:21:56.249 with the idea that so So what?

NOTE Confidence: 0.855869700333333

00:21:56.250 --> 00:21:57.466 What? It tells us.

NOTE Confidence: 0.855869700333333

00:21:57.466 --> 00:21:59.370 Basically, this task is a wonderful,

NOTE Confidence: 0.855869700333333

00:21:59.370 --> 00:22:01.940 wonderful proxy for assessing very

NOTE Confidence: 0.855869700333333

00:22:01.940 --> 00:22:06.170 quickly and in a very naturalistic way.

NOTE Confidence: 0.855869700333333

00:22:06.170 --> 00:22:08.960 Severity of social difficulties the

NOTE Confidence: 0.855869700333333

00:22:08.960 --> 00:22:12.303 children experience and and we are

NOTE Confidence: 0.855869700333333

00:22:12.303 --> 00:22:15.558 very excited to take this this this

NOTE Confidence: 0.855869700333333

00:22:15.558 --> 00:22:17.424 this particular outcome measure.

NOTE Confidence: 0.855869700333333

00:22:17.424 --> 00:22:21.160 To the next level with our imaging studies,  
NOTE Confidence: 0.855869700333333

00:22:21.160 --> 00:22:22.816 there's a second lab that we  
NOTE Confidence: 0.855869700333333

00:22:22.816 --> 00:22:23.920 developed during the pandemic.  
NOTE Confidence: 0.855869700333333

00:22:23.920 --> 00:22:25.792 This is in collaboration with our  
NOTE Confidence: 0.855869700333333

00:22:25.792 --> 00:22:27.360 colleagues at the Haskins Labs,  
NOTE Confidence: 0.855869700333333

00:22:27.360 --> 00:22:30.892 specifically Doctor Richard Aslin,  
NOTE Confidence: 0.855869700333333

00:22:30.892 --> 00:22:36.190 who's foremost most most world renowned  
NOTE Confidence: 0.855869700333333

00:22:36.312 --> 00:22:38.916 neurodevelopmental psychologist  
NOTE Confidence: 0.855869700333333

00:22:38.916 --> 00:22:42.108 and we developed a way to actually  
NOTE Confidence: 0.855869700333333

00:22:42.108 --> 00:22:45.055 not just study attention in their  
NOTE Confidence: 0.855869700333333

00:22:45.055 --> 00:22:47.983 context of real-world face to face.  
NOTE Confidence: 0.855869700333333

00:22:47.990 --> 00:22:48.794 Their action,  
NOTE Confidence: 0.855869700333333

00:22:48.794 --> 00:22:51.206 but actually looking into the brain  
NOTE Confidence: 0.855869700333333

00:22:51.206 --> 00:22:54.333 and seeing what is the what are the  
NOTE Confidence: 0.855869700333333

00:22:54.333 --> 00:22:56.309 activation patterns in response to the  
NOTE Confidence: 0.855869700333333

00:22:56.310 --> 00:22:58.746 child's interaction with the outside world.

NOTE Confidence: 0.855869700333333

00:22:58.750 --> 00:23:01.580 We use it using some we we do it using

NOTE Confidence: 0.855869700333333

00:23:01.657 --> 00:23:04.009 something that's called functional

NOTE Confidence: 0.855869700333333

00:23:04.009 --> 00:23:06.949 near infrared spectroscopy or years,

NOTE Confidence: 0.855869700333333

00:23:06.950 --> 00:23:11.262 which is a non invasive imaging technique

NOTE Confidence: 0.855869700333333

00:23:11.262 --> 00:23:14.904 that can be implemented anywhere and

NOTE Confidence: 0.855869700333333

00:23:14.904 --> 00:23:18.394 involves wearing this very handsome.

NOTE Confidence: 0.855869700333333

00:23:18.400 --> 00:23:18.806 That,

NOTE Confidence: 0.855869700333333

00:23:18.806 --> 00:23:22.460 and you might think it's hard to put on,

NOTE Confidence: 0.855869700333333

00:23:22.460 --> 00:23:23.644 and it might be,

NOTE Confidence: 0.855869700333333

00:23:23.644 --> 00:23:25.825 but we we have developed a lot

NOTE Confidence: 0.855869700333333

00:23:25.825 --> 00:23:27.490 of expertise in doing so.

NOTE Confidence: 0.855869700333333

00:23:27.490 --> 00:23:29.645 So hey,

NOTE Confidence: 0.855869700333333

00:23:29.645 --> 00:23:30.850 hey.

NOTE Confidence: 0.855869700333333

00:23:30.850 --> 00:23:32.580 Wow I

NOTE Confidence: 0.80647814

00:23:32.580 --> 00:23:34.784 love this hat Cecilia.

NOTE Confidence: 0.80647814

00:23:34.784 --> 00:23:37.850 I love this hat. Good job.  
NOTE Confidence: 0.8312986694

00:23:39.130 --> 00:23:42.298 And and then the child can watch something  
NOTE Confidence: 0.8312986694

00:23:42.298 --> 00:23:45.440 on the screen or interact with mom.  
NOTE Confidence: 0.8312986694

00:23:45.440 --> 00:23:47.240 And as they are doing it,  
NOTE Confidence: 0.8312986694

00:23:47.240 --> 00:23:50.600 we can record brain activity.  
NOTE Confidence: 0.8312986694

00:23:50.600 --> 00:23:53.240 The child's brain activity.  
NOTE Confidence: 0.8312986694

00:23:53.240 --> 00:23:56.063 And you know, in a way that's quite  
NOTE Confidence: 0.8312986694

00:23:56.063 --> 00:23:58.775 similar to what we would do in the magnet.  
NOTE Confidence: 0.8312986694

00:23:58.780 --> 00:24:00.910 It's very hard to keep a  
NOTE Confidence: 0.8312986694

00:24:00.910 --> 00:24:02.860 toddler and the magnet awake.  
NOTE Confidence: 0.8312986694

00:24:02.860 --> 00:24:05.062 So so we are tremendously excited  
NOTE Confidence: 0.8312986694

00:24:05.062 --> 00:24:07.530 with these two new developments.  
NOTE Confidence: 0.8312986694

00:24:07.530 --> 00:24:09.510 And we are already employing them.  
NOTE Confidence: 0.8312986694

00:24:09.510 --> 00:24:10.575 In our studies,  
NOTE Confidence: 0.8312986694

00:24:10.575 --> 00:24:12.705 and we actually last week submitted  
NOTE Confidence: 0.8312986694

00:24:12.705 --> 00:24:15.626 a grant application that will rely

NOTE Confidence: 0.8312986694

00:24:15.626 --> 00:24:18.338 very heavily on both of these

NOTE Confidence: 0.8312986694

00:24:18.338 --> 00:24:21.100 labs or all of these methods.

NOTE Confidence: 0.8312986694

00:24:21.100 --> 00:24:23.620 And with hey,

NOTE Confidence: 0.8312986694

00:24:23.620 --> 00:24:27.301 with that I would like to thank you very

NOTE Confidence: 0.8312986694

00:24:27.301 --> 00:24:31.262 much for your attention and from all of us,

NOTE Confidence: 0.8312986694

00:24:31.262 --> 00:24:33.881 including the babies who who who come

NOTE Confidence: 0.8312986694

00:24:33.881 --> 00:24:36.394 to our studies or to our clinics.

NOTE Confidence: 0.8312986694

00:24:36.400 --> 00:24:38.878 And I would also like to thank

NOTE Confidence: 0.8312986694

00:24:38.878 --> 00:24:41.792 you for your support because your

NOTE Confidence: 0.8312986694

00:24:41.792 --> 00:24:44.960 support allows us to allows us

NOTE Confidence: 0.8312986694

00:24:44.960 --> 00:24:47.802 freedom to take risks and invest

NOTE Confidence: 0.8312986694

00:24:47.802 --> 00:24:51.007 into the most cutting edge.

NOTE Confidence: 0.8312986694

00:24:51.010 --> 00:24:53.290 And and.

NOTE Confidence: 0.8312986694

00:24:53.290 --> 00:24:56.290 An exciting questions and

NOTE Confidence: 0.8312986694

00:24:56.290 --> 00:24:58.450 methodologies so thank you so much.

NOTE Confidence: 0.2505434

00:25:00.860 --> 00:25:05.500 Kasha might I turn to Suzanne doctor McCart.  
NOTE Confidence: 0.78040445

00:25:08.000 --> 00:25:09.885 Unless they do, we have questions for Kasha  
NOTE Confidence: 0.911248175

00:25:09.900 --> 00:25:10.820 right at this moment?  
NOTE Confidence: 0.935706546

00:25:13.810 --> 00:25:15.180 I actually have a question.  
NOTE Confidence: 0.8167985675

00:25:15.290 --> 00:25:16.078 Can you hear me?  
NOTE Confidence: 0.720341698333333

00:25:17.470 --> 00:25:19.630 It's Prescott, it's been a while.  
NOTE Confidence: 0.720341698333333

00:25:19.630 --> 00:25:20.960 I was wondering, given that  
NOTE Confidence: 0.950970458

00:25:20.970 --> 00:25:23.250 you were looking at the high risk  
NOTE Confidence: 0.950970458

00:25:23.250 --> 00:25:26.600 sibs, were their older brother  
NOTE Confidence: 0.950970458

00:25:26.610 --> 00:25:29.080 or sister? Do they all have  
NOTE Confidence: 0.602124139285714

00:25:29.190 --> 00:25:35.830 the low connectivity and the in the. Anterior  
NOTE Confidence: 0.892315392

00:25:35.840 --> 00:25:38.620 insula and given the heterogeneity  
NOTE Confidence: 0.892315392

00:25:38.620 --> 00:25:41.304 of autism, how prevalent is that  
NOTE Confidence: 0.892315392

00:25:41.304 --> 00:25:43.128 feature and does that correlate to  
NOTE Confidence: 0.734533733333333

00:25:43.140 --> 00:25:44.769 a certain phenotype?  
NOTE Confidence: 0.925140212222222

00:25:46.030 --> 00:25:50.323 So we know from studies of older kids that

NOTE Confidence: 0.925140212222222

00:25:50.330 --> 00:25:52.740 their reports of atypical connectivity

NOTE Confidence: 0.925140212222222

00:25:52.740 --> 00:25:55.150 between these two specific areas,

NOTE Confidence: 0.925140212222222

00:25:55.150 --> 00:25:57.715 so it has been it has been reported earlier.

NOTE Confidence: 0.864762725555555

00:26:00.020 --> 00:26:02.096 We don't know exactly whether the

NOTE Confidence: 0.864762725555555

00:26:02.096 --> 00:26:05.187 older sets of of of our kids had

NOTE Confidence: 0.864762725555555

00:26:05.187 --> 00:26:06.815 similar feature brain features.

NOTE Confidence: 0.864762725555555

00:26:06.820 --> 00:26:08.090 We were not able to.

NOTE Confidence: 0.864762725555555

00:26:08.090 --> 00:26:10.666 This is this is something that we

NOTE Confidence: 0.864762725555555

00:26:10.666 --> 00:26:13.219 discovered in the past two months so,

NOTE Confidence: 0.864762725555555

00:26:13.220 --> 00:26:16.232 but it would be very interesting

NOTE Confidence: 0.864762725555555

00:26:16.232 --> 00:26:19.879 to see and if in genetically

NOTE Confidence: 0.864762725555555

00:26:19.880 --> 00:26:23.721 similar family Members this

NOTE Confidence: 0.864762725555555

00:26:23.721 --> 00:26:26.469 particular feature carries through.

NOTE Confidence: 0.864762725555555

00:26:26.470 --> 00:26:27.100 I agree that.

NOTE Confidence: 0.92758935

00:26:37.370 --> 00:26:38.540 Any other questions?

NOTE Confidence: 0.7735888

00:26:41.220 --> 00:26:42.240 Doctor mcard  
NOTE Confidence: 0.908301885714286

00:26:51.450 --> 00:26:53.305 and you can you see my screen  
NOTE Confidence: 0.908301885714286

00:26:53.310 --> 00:26:57.960 look perfect OK? Great.  
NOTE Confidence: 0.908301885714286

00:26:57.960 --> 00:27:00.020 It's a great pleasure to be  
NOTE Confidence: 0.908301885714286

00:27:00.020 --> 00:27:02.122 here today to speak to you  
NOTE Confidence: 0.908301885714286

00:27:02.122 --> 00:27:04.120 all about some of our work.  
NOTE Confidence: 0.908301885714286

00:27:04.120 --> 00:27:06.620 I'll be talking today about  
NOTE Confidence: 0.908301885714286

00:27:06.620 --> 00:27:07.620 emotional development,  
NOTE Confidence: 0.908301885714286

00:27:07.620 --> 00:27:10.200 and in particular, joy.  
NOTE Confidence: 0.908301885714286

00:27:10.200 --> 00:27:12.944 So emotions play a major role in  
NOTE Confidence: 0.908301885714286

00:27:12.944 --> 00:27:14.899 how children experience the world,  
NOTE Confidence: 0.908301885714286

00:27:14.900 --> 00:27:17.300 but the majority of behavioral  
NOTE Confidence: 0.908301885714286

00:27:17.300 --> 00:27:19.700 research on autism has focused  
NOTE Confidence: 0.908301885714286

00:27:19.700 --> 00:27:22.202 mainly on its core symptoms and  
NOTE Confidence: 0.908301885714286

00:27:22.202 --> 00:27:24.933 very little attention has been paid  
NOTE Confidence: 0.908301885714286

00:27:24.933 --> 00:27:27.388 to other aspects like children's



NOTE Confidence: 0.908301885714286

00:27:27.388 --> 00:27:29.404 emotional experiences or have

NOTE Confidence: 0.908301885714286

00:27:29.404 --> 00:27:31.280 children with autism learn.

NOTE Confidence: 0.908301885714286

00:27:31.280 --> 00:27:33.142 So today I'll tell you a little

NOTE Confidence: 0.908301885714286

00:27:33.142 --> 00:27:35.162 bit about our research program on

NOTE Confidence: 0.908301885714286

00:27:35.162 --> 00:27:37.484 emotions in young children with autism.

NOTE Confidence: 0.86189418

00:27:39.910 --> 00:27:42.826 So emotions influence a really broad

NOTE Confidence: 0.86189418

00:27:42.826 --> 00:27:45.708 range of cognitive processes as well

NOTE Confidence: 0.86189418

00:27:45.708 --> 00:27:48.288 as emotional and even physical health.

NOTE Confidence: 0.86189418

00:27:48.290 --> 00:27:50.250 Different types of early emotional

NOTE Confidence: 0.86189418

00:27:50.250 --> 00:27:52.210 reactivity are associated not only

NOTE Confidence: 0.86189418

00:27:52.270 --> 00:27:54.090 with later developmental skills,

NOTE Confidence: 0.86189418

00:27:54.090 --> 00:27:56.544 but also the likelihood of various

NOTE Confidence: 0.86189418

00:27:56.544 --> 00:27:58.180 emotional and behavioral problems.

NOTE Confidence: 0.875406885

00:28:02.510 --> 00:28:05.492 A common picture of the lives of

NOTE Confidence: 0.875406885

00:28:05.492 --> 00:28:08.389 children with autism is 1 where

NOTE Confidence: 0.875406885

00:28:08.389 --> 00:28:09.919 negative emotions dominate.  
NOTE Confidence: 0.875406885

00:28:09.920 --> 00:28:11.136 For example, children with  
NOTE Confidence: 0.875406885

00:28:11.136 --> 00:28:12.960 autism have a lot of tantrums.  
NOTE Confidence: 0.875406885

00:28:12.960 --> 00:28:15.180 Children with autism are anxious,  
NOTE Confidence: 0.875406885

00:28:15.180 --> 00:28:18.084 they're sad, and they generally have  
NOTE Confidence: 0.875406885

00:28:18.084 --> 00:28:20.020 trouble regulating their emotions.  
NOTE Confidence: 0.875406885

00:28:20.020 --> 00:28:22.956 This may all have some truth to it,  
NOTE Confidence: 0.875406885

00:28:22.960 --> 00:28:25.078 but this is where the little  
NOTE Confidence: 0.875406885

00:28:25.078 --> 00:28:27.014 research on emotion has focused  
NOTE Confidence: 0.875406885

00:28:27.014 --> 00:28:28.810 on the negative emotions.  
NOTE Confidence: 0.902807573333333

00:28:31.170 --> 00:28:32.990 But we really know close to nothing  
NOTE Confidence: 0.902807573333333

00:28:32.990 --> 00:28:34.875 about how they experience the positive  
NOTE Confidence: 0.902807573333333

00:28:34.875 --> 00:28:36.630 end of the emotional spectrum.  
NOTE Confidence: 0.902807573333333

00:28:36.630 --> 00:28:39.294 And this is a huge gap in knowledge  
NOTE Confidence: 0.902807573333333

00:28:39.294 --> 00:28:40.949 because positive emotions like  
NOTE Confidence: 0.902807573333333

00:28:40.949 --> 00:28:42.785 joy are incredibly important.

NOTE Confidence: 0.9028075733333333

00:28:42.790 --> 00:28:45.424 Positive emotion increases levels of the

NOTE Confidence: 0.9028075733333333

00:28:45.424 --> 00:28:47.610 neurotransmitter dopamine in the brain,

NOTE Confidence: 0.9028075733333333

00:28:47.610 --> 00:28:49.615 which is important to processes

NOTE Confidence: 0.9028075733333333

00:28:49.615 --> 00:28:51.216 like motivation, reinforcement,

NOTE Confidence: 0.9028075733333333

00:28:51.216 --> 00:28:54.400 learning and problem solving.

NOTE Confidence: 0.9028075733333333

00:28:54.400 --> 00:28:57.730 Joy is also related to sociability

NOTE Confidence: 0.9028075733333333

00:28:57.730 --> 00:28:59.395 and overall adjustment,

NOTE Confidence: 0.9028075733333333

00:28:59.400 --> 00:29:01.265 at least in the general

NOTE Confidence: 0.9028075733333333

00:29:01.265 --> 00:29:02.384 population of children.

NOTE Confidence: 0.9028075733333333

00:29:02.390 --> 00:29:03.350 This is what we know.

NOTE Confidence: 0.95593351

00:29:07.070 --> 00:29:09.144 Because no one had investigated this,

NOTE Confidence: 0.95593351

00:29:09.144 --> 00:29:12.000 we designed a study to examine how

NOTE Confidence: 0.95593351

00:29:12.071 --> 00:29:14.323 Tyler's thought TISM experience

NOTE Confidence: 0.95593351

00:29:14.323 --> 00:29:16.575 emotion in everyday situations,

NOTE Confidence: 0.95593351

00:29:16.580 --> 00:29:19.148 and the results were very different,

NOTE Confidence: 0.95593351

00:29:19.150 --> 00:29:22.720 more complex than we expected.  
NOTE Confidence: 0.95593351

00:29:22.720 --> 00:29:26.416 So first we were not too surprised to  
NOTE Confidence: 0.95593351

00:29:26.416 --> 00:29:29.964 see that in the anchor condition that  
NOTE Confidence: 0.95593351

00:29:29.964 --> 00:29:33.776 we created in the lab that there was  
NOTE Confidence: 0.95593351

00:29:33.776 --> 00:29:36.212 more frustration for the kids with  
NOTE Confidence: 0.95593351

00:29:36.212 --> 00:29:38.177 autism compared to their developmentally  
NOTE Confidence: 0.95593351

00:29:38.177 --> 00:29:40.420 delayed and typically developing peers  
NOTE Confidence: 0.95593351

00:29:40.420 --> 00:29:44.356 in situations like being in a car seat.  
NOTE Confidence: 0.95593351

00:29:44.360 --> 00:29:46.682 But in situations where we presented  
NOTE Confidence: 0.95593351

00:29:46.682 --> 00:29:49.419 them with unusual toys or novel objects,  
NOTE Confidence: 0.95593351

00:29:49.420 --> 00:29:52.572 they were actually less fearful than others,  
NOTE Confidence: 0.95593351

00:29:52.572 --> 00:29:55.980 and that was not an expectation we had,  
NOTE Confidence: 0.95593351

00:29:55.980 --> 00:29:59.008 but very interesting were the results from  
NOTE Confidence: 0.95593351

00:29:59.008 --> 00:30:01.420 the joy condition, and we know that it.  
NOTE Confidence: 0.95593351

00:30:01.420 --> 00:30:03.296 Sometimes it can be difficult to get  
NOTE Confidence: 0.95593351

00:30:03.296 --> 00:30:05.556 a smile out of some kids with autism,

NOTE Confidence: 0.95593351

00:30:05.560 --> 00:30:07.905 but when we presented them with things

NOTE Confidence: 0.95593351

00:30:07.905 --> 00:30:10.158 like a puppet show and bubbles,

NOTE Confidence: 0.95593351

00:30:10.158 --> 00:30:12.912 we observed just as much smiling

NOTE Confidence: 0.95593351

00:30:12.912 --> 00:30:13.830 and laughter.

NOTE Confidence: 0.95593351

00:30:13.830 --> 00:30:16.266 From them compared to their peers,

NOTE Confidence: 0.95593351

00:30:16.270 --> 00:30:18.604 so it looks like during situations

NOTE Confidence: 0.95593351

00:30:18.604 --> 00:30:20.988 that are typically fun for little

NOTE Confidence: 0.95593351

00:30:20.988 --> 00:30:22.888 children like a puppet show,

NOTE Confidence: 0.95593351

00:30:22.890 --> 00:30:26.929 there is a lot of positive affect.

NOTE Confidence: 0.95593351

00:30:26.930 --> 00:30:29.269 Now overall, if we take this all together,

NOTE Confidence: 0.95593351

00:30:29.270 --> 00:30:33.086 we see a more complex landscape.

NOTE Confidence: 0.95593351

00:30:33.090 --> 00:30:34.344 If you will,

NOTE Confidence: 0.95593351

00:30:34.344 --> 00:30:36.434 of emotional expression and very

NOTE Confidence: 0.95593351

00:30:36.434 --> 00:30:38.426 young children with autism now.

NOTE Confidence: 0.95593351

00:30:38.426 --> 00:30:40.638 Next we took a closer look at

NOTE Confidence: 0.95593351

00:30:40.638 --> 00:30:43.304 the Puppet Show task to see not  
NOTE Confidence: 0.95593351

00:30:43.304 --> 00:30:44.868 only what children expressed,  
NOTE Confidence: 0.95593351

00:30:44.870 --> 00:30:48.548 but also how they shared it.  
NOTE Confidence: 0.95593351

00:30:48.550 --> 00:30:51.178 And there were more surprises here.  
NOTE Confidence: 0.95593351

00:30:51.180 --> 00:30:53.214 So during this fun activity which  
NOTE Confidence: 0.95593351

00:30:53.214 --> 00:30:55.839 didn't have a lot of social demands,  
NOTE Confidence: 0.95593351

00:30:55.840 --> 00:30:58.684 they shared their enjoyment with their  
NOTE Confidence: 0.95593351

00:30:58.684 --> 00:31:02.280 parent just as often as the kids who had,  
NOTE Confidence: 0.95593351

00:31:02.280 --> 00:31:05.290 who were typically developing and now shared.  
NOTE Confidence: 0.95593351

00:31:05.290 --> 00:31:07.210 Enjoyment is something that we generally  
NOTE Confidence: 0.95593351

00:31:07.210 --> 00:31:09.736 see less of in children with autism,  
NOTE Confidence: 0.95593351

00:31:09.740 --> 00:31:12.410 and it's something that we like  
NOTE Confidence: 0.95593351

00:31:12.410 --> 00:31:14.190 to foster whenever possible.  
NOTE Confidence: 0.95593351

00:31:14.190 --> 00:31:17.230 So this puppet activity kind of intrigued us.  
NOTE Confidence: 0.95593351

00:31:17.230 --> 00:31:20.166 It seems to be a sort of normalizing  
NOTE Confidence: 0.95593351

00:31:20.166 --> 00:31:22.821 context where children with autism

NOTE Confidence: 0.95593351  
00:31:22.821 --> 00:31:24.660 experience positive emotions,  
NOTE Confidence: 0.95593351  
00:31:24.660 --> 00:31:27.084 and they shared them as much  
NOTE Confidence: 0.95593351  
00:31:27.084 --> 00:31:28.296 as other children.  
NOTE Confidence: 0.95593351  
00:31:28.300 --> 00:31:30.480 So why this response to puppets?  
NOTE Confidence: 0.95593351  
00:31:30.480 --> 00:31:33.322 Do we have any understanding of of  
NOTE Confidence: 0.95593351  
00:31:33.322 --> 00:31:35.880 puppets and and can we explain why they  
NOTE Confidence: 0.95593351  
00:31:35.880 --> 00:31:37.880 might elicit this kind of a response?  
NOTE Confidence: 0.889069328  
00:31:42.740 --> 00:31:44.942 So we had heard some anecdotal  
NOTE Confidence: 0.889069328  
00:31:44.942 --> 00:31:46.912 reports that children with autism  
NOTE Confidence: 0.889069328  
00:31:46.912 --> 00:31:49.072 can become very interested in  
NOTE Confidence: 0.889069328  
00:31:49.072 --> 00:31:50.800 puppets and public characters,  
NOTE Confidence: 0.889069328  
00:31:50.800 --> 00:31:54.320 and the study that I just described suggests  
NOTE Confidence: 0.889069328  
00:31:54.320 --> 00:31:57.216 that puppets are a source of pleasure.  
NOTE Confidence: 0.889069328  
00:31:57.220 --> 00:31:59.724 So to take just a little bit of  
NOTE Confidence: 0.889069328  
00:31:59.724 --> 00:32:02.329 a step back as you just heard.  
NOTE Confidence: 0.889069328

00:32:02.330 --> 00:32:04.654 From Kasha and from knowing maybe a

NOTE Confidence: 0.889069328

00:32:04.654 --> 00:32:06.890 little bit more about our studies,

NOTE Confidence: 0.889069328

00:32:06.890 --> 00:32:09.554 one of our areas of expertise

NOTE Confidence: 0.889069328

00:32:09.554 --> 00:32:10.886 is social attention.

NOTE Confidence: 0.889069328

00:32:10.890 --> 00:32:12.810 We know from our many studies

NOTE Confidence: 0.889069328

00:32:12.810 --> 00:32:14.588 of infants and young children

NOTE Confidence: 0.889069328

00:32:14.588 --> 00:32:16.733 that social attention is greatly

NOTE Confidence: 0.889069328

00:32:16.733 --> 00:32:18.710 impacted and autism early on.

NOTE Confidence: 0.889069328

00:32:18.710 --> 00:32:20.048 So what do we know about

NOTE Confidence: 0.889069328

00:32:20.048 --> 00:32:20.717 attention to puppets?

NOTE Confidence: 0.84445425125

00:32:25.890 --> 00:32:28.914 So in this very recent study we

NOTE Confidence: 0.84445425125

00:32:28.914 --> 00:32:30.928 presented preschoolers with a brief

NOTE Confidence: 0.84445425125

00:32:30.928 --> 00:32:33.504 video in which a person and a puppet

NOTE Confidence: 0.84445425125

00:32:33.579 --> 00:32:36.490 engaged in a conversation when the

NOTE Confidence: 0.84445425125

00:32:36.490 --> 00:32:39.520 person was speaking children with autism

NOTE Confidence: 0.84445425125

00:32:39.520 --> 00:32:41.870 did not attend particularly well,



NOTE Confidence: 0.84445425125

00:32:41.870 --> 00:32:43.770 but when the puppets spoke,

NOTE Confidence: 0.84445425125

00:32:43.770 --> 00:32:45.100 there were high levels of

NOTE Confidence: 0.84445425125

00:32:45.100 --> 00:32:46.430 attention to the puppets face,

NOTE Confidence: 0.84445425125

00:32:46.430 --> 00:32:49.902 much like what we saw with the

NOTE Confidence: 0.84445425125

00:32:49.902 --> 00:32:51.390 typically developing children.

NOTE Confidence: 0.84445425125

00:32:51.390 --> 00:32:53.532 Also a very important finding in the

NOTE Confidence: 0.84445425125

00:32:53.532 --> 00:32:55.608 study was that the preference for

NOTE Confidence: 0.84445425125

00:32:55.608 --> 00:32:57.804 the puppet speaker was not associated

NOTE Confidence: 0.84445425125

00:32:57.804 --> 00:32:59.910 with severity of autism symptoms,

NOTE Confidence: 0.84445425125

00:32:59.910 --> 00:33:01.935 so children who were severely

NOTE Confidence: 0.84445425125

00:33:01.935 --> 00:33:04.378 impacted by autism were just as

NOTE Confidence: 0.84445425125

00:33:04.378 --> 00:33:06.772 likely to attend to puppets as those

NOTE Confidence: 0.84445425125

00:33:06.772 --> 00:33:09.140 with less severe autism symptoms.

NOTE Confidence: 0.84445425125

00:33:09.140 --> 00:33:10.760 So, given all of these results,

NOTE Confidence: 0.84445425125

00:33:10.760 --> 00:33:13.462 it seems that puppets might be a

NOTE Confidence: 0.84445425125

00:33:13.462 --> 00:33:15.810 very effective way to introduce  
NOTE Confidence: 0.84445425125

00:33:15.810 --> 00:33:18.030 social communication to kids  
NOTE Confidence: 0.84445425125

00:33:18.030 --> 00:33:19.695 in therapeutic contexts.  
NOTE Confidence: 0.84445425125

00:33:19.700 --> 00:33:20.768 In other words,  
NOTE Confidence: 0.84445425125

00:33:20.768 --> 00:33:22.548 interacting with puppets may help  
NOTE Confidence: 0.84445425125

00:33:22.548 --> 00:33:24.583 toddlers with autism develop better  
NOTE Confidence: 0.84445425125

00:33:24.583 --> 00:33:27.109 engagement skills with human social partners.  
NOTE Confidence: 0.74966884

00:33:32.440 --> 00:33:34.250 We know that teaching kids with  
NOTE Confidence: 0.74966884

00:33:34.250 --> 00:33:35.880 autism can be very challenging.  
NOTE Confidence: 0.74966884

00:33:35.880 --> 00:33:37.968 Our work suggests that there are  
NOTE Confidence: 0.74966884

00:33:37.968 --> 00:33:40.115 ways to normalize both attention and  
NOTE Confidence: 0.74966884

00:33:40.115 --> 00:33:42.523 joy and young kids on the spectrum,  
NOTE Confidence: 0.74966884

00:33:42.530 --> 00:33:45.482 with puppets being one Ave to reach children  
NOTE Confidence: 0.74966884

00:33:45.482 --> 00:33:47.619 with significant learning difficulties,  
NOTE Confidence: 0.74966884

00:33:47.620 --> 00:33:50.455 and there are sure to be others.  
NOTE Confidence: 0.74966884

00:33:50.460 --> 00:33:52.516 Activities that elicit solid

NOTE Confidence: 0.74966884

00:33:52.516 --> 00:33:54.058 attention and inspire.

NOTE Confidence: 0.74966884

00:33:54.060 --> 00:33:56.454 Smiling and laughter are likely to

NOTE Confidence: 0.74966884

00:33:56.454 --> 00:33:58.050 facilitate cognitive processes involved

NOTE Confidence: 0.74966884

00:33:58.104 --> 00:33:59.910 in learning and problem solving as

NOTE Confidence: 0.74966884

00:33:59.910 --> 00:34:01.770 well as better social engagement.

NOTE Confidence: 0.8801547

00:34:05.870 --> 00:34:07.806 So in some future directions,

NOTE Confidence: 0.8801547

00:34:07.806 --> 00:34:09.651 we are really interested in

NOTE Confidence: 0.8801547

00:34:09.651 --> 00:34:12.163 how the experience of joy may

NOTE Confidence: 0.8801547

00:34:12.163 --> 00:34:13.405 enhance social engagement,

NOTE Confidence: 0.8801547

00:34:13.410 --> 00:34:15.090 learning and generalization

NOTE Confidence: 0.8801547

00:34:15.090 --> 00:34:17.330 for children with autism.

NOTE Confidence: 0.8801547

00:34:17.330 --> 00:34:19.370 Links have been documented in the

NOTE Confidence: 0.8801547

00:34:19.370 --> 00:34:21.148 general population and we think

NOTE Confidence: 0.8801547

00:34:21.148 --> 00:34:23.260 that these principles may also be

NOTE Confidence: 0.8801547

00:34:23.260 --> 00:34:25.069 operating in children with autism,

NOTE Confidence: 0.8801547

00:34:25.070 --> 00:34:27.270 but this is an area that we are  
NOTE Confidence: 0.8801547

00:34:27.270 --> 00:34:29.329 very excited to investigate further.  
NOTE Confidence: 0.94497008

00:34:33.950 --> 00:34:36.973 I would like to give special thanks to  
NOTE Confidence: 0.94497008

00:34:36.973 --> 00:34:39.391 all the associates because it would  
NOTE Confidence: 0.94497008

00:34:39.391 --> 00:34:42.634 not be possible to do some of this  
NOTE Confidence: 0.94497008

00:34:42.634 --> 00:34:44.810 innovative work without you. Thank you.  
NOTE Confidence: 0.747491013333333

00:34:47.240 --> 00:34:51.110 Thank you Susan. Ohh I love the images  
NOTE Confidence: 0.747491013333333

00:34:51.110 --> 00:34:57.979 that you show. Any any questions?  
NOTE Confidence: 0.747491013333333

00:34:57.980 --> 00:35:00.148 I would just make it a comment that.  
NOTE Confidence: 0.82221124

00:35:01.160 --> 00:35:03.670 Can you show the Sesame Street characters?  
NOTE Confidence: 0.914781405

00:35:04.870 --> 00:35:07.223 So I wonder whether there's  
NOTE Confidence: 0.914781405

00:35:07.223 --> 00:35:09.440 any difference between  
NOTE Confidence: 0.7538805

00:35:09.570 --> 00:35:13.030 the recognition the the joy,  
NOTE Confidence: 0.7538805

00:35:13.030 --> 00:35:14.670 the the, the, the feeling.  
NOTE Confidence: 0.729862

00:35:15.670 --> 00:35:17.478 If it's a puppet  
NOTE Confidence: 0.897727138

00:35:17.490 --> 00:35:18.520 that they may have seen

NOTE Confidence: 0.80867467

00:35:18.530 --> 00:35:20.400 before, there is a familiar

NOTE Confidence: 0.6519025333333333

00:35:21.090 --> 00:35:22.170 puppet as opposed

NOTE Confidence: 0.907072815

00:35:22.180 --> 00:35:25.516 to some other kind of puppet.

NOTE Confidence: 0.907072815

00:35:25.520 --> 00:35:26.580 You probably look at that.

NOTE Confidence: 0.819094045

00:35:28.460 --> 00:35:31.118 That's a great question. It is.

NOTE Confidence: 0.819094045

00:35:31.120 --> 00:35:32.723 I'll just note that the in this

NOTE Confidence: 0.819094045

00:35:32.723 --> 00:35:34.636 in the study where I showed the

NOTE Confidence: 0.819094045

00:35:34.636 --> 00:35:36.096 the image of the conversation

NOTE Confidence: 0.819094045

00:35:36.096 --> 00:35:37.798 between the puppet and the person.

NOTE Confidence: 0.819094045

00:35:37.800 --> 00:35:39.900 This was actually a novel puppet

NOTE Confidence: 0.819094045

00:35:39.900 --> 00:35:42.548 that is not one of the standard.

NOTE Confidence: 0.819094045

00:35:42.550 --> 00:35:44.386 You know, characters that that are

NOTE Confidence: 0.819094045

00:35:44.386 --> 00:35:47.062 that are shown on TV or in on the

NOTE Confidence: 0.819094045

00:35:47.062 --> 00:35:48.447 Internet or anything like that.

NOTE Confidence: 0.819094045

00:35:48.450 --> 00:35:50.564 So in this case it was actually

NOTE Confidence: 0.819094045

00:35:50.564 --> 00:35:51.470 a novel puppet.  
NOTE Confidence: 0.819094045

00:35:51.470 --> 00:35:54.182 Certainly it has some of the  
NOTE Confidence: 0.819094045

00:35:54.182 --> 00:35:56.560 some similar features to some  
NOTE Confidence: 0.819094045

00:35:56.560 --> 00:35:58.270 Sesame Street characters.  
NOTE Confidence: 0.819094045

00:35:58.270 --> 00:36:00.730 You know, maybe there are some.  
NOTE Confidence: 0.819094045

00:36:00.730 --> 00:36:02.050 There are probably similarities,  
NOTE Confidence: 0.819094045

00:36:02.050 --> 00:36:03.538 but that's that's a great question.  
NOTE Confidence: 0.8284226925

00:36:05.440 --> 00:36:07.816 Actually, the the puppets were sort  
NOTE Confidence: 0.8284226925

00:36:07.816 --> 00:36:10.179 of custom design for our study.  
NOTE Confidence: 0.8284226925

00:36:10.180 --> 00:36:14.779 And we we had Cheryl Hanson and some of  
NOTE Confidence: 0.8284226925

00:36:14.779 --> 00:36:19.036 the puppeteers from her group to come to  
NOTE Confidence: 0.8284226925

00:36:19.036 --> 00:36:22.380 Yale with with bags full of materials,  
NOTE Confidence: 0.8284226925

00:36:22.380 --> 00:36:24.520 and they assemble the puppets  
NOTE Confidence: 0.8284226925

00:36:24.520 --> 00:36:27.200 here on the on the spot,  
NOTE Confidence: 0.8284226925

00:36:27.200 --> 00:36:29.480 and we recorded the videos.  
NOTE Confidence: 0.8284226925

00:36:29.480 --> 00:36:31.937 We are now using in in number of studies,

NOTE Confidence: 0.8284226925

00:36:31.940 --> 00:36:34.068 not just the study that Suzanne mentioned.

NOTE Confidence: 0.8284226925

00:36:34.070 --> 00:36:36.006 That which is published.

NOTE Confidence: 0.8284226925

00:36:36.006 --> 00:36:39.903 But a number of studies and these are

NOTE Confidence: 0.8284226925

00:36:39.903 --> 00:36:42.849 the most beautiful and amazing stimuli

NOTE Confidence: 0.8284226925

00:36:42.849 --> 00:36:46.240 you can ever wish for in a study.

NOTE Confidence: 0.8284226925

00:36:46.240 --> 00:36:48.680 To the extent that actually you know the

NOTE Confidence: 0.8284226925

00:36:48.680 --> 00:36:51.468 the kids are absolutely mesmerized by them,

NOTE Confidence: 0.8284226925

00:36:51.470 --> 00:36:55.495 the puppets always wins over a person.

NOTE Confidence: 0.8284226925

00:36:55.500 --> 00:36:57.944 Even even informal babies,

NOTE Confidence: 0.8284226925

00:36:57.944 --> 00:37:00.388 does that continue because

NOTE Confidence: 0.876770406

00:37:00.400 --> 00:37:02.370 I've had the experience granted

NOTE Confidence: 0.840534344285714

00:37:02.380 --> 00:37:04.669 just with my daughter where she's focused,

NOTE Confidence: 0.840534344285714

00:37:04.670 --> 00:37:06.110 focused, focused for one day,

NOTE Confidence: 0.840534344285714

00:37:06.110 --> 00:37:07.640 and the next day she wants to

NOTE Confidence: 0.840534344285714

00:37:07.640 --> 00:37:09.920 have nothing to do with it.

NOTE Confidence: 0.840534344285714

00:37:09.920 --> 00:37:12.390 So I'm curious as to whether you've seen that

NOTE Confidence: 0.85657424

00:37:12.400 --> 00:37:13.890 pattern. Was it just her?

NOTE Confidence: 0.875319942727273

00:37:15.400 --> 00:37:17.241 Well it it. It depends what we

NOTE Confidence: 0.875319942727273

00:37:17.241 --> 00:37:19.023 do with the puppets, right?

NOTE Confidence: 0.875319942727273

00:37:19.023 --> 00:37:22.610 So so one of the hypothesis that we

NOTE Confidence: 0.875319942727273

00:37:22.610 --> 00:37:26.040 have is that it's it's possible that

NOTE Confidence: 0.875319942727273

00:37:26.131 --> 00:37:28.457 puppets have for whatever reasons

NOTE Confidence: 0.875319942727273

00:37:28.457 --> 00:37:31.390 they have a capacity to make kids

NOTE Confidence: 0.875319942727273

00:37:31.472 --> 00:37:33.877 with autism excited and joyful,

NOTE Confidence: 0.875319942727273

00:37:33.880 --> 00:37:36.180 which raises their arousal level,

NOTE Confidence: 0.875319942727273

00:37:36.180 --> 00:37:38.352 raises their neurotransmitter levels,

NOTE Confidence: 0.875319942727273

00:37:38.352 --> 00:37:41.610 and makes them probably more receptive

NOTE Confidence: 0.875319942727273

00:37:41.685 --> 00:37:43.630 to engage, sustain attention and

NOTE Confidence: 0.875319942727273

00:37:43.630 --> 00:37:46.090 learn and return what they learn.

NOTE Confidence: 0.875319942727273

00:37:46.090 --> 00:37:48.040 This is a hypothesis we have

NOTE Confidence: 0.875319942727273

00:37:48.040 --> 00:37:49.999 not been able to test it.



NOTE Confidence: 0.875319942727273  
00:37:50.000 --> 00:37:52.616 But we we are hoping to do it  
NOTE Confidence: 0.875319942727273  
00:37:52.616 --> 00:37:55.140 at some point in the future,  
NOTE Confidence: 0.875319942727273  
00:37:55.140 --> 00:37:56.505 because if so,  
NOTE Confidence: 0.875319942727273  
00:37:56.505 --> 00:38:00.200 that would be a such a natural way.  
NOTE Confidence: 0.875319942727273  
00:38:00.200 --> 00:38:02.912 Of imbuing therapeutic interaction  
NOTE Confidence: 0.875319942727273  
00:38:02.912 --> 00:38:06.051 with something that's I mean who  
NOTE Confidence: 0.875319942727273  
00:38:06.051 --> 00:38:07.886 doesn't like puppets right with  
NOTE Confidence: 0.875319942727273  
00:38:07.886 --> 00:38:09.430 something that's inexpensive,  
NOTE Confidence: 0.875319942727273  
00:38:09.430 --> 00:38:11.059 easy to operate.  
NOTE Confidence: 0.875319942727273  
00:38:11.059 --> 00:38:13.051 It's highly interactive, right?  
NOTE Confidence: 0.875319942727273  
00:38:13.051 --> 00:38:14.134 It can be.  
NOTE Confidence: 0.875319942727273  
00:38:14.134 --> 00:38:16.811 It can change the script on the  
NOTE Confidence: 0.875319942727273  
00:38:16.811 --> 00:38:19.361 fly depending on the child's level  
NOTE Confidence: 0.875319942727273  
00:38:19.361 --> 00:38:21.849 of interest or motivation or.  
NOTE Confidence: 0.875319942727273  
00:38:21.850 --> 00:38:23.410 Can mirror the mood.  
NOTE Confidence: 0.875319942727273

00:38:23.410 --> 00:38:25.366 It can counter the mood.  
NOTE Confidence: 0.875319942727273

00:38:25.366 --> 00:38:27.326 It can introduce new topics,  
NOTE Confidence: 0.875319942727273

00:38:27.330 --> 00:38:29.380 distractions in a way that's  
NOTE Confidence: 0.875319942727273

00:38:29.380 --> 00:38:31.430 not related to the person.  
NOTE Confidence: 0.875319942727273

00:38:31.430 --> 00:38:34.490 So so in in that respect.  
NOTE Confidence: 0.875319942727273

00:38:34.490 --> 00:38:35.946 It would be really,  
NOTE Confidence: 0.875319942727273

00:38:35.946 --> 00:38:38.100 really cool and exciting if if  
NOTE Confidence: 0.875319942727273

00:38:38.100 --> 00:38:40.589 that was a medium that we could  
NOTE Confidence: 0.875319942727273

00:38:40.590 --> 00:38:43.294 introduce into brother practice.  
NOTE Confidence: 0.875319942727273

00:38:43.294 --> 00:38:44.646 In fact,  
NOTE Confidence: 0.875319942727273

00:38:44.650 --> 00:38:46.234 tomorrow we are meeting with the  
NOTE Confidence: 0.875319942727273

00:38:46.234 --> 00:38:48.180 heads of the birth to three system.  
NOTE Confidence: 0.832812906428571

00:38:50.230 --> 00:38:53.092 The new there's a new new team and they're  
NOTE Confidence: 0.832812906428571

00:38:53.092 --> 00:38:54.809 tremendously excited about our work.  
NOTE Confidence: 0.832812906428571

00:38:54.810 --> 00:38:57.428 We are going to talk about it.  
NOTE Confidence: 0.832812906428571

00:38:57.430 --> 00:38:59.523 And see if they would be interested

NOTE Confidence: 0.832812906428571  
00:38:59.523 --> 00:39:01.360 in adopting some of these strategies  
NOTE Confidence: 0.832812906428571  
00:39:01.360 --> 00:39:03.411 in a sort of more intuitive way  
NOTE Confidence: 0.832812906428571  
00:39:03.475 --> 00:39:05.259 in their intervention programs.  
NOTE Confidence: 0.71392107  
00:39:08.790 --> 00:39:12.290 The puppets talk, yes. They have a voice.  
NOTE Confidence: 0.803069525  
00:39:13.460 --> 00:39:14.860 They have a voice,  
NOTE Confidence: 0.803069525  
00:39:14.860 --> 00:39:16.900 how similar to a human voice.  
NOTE Confidence: 0.730634732857143  
00:39:18.270 --> 00:39:19.824 This is me. It was a female.  
NOTE Confidence: 0.730634732857143  
00:39:19.830 --> 00:39:21.170 Was it high? Is it low?  
NOTE Confidence: 0.730634732857143  
00:39:21.170 --> 00:39:23.440 I mean do these things have any effect?  
NOTE Confidence: 0.675847236666667  
00:39:24.640 --> 00:39:28.242 To mend this. Tremendous and that's  
NOTE Confidence: 0.675847236666667  
00:39:28.242 --> 00:39:31.266 why they can be individualized to  
NOTE Confidence: 0.675847236666667  
00:39:31.266 --> 00:39:34.417 the child's preferences and likes.  
NOTE Confidence: 0.675847236666667  
00:39:34.420 --> 00:39:36.150 So some might prefer you  
NOTE Confidence: 0.675847236666667  
00:39:36.150 --> 00:39:37.880 know very high pitched voice.  
NOTE Confidence: 0.675847236666667  
00:39:37.880 --> 00:39:39.833 I I don't want to do the  
NOTE Confidence: 0.675847236666667

00:39:39.833 --> 00:39:41.410 packets here that we have a.  
NOTE Confidence: 0.675847236666667

00:39:41.410 --> 00:39:43.225 We have a collection of  
NOTE Confidence: 0.675847236666667

00:39:43.225 --> 00:39:44.314 pockets here actually,  
NOTE Confidence: 0.675847236666667

00:39:44.320 --> 00:39:46.075 but you don't want me to be a puppet.  
NOTE Confidence: 0.675847236666667

00:39:46.080 --> 00:39:49.008 You don't want to see me being a puppeteer,  
NOTE Confidence: 0.675847236666667

00:39:49.008 --> 00:39:50.800 but but you can adjust the voice  
NOTE Confidence: 0.675847236666667

00:39:50.858 --> 00:39:52.668 depending on the child's preference.  
NOTE Confidence: 0.675847236666667

00:39:52.670 --> 00:39:53.342 It can be low.  
NOTE Confidence: 0.675847236666667

00:39:53.342 --> 00:39:55.780 It can be high, it can be quiet,  
NOTE Confidence: 0.675847236666667

00:39:55.780 --> 00:39:56.220 compassionate.  
NOTE Confidence: 0.675847236666667

00:39:56.220 --> 00:39:58.405 It could be very excited  
NOTE Confidence: 0.675847236666667

00:39:58.405 --> 00:40:00.590 and and and and high.  
NOTE Confidence: 0.675847236666667

00:40:00.590 --> 00:40:02.739 And and you can adjust the depending  
NOTE Confidence: 0.675847236666667

00:40:02.739 --> 00:40:05.257 you know if you start losing the  
NOTE Confidence: 0.675847236666667

00:40:05.257 --> 00:40:07.172 child's attention you can switch.  
NOTE Confidence: 0.675847236666667

00:40:07.180 --> 00:40:08.440 Right, you can switch characters.

NOTE Confidence: 0.675847236666667  
00:40:08.440 --> 00:40:10.040 You can switch voices,  
NOTE Confidence: 0.675847236666667  
00:40:10.040 --> 00:40:11.640 you can switch motions,  
NOTE Confidence: 0.675847236666667  
00:40:11.640 --> 00:40:16.340 and that's the incredible versatility  
NOTE Confidence: 0.675847236666667  
00:40:16.340 --> 00:40:18.220 of of the of that meeting.  
NOTE Confidence: 0.836620424285714  
00:40:21.810 --> 00:40:23.567 I think Suzanne's got a fun project.  
NOTE Confidence: 0.938470875  
00:40:26.920 --> 00:40:27.710 I agree.  
NOTE Confidence: 0.836247664166667  
00:40:29.230 --> 00:40:30.532 I would say there's several of us  
NOTE Confidence: 0.836247664166667  
00:40:30.532 --> 00:40:31.829 when there was their opportunity.  
NOTE Confidence: 0.836247664166667  
00:40:31.830 --> 00:40:33.974 We love to just go watch the puppets.  
NOTE Confidence: 0.877146325  
00:40:36.140 --> 00:40:37.300 Kelly, would you like  
NOTE Confidence: 0.77836818  
00:40:37.310 --> 00:40:39.170 to? Take us forward.  
NOTE Confidence: 0.96400267  
00:40:40.250 --> 00:40:41.020 Definitely.  
NOTE Confidence: 0.796123956  
00:40:42.460 --> 00:40:45.400 All right, you can see my screen  
NOTE Confidence: 0.796123956  
00:40:45.400 --> 00:40:47.281 and hear me as everyone said,  
NOTE Confidence: 0.796123956  
00:40:47.281 --> 00:40:49.239 it's just a real pleasure to be here today.  
NOTE Confidence: 0.796123956

00:40:49.240 --> 00:40:51.240 Speaking with all of you,  
NOTE Confidence: 0.796123956

00:40:51.240 --> 00:40:53.724 and I'll talk specifically about our  
NOTE Confidence: 0.796123956

00:40:53.724 --> 00:40:56.406 approach in the lab to partnering  
NOTE Confidence: 0.796123956

00:40:56.406 --> 00:40:59.238 with and also supporting our parents.  
NOTE Confidence: 0.796123956

00:40:59.240 --> 00:41:01.536 As mentioned at the center of our research,  
NOTE Confidence: 0.796123956

00:41:01.540 --> 00:41:03.490 aims are really the children families  
NOTE Confidence: 0.796123956

00:41:03.490 --> 00:41:05.687 that we serve and we keep families  
NOTE Confidence: 0.796123956

00:41:05.687 --> 00:41:07.633 in mind as we are planning our  
NOTE Confidence: 0.796123956

00:41:07.692 --> 00:41:09.522 research questions and writing our  
NOTE Confidence: 0.796123956

00:41:09.522 --> 00:41:12.194 grants to the strategies we end up  
NOTE Confidence: 0.796123956

00:41:12.194 --> 00:41:14.279 using for recruitment and enrollment.  
NOTE Confidence: 0.796123956

00:41:14.280 --> 00:41:16.792 And of course the care we provide when  
NOTE Confidence: 0.796123956

00:41:16.792 --> 00:41:19.173 the families come to our lab for their  
NOTE Confidence: 0.796123956

00:41:19.173 --> 00:41:20.978 visits and then we carry that feeling  
NOTE Confidence: 0.796123956

00:41:20.978 --> 00:41:22.909 and that thought of the families all  
NOTE Confidence: 0.796123956

00:41:22.909 --> 00:41:24.637 the way through the dissemination of

NOTE Confidence: 0.796123956

00:41:24.637 --> 00:41:26.655 our research findings and making sure

NOTE Confidence: 0.796123956

00:41:26.655 --> 00:41:28.910 that families can understand the science.

NOTE Confidence: 0.796123956

00:41:28.910 --> 00:41:30.650 They were doing.

NOTE Confidence: 0.796123956

00:41:30.650 --> 00:41:33.378 And we also understand the role we play

NOTE Confidence: 0.796123956

00:41:33.378 --> 00:41:35.490 as researchers and clinicians as families

NOTE Confidence: 0.796123956

00:41:35.490 --> 00:41:38.550 really do and trust us with their children,

NOTE Confidence: 0.796123956

00:41:38.550 --> 00:41:39.588 often their infants,

NOTE Confidence: 0.796123956

00:41:39.588 --> 00:41:42.010 and they end up allowing us to

NOTE Confidence: 0.796123956

00:41:42.079 --> 00:41:44.928 be even a small part of their

NOTE Confidence: 0.796123956

00:41:44.928 --> 00:41:46.149 child's developmental journey,

NOTE Confidence: 0.796123956

00:41:46.150 --> 00:41:47.970 and our goal is to have families

NOTE Confidence: 0.796123956

00:41:47.970 --> 00:41:49.754 feel welcomed, feel accepted,

NOTE Confidence: 0.796123956

00:41:49.754 --> 00:41:51.018 feel valued,

NOTE Confidence: 0.796123956

00:41:51.018 --> 00:41:54.178 and definitely to feel supported.

NOTE Confidence: 0.796123956

00:41:54.180 --> 00:41:56.748 And we believe that developing this

NOTE Confidence: 0.796123956

00:41:56.748 --> 00:41:59.350 partnership with families is the core  
NOTE Confidence: 0.796123956

00:41:59.350 --> 00:42:01.810 of understanding the development of ASD.  
NOTE Confidence: 0.796123956

00:42:01.810 --> 00:42:03.700 This is a real bidirectional  
NOTE Confidence: 0.796123956

00:42:03.700 --> 00:42:05.590 relationship we have with families  
NOTE Confidence: 0.796123956

00:42:05.650 --> 00:42:07.750 such that we are always trying to  
NOTE Confidence: 0.796123956

00:42:07.750 --> 00:42:09.700 listen and learn from their experience  
NOTE Confidence: 0.796123956

00:42:09.700 --> 00:42:12.010 and hear about their needs and be  
NOTE Confidence: 0.796123956

00:42:12.010 --> 00:42:15.748 as responsive as possible to this.  
NOTE Confidence: 0.796123956

00:42:15.750 --> 00:42:18.150 So I wanted to mention a story that  
NOTE Confidence: 0.796123956

00:42:18.150 --> 00:42:20.415 was released about six months ago by  
NOTE Confidence: 0.796123956

00:42:20.415 --> 00:42:22.792 Yale Medicine about a young man named  
NOTE Confidence: 0.796123956

00:42:22.792 --> 00:42:24.934 Danny who was actually first evaluated  
NOTE Confidence: 0.796123956

00:42:24.934 --> 00:42:27.315 by Kasha and other similar group when  
NOTE Confidence: 0.796123956

00:42:27.315 --> 00:42:30.526 he was 2 1/2 years old through one of  
NOTE Confidence: 0.796123956

00:42:30.526 --> 00:42:33.310 our research studies and Danny is now 18.  
NOTE Confidence: 0.796123956

00:42:33.310 --> 00:42:35.125 Danny has graduated from high



NOTE Confidence: 0.796123956

00:42:35.125 --> 00:42:36.940 school in Connecticut last year

NOTE Confidence: 0.796123956

00:42:37.001 --> 00:42:38.816 and is currently studying marine

NOTE Confidence: 0.796123956

00:42:38.816 --> 00:42:40.870 biology at Eckerd College in St.

NOTE Confidence: 0.796123956

00:42:40.870 --> 00:42:41.173 Petersburg,

NOTE Confidence: 0.796123956

00:42:41.173 --> 00:42:41.476 FL.

NOTE Confidence: 0.796123956

00:42:41.476 --> 00:42:43.900 And I encourage you to take a look

NOTE Confidence: 0.796123956

00:42:43.970 --> 00:42:46.735 at this article and I wanted to

NOTE Confidence: 0.796123956

00:42:46.735 --> 00:42:47.920 specifically highlight something,

NOTE Confidence: 0.796123956

00:42:47.920 --> 00:42:49.186 Danny's mother said.

NOTE Confidence: 0.796123956

00:42:49.186 --> 00:42:51.296 She said that the recommendations

NOTE Confidence: 0.796123956

00:42:51.296 --> 00:42:53.573 from the Yale Child Study Center

NOTE Confidence: 0.796123956

00:42:53.573 --> 00:42:56.230 paved the way for her son's success,

NOTE Confidence: 0.796123956

00:42:56.230 --> 00:42:59.174 in part by equipping her to be a

NOTE Confidence: 0.796123956

00:42:59.174 --> 00:43:01.068 strong advocate for his needs.

NOTE Confidence: 0.796123956

00:43:01.070 --> 00:43:02.758 And in this article,

NOTE Confidence: 0.796123956

00:43:02.758 --> 00:43:04.868 Danny's mother also thanked Kasha  
NOTE Confidence: 0.796123956

00:43:04.868 --> 00:43:06.827 specifically for listening to the  
NOTE Confidence: 0.796123956

00:43:06.827 --> 00:43:08.657 family's concerns and helping them  
NOTE Confidence: 0.796123956

00:43:08.657 --> 00:43:11.167 to further understand Denny's needs.  
NOTE Confidence: 0.796123956

00:43:11.170 --> 00:43:12.060 And overall,  
NOTE Confidence: 0.796123956

00:43:12.060 --> 00:43:14.285 the sentiment is that early  
NOTE Confidence: 0.796123956

00:43:14.285 --> 00:43:16.118 diagnosis and recommendations for  
NOTE Confidence: 0.796123956

00:43:16.118 --> 00:43:17.822 interventions that were specifically  
NOTE Confidence: 0.796123956

00:43:17.822 --> 00:43:20.670 tailored to Danny had been key to  
NOTE Confidence: 0.796123956

00:43:20.670 --> 00:43:22.614 his success and also was helping  
NOTE Confidence: 0.796123956

00:43:22.614 --> 00:43:26.170 his parents become advocates for him,  
NOTE Confidence: 0.796123956

00:43:26.170 --> 00:43:28.458 and this story is powerful in many levels.  
NOTE Confidence: 0.796123956

00:43:28.460 --> 00:43:31.600 As you can imagine, but for me and our team.  
NOTE Confidence: 0.796123956

00:43:31.600 --> 00:43:33.928 The idea of empowering families and  
NOTE Confidence: 0.796123956

00:43:33.928 --> 00:43:36.640 helping them to fully understand their  
NOTE Confidence: 0.796123956

00:43:36.640 --> 00:43:39.020 child's often complex profile of

NOTE Confidence: 0.796123956

00:43:39.020 --> 00:43:41.400 strengths and areas of vulnerability,

NOTE Confidence: 0.796123956

00:43:41.400 --> 00:43:44.046 as well as helping them find their

NOTE Confidence: 0.796123956

00:43:44.046 --> 00:43:46.371 advocacy voice is so crucial and

NOTE Confidence: 0.796123956

00:43:46.371 --> 00:43:48.968 clearly has a long lasting impact on

NOTE Confidence: 0.929362800869565

00:43:49.043 --> 00:43:50.789 the child's development.

NOTE Confidence: 0.929362800869565

00:43:50.790 --> 00:43:53.094 So one way we have tried to support

NOTE Confidence: 0.929362800869565

00:43:53.094 --> 00:43:55.694 families is by offering a monthly parent

NOTE Confidence: 0.929362800869565

00:43:55.694 --> 00:43:57.654 support group that has historically

NOTE Confidence: 0.929362800869565

00:43:57.720 --> 00:43:59.886 been in person and turned virtual

NOTE Confidence: 0.929362800869565

00:43:59.886 --> 00:44:02.074 during the pandemic and what has

NOTE Confidence: 0.929362800869565

00:44:02.074 --> 00:44:04.282 been incredible about this group in

NOTE Confidence: 0.929362800869565

00:44:04.282 --> 00:44:06.211 particular is that originally began

NOTE Confidence: 0.929362800869565

00:44:06.211 --> 00:44:08.455 with four families who had children

NOTE Confidence: 0.929362800869565

00:44:08.522 --> 00:44:10.762 around the age of two years old who

NOTE Confidence: 0.929362800869565

00:44:10.762 --> 00:44:12.512 were just diagnosed with autism,

NOTE Confidence: 0.929362800869565

00:44:12.512 --> 00:44:15.600 and these children are now nine years old.  
NOTE Confidence: 0.929362800869565

00:44:15.600 --> 00:44:17.910 And the group has grown tremendously  
NOTE Confidence: 0.929362800869565

00:44:17.910 --> 00:44:20.176 from these four original families to  
NOTE Confidence: 0.929362800869565

00:44:20.176 --> 00:44:22.144 now having well over 100 families  
NOTE Confidence: 0.929362800869565

00:44:22.144 --> 00:44:23.440 on our listserv,  
NOTE Confidence: 0.929362800869565

00:44:23.440 --> 00:44:26.010 and sometimes upwards of twenty  
NOTE Confidence: 0.929362800869565

00:44:26.010 --> 00:44:28.066 families are joining anyone  
NOTE Confidence: 0.929362800869565

00:44:28.066 --> 00:44:29.912 meeting and during these meetings,  
NOTE Confidence: 0.929362800869565

00:44:29.912 --> 00:44:32.744 I was able to witness first hand the  
NOTE Confidence: 0.929362800869565

00:44:32.744 --> 00:44:34.659 power of familial connection and  
NOTE Confidence: 0.929362800869565

00:44:34.659 --> 00:44:37.019 sharing stories with other parents who  
NOTE Confidence: 0.929362800869565

00:44:37.019 --> 00:44:39.700 understood the journey the families were on.  
NOTE Confidence: 0.929362800869565

00:44:39.700 --> 00:44:40.314 I learned,  
NOTE Confidence: 0.929362800869565

00:44:40.314 --> 00:44:42.463 and I continue to learn so much  
NOTE Confidence: 0.929362800869565

00:44:42.463 --> 00:44:44.806 from these families about their  
NOTE Confidence: 0.929362800869565

00:44:44.806 --> 00:44:46.770 experience receiving a diagnosis.

NOTE Confidence: 0.929362800869565

00:44:46.770 --> 00:44:49.248 The hurdles they face trying to

NOTE Confidence: 0.929362800869565

00:44:49.248 --> 00:44:51.198 get services started the question.

NOTE Confidence: 0.929362800869565

00:44:51.198 --> 00:44:53.676 They asked each other about how to

NOTE Confidence: 0.929362800869565

00:44:53.676 --> 00:44:56.029 navigate conversations with families and

NOTE Confidence: 0.929362800869565

00:44:56.029 --> 00:44:58.444 friends about their child's diagnosis.

NOTE Confidence: 0.929362800869565

00:44:58.450 --> 00:45:00.774 2 questions that they asked me about

NOTE Confidence: 0.929362800869565

00:45:00.774 --> 00:45:03.382 how to manage a child's behavior or

NOTE Confidence: 0.929362800869565

00:45:03.382 --> 00:45:05.692 how to help their child communicate.

NOTE Confidence: 0.929362800869565

00:45:05.700 --> 00:45:07.716 And another fascinating aspect of this.

NOTE Confidence: 0.929362800869565

00:45:07.720 --> 00:45:09.690 Parents support Group that has

NOTE Confidence: 0.929362800869565

00:45:09.690 --> 00:45:12.175 been able to witness over the years

NOTE Confidence: 0.929362800869565

00:45:12.175 --> 00:45:14.733 are parents becoming advocates and

NOTE Confidence: 0.929362800869565

00:45:14.733 --> 00:45:17.393 that transition to becoming their

NOTE Confidence: 0.929362800869565

00:45:17.393 --> 00:45:19.040 child's best advocate.

NOTE Confidence: 0.929362800869565

00:45:19.040 --> 00:45:21.259 And one of the biggest hurdles we

NOTE Confidence: 0.929362800869565

00:45:21.259 --> 00:45:23.763 hear from families all the time is  
NOTE Confidence: 0.929362800869565

00:45:23.763 --> 00:45:25.623 insurance not covering something like  
NOTE Confidence: 0.929362800869565

00:45:25.623 --> 00:45:27.601 applied behavioral analysis through  
NOTE Confidence: 0.929362800869565

00:45:27.601 --> 00:45:29.983 the evidence based intervention and  
NOTE Confidence: 0.929362800869565

00:45:29.983 --> 00:45:31.921 one of our original families paved  
NOTE Confidence: 0.929362800869565

00:45:31.921 --> 00:45:34.794 the way for Yale to change its policy  
NOTE Confidence: 0.929362800869565

00:45:34.794 --> 00:45:37.060 about covering ABA services for those  
NOTE Confidence: 0.929362800869565

00:45:37.060 --> 00:45:39.214 enrolled in the Yale Health Plan.  
NOTE Confidence: 0.929362800869565

00:45:39.220 --> 00:45:41.292 And not only was this a huge impact  
NOTE Confidence: 0.929362800869565

00:45:41.292 --> 00:45:42.500 on the community,  
NOTE Confidence: 0.929362800869565

00:45:42.500 --> 00:45:44.410 but inspired another parent who  
NOTE Confidence: 0.929362800869565

00:45:44.410 --> 00:45:46.667 heard this mom's journey and she  
NOTE Confidence: 0.929362800869565

00:45:46.667 --> 00:45:48.359 was a teacher in New Haven,  
NOTE Confidence: 0.929362800869565

00:45:48.360 --> 00:45:49.640 so she decided to.  
NOTE Confidence: 0.929362800869565

00:45:49.640 --> 00:45:52.550 Advocate for her own child and to change the  
NOTE Confidence: 0.929362800869565

00:45:52.550 --> 00:45:55.420 policy of not only the school she worked in,

NOTE Confidence: 0.929362800869565  
00:45:55.420 --> 00:45:57.058 but ended up changing the policy  
NOTE Confidence: 0.929362800869565  
00:45:57.058 --> 00:45:58.900 for the whole city of New Haven.  
NOTE Confidence: 0.929362800869565  
00:45:58.900 --> 00:46:01.275 So she single handedly helped  
NOTE Confidence: 0.929362800869565  
00:46:01.275 --> 00:46:02.700 hundreds of families.  
NOTE Confidence: 0.929362800869565  
00:46:02.700 --> 00:46:03.780 So not just teachers,  
NOTE Confidence: 0.929362800869565  
00:46:03.780 --> 00:46:06.120 but parents who are employed as firefighters,  
NOTE Confidence: 0.929362800869565  
00:46:06.120 --> 00:46:08.670 police officers and other city  
NOTE Confidence: 0.929362800869565  
00:46:08.670 --> 00:46:11.793 employees who had children with autism  
NOTE Confidence: 0.929362800869565  
00:46:11.793 --> 00:46:14.685 who needed access to ABA services.  
NOTE Confidence: 0.929362800869565  
00:46:14.690 --> 00:46:16.598 But we feel like we could be doing more.  
NOTE Confidence: 0.929362800869565  
00:46:16.600 --> 00:46:18.728 We want to do more to help  
NOTE Confidence: 0.929362800869565  
00:46:18.728 --> 00:46:20.310 educate and empower families,  
NOTE Confidence: 0.929362800869565  
00:46:20.310 --> 00:46:22.942 and we want to expand this parent  
NOTE Confidence: 0.929362800869565  
00:46:22.942 --> 00:46:25.214 support group idea and the plan for  
NOTE Confidence: 0.929362800869565  
00:46:25.214 --> 00:46:26.644 this extension is really grounded  
NOTE Confidence: 0.929362800869565

00:46:26.644 --> 00:46:28.757 in the years of work we have with  
NOTE Confidence: 0.929362800869565

00:46:28.757 --> 00:46:31.046 families as well as our knowledge of  
NOTE Confidence: 0.929362800869565

00:46:31.046 --> 00:46:32.881 various evidence based treatments and  
NOTE Confidence: 0.929362800869565

00:46:32.881 --> 00:46:34.834 strategies that are currently available.  
NOTE Confidence: 0.929362800869565

00:46:34.834 --> 00:46:37.210 So we plan to offer individual  
NOTE Confidence: 0.929362800869565

00:46:37.278 --> 00:46:39.028 treatment to parents and really  
NOTE Confidence: 0.929362800869565

00:46:39.028 --> 00:46:41.570 to cover kind of four main areas.  
NOTE Confidence: 0.929362800869565

00:46:41.570 --> 00:46:43.586 So the first one is about providing  
NOTE Confidence: 0.929362800869565

00:46:43.586 --> 00:46:46.114 a space for parents to process their  
NOTE Confidence: 0.929362800869565

00:46:46.114 --> 00:46:48.109 own emotions following a diagnosis  
NOTE Confidence: 0.929362800869565

00:46:48.109 --> 00:46:50.287 which we know can be highly varied  
NOTE Confidence: 0.929362800869565

00:46:50.290 --> 00:46:52.430 and this can include reviewing  
NOTE Confidence: 0.929362800869565

00:46:52.430 --> 00:46:54.570 various stress management and coping  
NOTE Confidence: 0.895755894666667

00:46:54.637 --> 00:46:57.597 strategies to finding ways to talk to their  
NOTE Confidence: 0.895755894666667

00:46:57.597 --> 00:47:00.045 family members and friends about autism  
NOTE Confidence: 0.895755894666667

00:47:00.045 --> 00:47:02.499 or connecting them with other families.



NOTE Confidence: 0.895755894666667  
00:47:02.500 --> 00:47:04.710 And the second theme is  
NOTE Confidence: 0.895755894666667  
00:47:04.710 --> 00:47:06.036 psychoeducation about autism.  
NOTE Confidence: 0.895755894666667  
00:47:06.040 --> 00:47:09.271 What it is, but also what it's not and  
NOTE Confidence: 0.895755894666667  
00:47:09.271 --> 00:47:11.806 about their own child's unique profile  
NOTE Confidence: 0.895755894666667  
00:47:11.806 --> 00:47:14.518 of strengths and areas of growth.  
NOTE Confidence: 0.895755894666667  
00:47:14.520 --> 00:47:16.830 And then the third is helping parents  
NOTE Confidence: 0.895755894666667  
00:47:16.830 --> 00:47:18.674 navigate the often complex systems  
NOTE Confidence: 0.895755894666667  
00:47:18.674 --> 00:47:21.044 involved in finding and then building  
NOTE Confidence: 0.895755894666667  
00:47:21.044 --> 00:47:22.686 their child's intervention team  
NOTE Confidence: 0.895755894666667  
00:47:22.686 --> 00:47:25.451 because it's usually more than just one  
NOTE Confidence: 0.895755894666667  
00:47:25.451 --> 00:47:27.625 clinician or one provider and helping  
NOTE Confidence: 0.895755894666667  
00:47:27.625 --> 00:47:30.214 parents decide who is the best team  
NOTE Confidence: 0.895755894666667  
00:47:30.214 --> 00:47:32.428 for their child can be incredibly.  
NOTE Confidence: 0.895755894666667  
00:47:32.430 --> 00:47:35.400 Critical in the child's development.  
NOTE Confidence: 0.895755894666667  
00:47:35.400 --> 00:47:36.038 And finally,  
NOTE Confidence: 0.895755894666667

00:47:36.038 --> 00:47:38.271 we aim to teach parents various things  
NOTE Confidence: 0.895755894666667

00:47:38.271 --> 00:47:40.476 that they can do during everyday  
NOTE Confidence: 0.895755894666667

00:47:40.476 --> 00:47:41.936 routines and interactions with  
NOTE Confidence: 0.895755894666667

00:47:41.936 --> 00:47:44.479 their child to help further promote  
NOTE Confidence: 0.895755894666667

00:47:44.479 --> 00:47:46.175 communication and social development.  
NOTE Confidence: 0.895755894666667

00:47:46.180 --> 00:47:48.686 So these can be strategies they can  
NOTE Confidence: 0.895755894666667

00:47:48.686 --> 00:47:51.037 utilize during their daily kind of days.  
NOTE Confidence: 0.895755894666667

00:47:51.040 --> 00:47:53.080 During meal time, diaper changes,  
NOTE Confidence: 0.895755894666667

00:47:53.080 --> 00:47:56.160 bath time and so forth.  
NOTE Confidence: 0.895755894666667

00:47:56.160 --> 00:47:58.169 And our intention in this type of  
NOTE Confidence: 0.895755894666667

00:47:58.169 --> 00:48:00.571 treatment is to really bridge that gap  
NOTE Confidence: 0.895755894666667

00:48:00.571 --> 00:48:02.785 between receiving a first time diagnosis  
NOTE Confidence: 0.895755894666667

00:48:02.852 --> 00:48:05.348 and then the child actually beginning  
NOTE Confidence: 0.895755894666667

00:48:05.348 --> 00:48:07.012 their early intervention program,  
NOTE Confidence: 0.895755894666667

00:48:07.020 --> 00:48:09.477 which we know can take several months.  
NOTE Confidence: 0.895755894666667

00:48:09.480 --> 00:48:12.119 So this treatment would be time limited.

NOTE Confidence: 0.895755894666667  
00:48:12.120 --> 00:48:14.780 We suspect maybe three months in length.  
NOTE Confidence: 0.895755894666667  
00:48:14.780 --> 00:48:15.380 And again,  
NOTE Confidence: 0.895755894666667  
00:48:15.380 --> 00:48:17.480 the goal is to target this very,  
NOTE Confidence: 0.895755894666667  
00:48:17.480 --> 00:48:20.360 very transitional period for families.  
NOTE Confidence: 0.895755894666667  
00:48:20.360 --> 00:48:22.299 There's so much out there on the  
NOTE Confidence: 0.895755894666667  
00:48:22.299 --> 00:48:24.087 Internet and then the community and  
NOTE Confidence: 0.895755894666667  
00:48:24.087 --> 00:48:26.180 parents often don't know where to go  
NOTE Confidence: 0.895755894666667  
00:48:26.243 --> 00:48:28.126 or where to start on this journey.  
NOTE Confidence: 0.895755894666667  
00:48:28.130 --> 00:48:28.529 Therefore,  
NOTE Confidence: 0.895755894666667  
00:48:28.529 --> 00:48:31.322 we aim to really begin working with  
NOTE Confidence: 0.895755894666667  
00:48:31.322 --> 00:48:34.306 parents as soon as possible and the whole  
NOTE Confidence: 0.895755894666667  
00:48:34.306 --> 00:48:36.298 purpose of this type of intervention  
NOTE Confidence: 0.895755894666667  
00:48:36.298 --> 00:48:38.701 is once again empowering families to  
NOTE Confidence: 0.895755894666667  
00:48:38.701 --> 00:48:41.071 ensure families feel like they are  
NOTE Confidence: 0.895755894666667  
00:48:41.071 --> 00:48:43.171 getting the best head start that they  
NOTE Confidence: 0.895755894666667

00:48:43.171 --> 00:48:45.495 can as they begin their journey of  
NOTE Confidence: 0.895755894666667

00:48:45.495 --> 00:48:47.630 parenting a child with special needs,  
NOTE Confidence: 0.895755894666667

00:48:47.630 --> 00:48:49.730 and we want them to feel knowledgeable,  
NOTE Confidence: 0.895755894666667

00:48:49.730 --> 00:48:52.706 we want them to feel equipped to become  
NOTE Confidence: 0.895755894666667

00:48:52.706 --> 00:48:55.100 their child's best advocate because we  
NOTE Confidence: 0.895755894666667

00:48:55.100 --> 00:48:58.240 know that this is so incredibly important.  
NOTE Confidence: 0.895755894666667

00:48:58.240 --> 00:48:59.352 So before I end,  
NOTE Confidence: 0.895755894666667

00:48:59.352 --> 00:49:01.440 we also wanted to at least briefly  
NOTE Confidence: 0.895755894666667

00:49:01.440 --> 00:49:03.925 mention that part of our labs mission  
NOTE Confidence: 0.895755894666667

00:49:03.925 --> 00:49:06.820 is really to train that new generation  
NOTE Confidence: 0.895755894666667

00:49:06.820 --> 00:49:08.512 of clinicians and researchers,  
NOTE Confidence: 0.895755894666667

00:49:08.520 --> 00:49:10.256 and many from this group are from  
NOTE Confidence: 0.895755894666667

00:49:10.256 --> 00:49:11.779 the past three to four years,  
NOTE Confidence: 0.895755894666667

00:49:11.780 --> 00:49:14.000 others from a little while ago,  
NOTE Confidence: 0.895755894666667

00:49:14.000 --> 00:49:15.897 but many of our trainees have gone  
NOTE Confidence: 0.895755894666667

00:49:15.897 --> 00:49:17.796 on to study medicine, psychology,

NOTE Confidence: 0.895755894666667  
00:49:17.796 --> 00:49:19.780 social work, public health,  
NOTE Confidence: 0.895755894666667  
00:49:19.780 --> 00:49:21.292 speech, language, pathology,  
NOTE Confidence: 0.895755894666667  
00:49:21.292 --> 00:49:24.316 epidemiology, and the list goes on.  
NOTE Confidence: 0.895755894666667  
00:49:24.320 --> 00:49:26.396 And as they transition into their  
NOTE Confidence: 0.895755894666667  
00:49:26.396 --> 00:49:28.649 chosen career path, we do provide.  
NOTE Confidence: 0.895755894666667  
00:49:28.649 --> 00:49:31.067 Ourselves in providing them with some  
NOTE Confidence: 0.895755894666667  
00:49:31.067 --> 00:49:33.053 foundational knowledge and experience  
NOTE Confidence: 0.895755894666667  
00:49:33.053 --> 00:49:35.573 regarding family centered clinical care,  
NOTE Confidence: 0.895755894666667  
00:49:35.580 --> 00:49:40.000 especially within a research program.  
NOTE Confidence: 0.895755894666667  
00:49:40.000 --> 00:49:41.773 And with that I want to thank you for  
NOTE Confidence: 0.895755894666667  
00:49:41.773 --> 00:49:43.620 your time and attention as well as your  
NOTE Confidence: 0.895755894666667  
00:49:43.620 --> 00:49:45.298 support of our work over the years.  
NOTE Confidence: 0.895755894666667  
00:49:45.300 --> 00:49:47.428 And my son Reed also says thank you.  
NOTE Confidence: 0.909068083333333  
00:49:50.710 --> 00:49:52.798 Thank you, Kelly.  
NOTE Confidence: 0.909068083333333  
00:49:52.800 --> 00:49:56.880 So questions or any discussion?  
NOTE Confidence: 0.84393793

00:50:00.550 --> 00:50:06.128 Bravo. Thank you, janitor. I you know,

NOTE Confidence: 0.907882086

00:50:06.140 --> 00:50:08.110 as as a social worker by training,

NOTE Confidence: 0.8311907425

00:50:08.720 --> 00:50:10.630 although I don't never put

NOTE Confidence: 0.8311907425

00:50:10.630 --> 00:50:13.010 up my shingle, I think I'm

NOTE Confidence: 0.935239335

00:50:13.020 --> 00:50:15.524 a big, big big believer in support groups

NOTE Confidence: 0.866758532

00:50:15.660 --> 00:50:18.500 and family centered care and

NOTE Confidence: 0.866758532

00:50:18.500 --> 00:50:19.938 everything you just described.

NOTE Confidence: 0.866758532

00:50:19.938 --> 00:50:22.800 I think it's fabulous. Thank

NOTE Confidence: 0.848288367090909

00:50:22.810 --> 00:50:23.932 you, it really is at the

NOTE Confidence: 0.848288367090909

00:50:23.932 --> 00:50:25.930 heart of what we do. Yeah.

NOTE Confidence: 0.85356421

00:50:33.420 --> 00:50:34.290 Just looking to.

NOTE Confidence: 0.873936625

00:50:34.920 --> 00:50:36.048 See if any other.

NOTE Confidence: 0.901244376

00:50:36.770 --> 00:50:39.560 Questions in the chat or otherwise.

NOTE Confidence: 0.8633045875

00:50:45.170 --> 00:50:47.522 If I if I just may add something

NOTE Confidence: 0.8633045875

00:50:47.522 --> 00:50:50.455 to to the last slide that Kelly

NOTE Confidence: 0.8633045875

00:50:50.455 --> 00:50:52.126 presented when she presented our

NOTE Confidence: 0.8633045875

00:50:52.126 --> 00:50:54.304 investment into the future as I was

NOTE Confidence: 0.8633045875

00:50:54.304 --> 00:50:56.327 as we were putting through the slide,

NOTE Confidence: 0.8633045875

00:50:56.330 --> 00:50:59.434 I realized that both Suzanne and Kelly came

NOTE Confidence: 0.8633045875

00:50:59.434 --> 00:51:03.870 to us as postdoctoral trainees, right?

NOTE Confidence: 0.8633045875

00:51:03.870 --> 00:51:05.950 And and stay thankfully stayed

NOTE Confidence: 0.8633045875

00:51:05.950 --> 00:51:08.030 with us and contributed their

NOTE Confidence: 0.8633045875

00:51:08.109 --> 00:51:10.100 tremendous talent to this program.

NOTE Confidence: 0.77295942

00:51:11.770 --> 00:51:12.600 Good point.

NOTE Confidence: 0.77018327

00:51:17.240 --> 00:51:18.618 Well, we, we'd be very

NOTE Confidence: 0.77018327

00:51:18.618 --> 00:51:19.786 grateful for your feedback.

NOTE Confidence: 0.8136596525

00:51:19.790 --> 00:51:23.798 Also, on this kind of fireside chat salon,

NOTE Confidence: 0.8136596525

00:51:23.800 --> 00:51:26.184 just opportunity to get updates

NOTE Confidence: 0.8136596525

00:51:26.184 --> 00:51:29.577 through zoom and using this format in

NOTE Confidence: 0.8136596525

00:51:29.577 --> 00:51:32.300 any other topics you'd like to hear,

NOTE Confidence: 0.8136596525

00:51:32.300 --> 00:51:33.840 or any questions that you might

NOTE Confidence: 0.8136596525

00:51:33.840 --> 00:51:35.360 have after you get off from.  
NOTE Confidence: 0.8136596525

00:51:35.360 --> 00:51:37.292 I'm sure Costa and the team  
NOTE Confidence: 0.8136596525

00:51:37.292 --> 00:51:39.210 would be more than glad to.  
NOTE Confidence: 0.8136596525

00:51:39.210 --> 00:51:40.878 I have a discussion right kussion.  
NOTE Confidence: 0.8136596525

00:51:41.550 --> 00:51:43.010 Absolutely anytime.  
NOTE Confidence: 0.023718059

00:51:46.630 --> 00:51:49.259 Contra, do you want to have the not last  
NOTE Confidence: 0.882769925

00:51:49.270 --> 00:51:52.500 word but the transition word?  
NOTE Confidence: 0.85826487375

00:51:52.500 --> 00:51:54.824 Well, we truly appreciate  
NOTE Confidence: 0.85826487375

00:51:54.824 --> 00:51:57.148 your your your your.  
NOTE Confidence: 0.85826487375

00:51:57.150 --> 00:51:59.838 And coming here and helping us,  
NOTE Confidence: 0.85826487375

00:51:59.840 --> 00:52:00.848 you know, with some of us,  
NOTE Confidence: 0.85826487375

00:52:00.850 --> 00:52:02.866 we've had discussions in the past  
NOTE Confidence: 0.85826487375

00:52:02.866 --> 00:52:04.880 thinking about what is important.  
NOTE Confidence: 0.85826487375

00:52:04.880 --> 00:52:06.920 What are the priorities in the  
NOTE Confidence: 0.85826487375

00:52:06.920 --> 00:52:09.700 field and and your input is really  
NOTE Confidence: 0.85826487375

00:52:09.700 --> 00:52:11.906 tremendously important for us and



NOTE Confidence: 0.85826487375

00:52:11.906 --> 00:52:15.466 and we are grateful and look

NOTE Confidence: 0.85826487375

00:52:15.466 --> 00:52:17.994 forward to future discussions.