WEBVTT

NOTE duration: ”00:02:59.498”

NOTE Confidence: 0.9937185

00:00:05.120 --> 00:00:06.740 We see chronic irritability

NOTE Confidence: 0.96304154

00:00:07.120 --> 00:00:07.620 affect

NOTE Confidence: 0.939106

00:00:08.240 --> 00:00:09.840 many aspects of the kid's

NOTE Confidence: 0.939106

00:00:09.840 --> 00:00:10.340 life.

NOTE Confidence: 0.9940368

00:00:10.800 --> 00:00:12.240 And we have also seen

NOTE Confidence: 0.9940368

00:00:12.240 --> 00:00:13.380 that, irritability

NOTE Confidence: 0.92707074

00:00:13.759 --> 00:00:15.040 seem to be among the

NOTE Confidence: 0.92707074

00:00:15.040 --> 00:00:15.860 top reason

NOTE Confidence: 0.96904224

00:00:16.235 --> 00:00:17.915 for why kids were referred

NOTE Confidence: 0.96904224

00:00:17.915 --> 00:00:19.355 to the clinic and mental

NOTE Confidence: 0.96904224

00:00:19.355 --> 00:00:20.255 health services.

NOTE Confidence: 0.9984829

00:00:20.715 --> 00:00:22.635 And research has also shown

NOTE Confidence: 0.9984829

00:00:22.635 --> 00:00:23.135 that

NOTE Confidence: 0.9980391

00:00:23.755 --> 00:00:24.255 irritability

NOTE Confidence: 0.99668336

00:00:24.555 --> 00:00:25.614 in early childhood

NOTE Confidence: 0.9531112

00:00:25.994 --> 00:00:27.355 seemed to be a robust

NOTE Confidence: 0.9531112

00:00:27.355 --> 00:00:30.015 predictor for later negative outcomes.

NOTE Confidence: 0.99084336

00:00:30.360 --> 00:00:32.780 So this include anxiety, depression,

NOTE Confidence: 0.99084336

00:00:33.000 --> 00:00:33.500 suicidality.

NOTE Confidence: 0.94377553

00:00:37.880 --> 00:00:40.460 My research focuses on, irritability,

NOTE Confidence: 0.98816824

00:00:40.920 --> 00:00:42.760 anger, and aggression in children

NOTE Confidence: 0.98816824

00:00:42.760 --> 00:00:43.500 and adolescents.

NOTE Confidence: 0.998297

00:00:44.200 --> 00:00:45.479 So these are the kids

NOTE Confidence: 0.998297

00:00:45.479 --> 00:00:45.915 who

NOTE Confidence: 0.88803244

00:00:46.315 --> 00:00:47.935 have low frustration tolerance.

NOTE Confidence: 0.9717563

00:00:48.395 --> 00:00:49.995 Any little things can easily

NOTE Confidence: 0.9717563

00:00:49.995 --> 00:00:51.435 set them off, and they

NOTE Confidence: 0.9717563

00:00:51.435 --> 00:00:52.735 often have frequent,

NOTE Confidence: 0.999456

00:00:53.435 --> 00:00:53.935 severe

NOTE Confidence: 0.9616786

00:00:54.475 --> 00:00:54.975 dysregulated

NOTE Confidence: 0.85005474

00:00:55.435 --> 00:00:56.415 temporal bursts.

NOTE Confidence: 0.9913355

00:01:00.430 --> 00:01:02.350 In our lab, fMRI is

NOTE Confidence: 0.9913355

00:01:02.350 --> 00:01:03.649 one of the main component

NOTE Confidence: 0.959481

00:01:04.189 --> 00:01:05.150 in the sense that we

NOTE Confidence: 0.959481

00:01:05.150 --> 00:01:06.610 wanted to better understand,

NOTE Confidence: 0.9912335

00:01:07.470 --> 00:01:09.470 what goes on in kids

NOTE Confidence: 0.9912335

00:01:09.470 --> 00:01:10.209 with irritability

NOTE Confidence: 0.9687271

00:01:10.670 --> 00:01:11.170 sprain.

NOTE Confidence: 0.9971068

00:01:11.470 --> 00:01:13.170 So we have them

NOTE Confidence: 0.96039164

00:01:13.475 --> 00:01:14.914 come into the lab, and

NOTE Confidence: 0.96039164

00:01:14.914 --> 00:01:16.115 then we put them inside

NOTE Confidence: 0.96039164

00:01:16.115 --> 00:01:17.255 the MRI scanner.

NOTE Confidence: 0.9975309

00:01:17.634 --> 00:01:18.755 And we have them play

NOTE Confidence: 0.9975309

00:01:18.755 --> 00:01:19.494 some games

NOTE Confidence: 0.97555614

00:01:19.795 --> 00:01:21.234 that are designed to frustrate

NOTE Confidence: 0.97555614

00:01:21.234 --> 00:01:22.755 them so that we can

NOTE Confidence: 0.97555614

00:01:22.755 --> 00:01:23.255 see

NOTE Confidence: 0.97865814

00:01:23.634 --> 00:01:25.795 how their brain respond and

NOTE Confidence: 0.97865814

00:01:25.795 --> 00:01:26.854 what are the different

NOTE Confidence: 0.9998096

00:01:27.500 --> 00:01:28.959 areas that are activated

NOTE Confidence: 0.9245295

00:01:29.660 --> 00:01:30.860 and how do the different

NOTE Confidence: 0.9245295

00:01:30.860 --> 00:01:32.940 brain region communicate, talk to

NOTE Confidence: 0.9245295

00:01:32.940 --> 00:01:33.600 each others

NOTE Confidence: 0.9337977

00:01:33.980 --> 00:01:35.440 while kids are experiencing

NOTE Confidence: 0.99925965

00:01:35.819 --> 00:01:36.319 frustration

NOTE Confidence: 0.9949098

00:01:36.780 --> 00:01:38.720 and trying to regulate frustration

NOTE Confidence: 0.9949098

00:01:38.860 --> 00:01:40.540 inside the scanner in real

NOTE Confidence: 0.9949098

00:01:40.540 --> 00:01:41.040 time.

NOTE Confidence: 0.99804926

00:01:42.125 --> 00:01:43.485 In the new studies that

NOTE Confidence: 0.99804926

00:01:43.485 --> 00:01:44.465 we are launching,

NOTE Confidence: 0.9786177

00:01:44.925 --> 00:01:46.685 we invite the parent and

NOTE Confidence: 0.9786177

00:01:46.685 --> 00:01:48.385 the child to our lab

NOTE Confidence: 0.9786177

00:01:48.605 --> 00:01:49.965 and have them do some

NOTE Confidence: 0.9786177

00:01:49.965 --> 00:01:51.585 sort of interaction task,

NOTE Confidence: 0.9994454

00:01:51.885 --> 00:01:53.425 and we wanted to see

NOTE Confidence: 0.9994454

00:01:53.565 --> 00:01:55.265 how the child's frustration

NOTE Confidence: 0.9576923

00:01:56.045 --> 00:01:56.545 manifest

NOTE Confidence: 0.9990093

00:01:56.850 --> 00:01:57.830 in their physiology.

NOTE Confidence: 0.9799902

00:02:02.290 --> 00:02:04.369 Given the severity and the

NOTE Confidence: 0.9799902

00:02:04.369 --> 00:02:06.310 impairment that these kids experience,

NOTE Confidence: 0.98414886

00:02:07.009 --> 00:02:09.270 surprisingly, there's very little treatment

NOTE Confidence: 0.98414886

00:02:09.330 --> 00:02:11.650 options for them, especially treatment

NOTE Confidence: 0.98414886

00:02:11.650 --> 00:02:14.035 that's specifically designed to target

NOTE Confidence: 0.98414886

00:02:14.035 --> 00:02:14.535 irritability.

NOTE Confidence: 0.99119866

00:02:15.555 --> 00:02:17.555 So with the fMRI study,

NOTE Confidence: 0.99119866

00:02:17.555 --> 00:02:18.995 what we're hoping to do

NOTE Confidence: 0.99119866

00:02:18.995 --> 00:02:20.695 is to identify some

NOTE Confidence: 0.6764598

00:02:21.075 --> 00:02:22.055 neuro signatures,

NOTE Confidence: 0.7410483

00:02:22.435 --> 00:02:23.735 so neural markers.

NOTE Confidence: 0.9974315

00:02:24.115 --> 00:02:25.750 So this could be, how

NOTE Confidence: 0.9974315

00:02:25.750 --> 00:02:27.210 the different brain regions

NOTE Confidence: 0.99867576

00:02:27.590 --> 00:02:28.090 activate

NOTE Confidence: 0.9862196

00:02:28.470 --> 00:02:30.310 or how they communicate with

NOTE Confidence: 0.9862196

00:02:30.310 --> 00:02:30.970 each other

NOTE Confidence: 0.84152496

00:02:31.430 --> 00:02:33.370 and take these neural markers

NOTE Confidence: 0.9653387

00:02:33.830 --> 00:02:35.110 and then treat them like

NOTE Confidence: 0.9653387

00:02:35.110 --> 00:02:35.930 a target.

NOTE Confidence: 0.9511925

00:02:36.389 --> 00:02:37.669 And so if we can

NOTE Confidence: 0.9511925

00:02:37.669 --> 00:02:39.905 move those neural targets targets

NOTE Confidence: 0.9511925

00:02:39.905 --> 00:02:41.105 using some sort of,

NOTE Confidence: 0.9756653

00:02:41.745 --> 00:02:42.245 therapeutics,

NOTE Confidence: 0.9860356

00:02:42.864 --> 00:02:44.805 this could be behavioral therapy,

NOTE Confidence: 0.9860356

00:02:44.944 --> 00:02:45.444 psychotherapy,

NOTE Confidence: 0.925513

00:02:46.065 --> 00:02:46.565 or,

NOTE Confidence: 0.9979911

00:02:47.504 --> 00:02:48.004 pharmacological

NOTE Confidence: 0.98952746

00:02:48.705 --> 00:02:50.144 therapy, we might be able

NOTE Confidence: 0.98952746

00:02:50.144 --> 00:02:52.084 to see the downstream changes

NOTE Confidence: 0.98952746

00:02:52.144 --> 00:02:53.584 in terms of reduction in

NOTE Confidence: 0.98952746

00:02:53.584 --> 00:02:54.084 irritability

NOTE Confidence: 0.9981302

00:02:54.385 --> 00:02:54.885 symptoms.