

WEBVTT

NOTE duration:"01:14:10"

NOTE recognizability:0.824

NOTE language:en-us

NOTE Confidence: 0.857381942857143

00:00:00.000 --> 00:00:04.298 Thank you Trisha and and welcome everybody.

NOTE Confidence: 0.857381942857143

00:00:04.300 --> 00:00:07.055 The and welcome to the

NOTE Confidence: 0.857381942857143

00:00:07.055 --> 00:00:08.708 Lussman Award celebration.

NOTE Confidence: 0.857381942857143

00:00:08.710 --> 00:00:13.435 The Lussman Awards are just a wonderful.

NOTE Confidence: 0.857381942857143

00:00:13.440 --> 00:00:15.770 Opportunity to acknowledge the incredible

NOTE Confidence: 0.857381942857143

00:00:15.770 --> 00:00:18.589 work done by young scientists in

NOTE Confidence: 0.857381942857143

00:00:18.589 --> 00:00:21.109 the Department of Psychiatry and the

NOTE Confidence: 0.857381942857143

00:00:21.109 --> 00:00:23.030 Residency and Fellowship programs.

NOTE Confidence: 0.857381942857143

00:00:23.030 --> 00:00:25.487 It's also a great time to celebrate

NOTE Confidence: 0.857381942857143

00:00:25.487 --> 00:00:27.571 the the career and accomplishments

NOTE Confidence: 0.857381942857143

00:00:27.571 --> 00:00:30.439 of Seymour Lassman and and Doctor

NOTE Confidence: 0.857381942857143

00:00:30.439 --> 00:00:32.256 Pittenger will describe his

NOTE Confidence: 0.857381942857143

00:00:32.256 --> 00:00:34.626 background in just a little bit.

NOTE Confidence: 0.857381942857143

00:00:34.630 --> 00:00:36.634 But the Lussman family plays a  
NOTE Confidence: 0.857381942857143

00:00:36.634 --> 00:00:38.909 special role in the hearts of  
NOTE Confidence: 0.857381942857143

00:00:38.909 --> 00:00:40.645 the Department of Psychiatry.  
NOTE Confidence: 0.857381942857143

00:00:40.650 --> 00:00:42.570 It's a family that's been involved,  
NOTE Confidence: 0.857381942857143

00:00:42.570 --> 00:00:44.370 connected to the department  
NOTE Confidence: 0.857381942857143

00:00:44.370 --> 00:00:45.720 across 3 generations,  
NOTE Confidence: 0.857381942857143

00:00:45.720 --> 00:00:47.814 and I particularly want to add  
NOTE Confidence: 0.857381942857143

00:00:47.814 --> 00:00:50.334 my thanks to the the things that  
NOTE Confidence: 0.857381942857143

00:00:50.334 --> 00:00:52.777 I know that that Chris and and.  
NOTE Confidence: 0.857381942857143

00:00:52.780 --> 00:00:55.810 And perhaps others will express  
NOTE Confidence: 0.857381942857143

00:00:55.810 --> 00:00:58.840 to Susan and Jonathan Katz,  
NOTE Confidence: 0.857381942857143

00:00:58.840 --> 00:01:02.000 who've been really incredibly supportive  
NOTE Confidence: 0.857381942857143

00:01:02.000 --> 00:01:06.302 of our ability to continue the lesbian  
NOTE Confidence: 0.857381942857143

00:01:06.302 --> 00:01:09.416 awards over the last many years.  
NOTE Confidence: 0.857381942857143

00:01:09.420 --> 00:01:11.485 The last man awards have really emerged  
NOTE Confidence: 0.857381942857143

00:01:11.485 --> 00:01:14.300 as one of the nation's leading awards

NOTE Confidence: 0.857381942857143  
00:01:14.300 --> 00:01:17.660 for research done in the residency.  
NOTE Confidence: 0.857381942857143  
00:01:17.660 --> 00:01:20.830 And if you go back over the list of honorees,  
NOTE Confidence: 0.857381942857143  
00:01:20.830 --> 00:01:22.665 you'll see many people who  
NOTE Confidence: 0.857381942857143  
00:01:22.665 --> 00:01:24.965 have emerged as leaders in the  
NOTE Confidence: 0.857381942857143  
00:01:24.965 --> 00:01:27.335 Department of Symmetry here at Yale.  
NOTE Confidence: 0.857381942857143  
00:01:27.340 --> 00:01:27.990 But really,  
NOTE Confidence: 0.857381942857143  
00:01:27.990 --> 00:01:31.975 all across the country and and people  
NOTE Confidence: 0.857381942857143  
00:01:31.975 --> 00:01:34.960 who've had whose impact has really.  
NOTE Confidence: 0.902800677777778  
00:01:37.930 --> 00:01:40.384 Been measurable on the overall effort  
NOTE Confidence: 0.902800677777778  
00:01:40.384 --> 00:01:43.765 to relieve the the public health burden  
NOTE Confidence: 0.902800677777778  
00:01:43.765 --> 00:01:46.550 of psychiatric disorders and addictions,  
NOTE Confidence: 0.902800677777778  
00:01:46.550 --> 00:01:48.776 so this is really an incredibly  
NOTE Confidence: 0.902800677777778  
00:01:48.776 --> 00:01:51.092 exciting and special day and I  
NOTE Confidence: 0.902800677777778  
00:01:51.092 --> 00:01:52.987 look forward to the presentations.  
NOTE Confidence: 0.902800677777778  
00:01:52.990 --> 00:01:54.694 I just wanted to add one  
NOTE Confidence: 0.902800677777778

00:01:54.694 --> 00:01:55.830 thing before I close.  
NOTE Confidence: 0.902800677777778

00:01:55.830 --> 00:01:58.702 There's no grand rounds next week due to  
NOTE Confidence: 0.902800677777778

00:01:58.702 --> 00:02:01.386 more because of the Memorial Day holiday,  
NOTE Confidence: 0.902800677777778

00:02:01.390 --> 00:02:02.866 but the following Friday,  
NOTE Confidence: 0.902800677777778

00:02:02.866 --> 00:02:05.892 June 3rd will have the state of the  
NOTE Confidence: 0.902800677777778

00:02:05.892 --> 00:02:08.100 the state of the department address.  
NOTE Confidence: 0.902800677777778

00:02:08.100 --> 00:02:10.924 So I hope that we'll see everybody there  
NOTE Confidence: 0.902800677777778

00:02:10.924 --> 00:02:14.066 for the state of the department address.  
NOTE Confidence: 0.9330850525

00:02:16.630 --> 00:02:18.440 Which is also another great  
NOTE Confidence: 0.9330850525

00:02:18.440 --> 00:02:20.250 opportunity to reflect on the  
NOTE Confidence: 0.9330850525

00:02:20.314 --> 00:02:22.408 year that we've all been through.  
NOTE Confidence: 0.9330850525

00:02:22.410 --> 00:02:24.094 So without further ado,  
NOTE Confidence: 0.9330850525

00:02:24.094 --> 00:02:26.199 let me introduce Doctor Chris  
NOTE Confidence: 0.9330850525

00:02:26.199 --> 00:02:28.359 Bittinger who will get us underway.  
NOTE Confidence: 0.826254696666667

00:02:42.140 --> 00:02:43.268 Chris, you're muted.  
NOTE Confidence: 0.89862052

00:02:55.980 --> 00:02:57.870 There we go. You think that after two

NOTE Confidence: 0.824616268333333

00:02:57.880 --> 00:03:01.230 years I have this figured out. That's OK.

NOTE Confidence: 0.91852538

00:03:03.760 --> 00:03:05.422 So now I just need your

NOTE Confidence: 0.91852538

00:03:05.422 --> 00:03:07.810 screen back slides back.

NOTE Confidence: 0.34211177

00:03:19.250 --> 00:03:21.530 And multitude of slide decks,

NOTE Confidence: 0.34211177

00:03:21.530 --> 00:03:26.078 it's all well. There we go.

NOTE Confidence: 0.34211177

00:03:26.080 --> 00:03:29.872 Good alright, let me try again.

NOTE Confidence: 0.34211177

00:03:29.872 --> 00:03:30.838 Welcome everyone.

NOTE Confidence: 0.34211177

00:03:30.840 --> 00:03:32.656 It's a pleasure to have you all join

NOTE Confidence: 0.34211177

00:03:32.656 --> 00:03:34.798 us for this year's last minute awards.

NOTE Confidence: 0.34211177

00:03:34.800 --> 00:03:35.454 As John said,

NOTE Confidence: 0.34211177

00:03:35.454 --> 00:03:36.980 this is really a special day in

NOTE Confidence: 0.34211177

00:03:37.032 --> 00:03:38.691 the life of the department and one

NOTE Confidence: 0.34211177

00:03:38.691 --> 00:03:40.778 of my favorite grand rounds of the

NOTE Confidence: 0.34211177

00:03:40.778 --> 00:03:42.992 year as we celebrate our commitment

NOTE Confidence: 0.34211177

00:03:42.992 --> 00:03:44.769 to training and the spectacular

NOTE Confidence: 0.34211177

00:03:44.769 --> 00:03:47.777 work of some of our of some of our  
NOTE Confidence: 0.34211177

00:03:47.777 --> 00:03:50.010 trainees as well as our commitment  
NOTE Confidence: 0.34211177

00:03:50.010 --> 00:03:51.900 to mentorship and the participation  
NOTE Confidence: 0.34211177

00:03:51.970 --> 00:03:53.968 of mentors in the success of  
NOTE Confidence: 0.34211177

00:03:53.968 --> 00:03:56.566 these trainees and the history.  
NOTE Confidence: 0.34211177

00:03:56.566 --> 00:03:58.218 Of of Seymour Lessman,  
NOTE Confidence: 0.34211177

00:03:58.220 --> 00:04:00.540 who was a giant in in our department  
NOTE Confidence: 0.34211177

00:04:00.540 --> 00:04:02.902 and then the Child Study center years  
NOTE Confidence: 0.34211177

00:04:02.902 --> 00:04:05.158 ago and whose family has generously  
NOTE Confidence: 0.34211177

00:04:05.158 --> 00:04:07.639 supported this award since 1973.  
NOTE Confidence: 0.34211177

00:04:07.639 --> 00:04:11.053 As an in honor and continuation  
NOTE Confidence: 0.34211177

00:04:11.053 --> 00:04:12.760 of his legacy.  
NOTE Confidence: 0.34211177

00:04:12.760 --> 00:04:13.714 So, Seymour Lessman,  
NOTE Confidence: 0.34211177

00:04:13.714 --> 00:04:15.622 for those of you who aren't  
NOTE Confidence: 0.34211177

00:04:15.622 --> 00:04:17.960 familiar with him from previous from  
NOTE Confidence: 0.34211177

00:04:17.960 --> 00:04:19.524 previous lesson award celebrations,

NOTE Confidence: 0.34211177

00:04:19.530 --> 00:04:21.914 had a remarkable career.

NOTE Confidence: 0.34211177

00:04:21.914 --> 00:04:24.412 He served in the Army in World War Two.

NOTE Confidence: 0.34211177

00:04:24.412 --> 00:04:26.476 Then he obtained his PhD in psychology

NOTE Confidence: 0.34211177

00:04:26.476 --> 00:04:28.474 from the University of Chicago in

NOTE Confidence: 0.34211177

00:04:28.474 --> 00:04:31.209 his MD at the University of Illinois.

NOTE Confidence: 0.34211177

00:04:31.210 --> 00:04:33.130 And while at the University of

NOTE Confidence: 0.34211177

00:04:33.130 --> 00:04:35.129 Illinois he became interested in the

NOTE Confidence: 0.34211177

00:04:35.129 --> 00:04:37.127 Physiology and behavior of newborn infants.

NOTE Confidence: 0.34211177

00:04:37.130 --> 00:04:39.146 This was a time when the field was rife

NOTE Confidence: 0.34211177

00:04:39.146 --> 00:04:41.700 with arguments about nature versus nurture,

NOTE Confidence: 0.34211177

00:04:41.700 --> 00:04:43.408 which I think we've long since transcended.

NOTE Confidence: 0.34211177

00:04:43.410 --> 00:04:44.298 Because of course,

NOTE Confidence: 0.34211177

00:04:44.298 --> 00:04:45.186 all interesting things.

NOTE Confidence: 0.34211177

00:04:45.190 --> 00:04:47.810 Or both, but at that point this was a very,

NOTE Confidence: 0.34211177

00:04:47.810 --> 00:04:50.504 you know, active point of of

NOTE Confidence: 0.34211177

00:04:50.504 --> 00:04:53.170 disagreement and conflict in the field.  
NOTE Confidence: 0.34211177

00:04:53.170 --> 00:04:55.510 And that became the focus of  
NOTE Confidence: 0.34211177

00:04:55.510 --> 00:04:57.092 doctor Glassman's work.  
NOTE Confidence: 0.34211177

00:04:57.092 --> 00:04:59.390 He came to Yale in 1955,  
NOTE Confidence: 0.34211177

00:04:59.390 --> 00:05:00.990 where he completed psychiatry,  
NOTE Confidence: 0.34211177

00:05:00.990 --> 00:05:02.774 residency and Child fellowship,  
NOTE Confidence: 0.34211177

00:05:02.774 --> 00:05:06.350 and he joined the psychiatry faculty in 1962.  
NOTE Confidence: 0.34211177

00:05:06.350 --> 00:05:07.770 And then two years later,  
NOTE Confidence: 0.34211177

00:05:07.770 --> 00:05:09.660 he was promoted to the rank  
NOTE Confidence: 0.34211177

00:05:09.660 --> 00:05:10.605 of full professor.  
NOTE Confidence: 0.34211177

00:05:10.610 --> 00:05:12.199 I can clearly remember when I was  
NOTE Confidence: 0.34211177

00:05:12.199 --> 00:05:13.978 a trainee and John would make that  
NOTE Confidence: 0.34211177

00:05:13.978 --> 00:05:15.857 statement that he was promoted to full  
NOTE Confidence: 0.34211177

00:05:15.857 --> 00:05:17.423 professor just two years later and  
NOTE Confidence: 0.34211177

00:05:17.423 --> 00:05:19.890 John Pier out, all of us and and say,  
NOTE Confidence: 0.34211177

00:05:19.890 --> 00:05:23.218 let that be a model for you, but.



NOTE Confidence: 0.34211177

00:05:23.218 --> 00:05:26.130 But truly remarkable remarkable

NOTE Confidence: 0.34211177

00:05:26.130 --> 00:05:27.676 achievement on the faculty.

NOTE Confidence: 0.34211177

00:05:27.676 --> 00:05:29.036 He was a dedicated teacher,

NOTE Confidence: 0.34211177

00:05:29.040 --> 00:05:29.844 gifted clinician,

NOTE Confidence: 0.34211177

00:05:29.844 --> 00:05:32.256 and a careful and creative scientist.

NOTE Confidence: 0.34211177

00:05:32.260 --> 00:05:34.514 He became increasingly interested in

NOTE Confidence: 0.34211177

00:05:34.514 --> 00:05:36.998 problems of impulse control and adolescence,

NOTE Confidence: 0.34211177

00:05:37.000 --> 00:05:39.080 and among numerous other contributions.

NOTE Confidence: 0.34211177

00:05:39.080 --> 00:05:40.934 He was a key member of a group of

NOTE Confidence: 0.34211177

00:05:40.934 --> 00:05:42.378 scholars together with Al Solnit,

NOTE Confidence: 0.34211177

00:05:42.380 --> 00:05:43.890 Anna Freud and Joe Goldstein,

NOTE Confidence: 0.34211177

00:05:43.890 --> 00:05:46.130 who wrote a landmark text in the

NOTE Confidence: 0.34211177

00:05:46.130 --> 00:05:48.050 field of child maltreatment beyond

NOTE Confidence: 0.34211177

00:05:48.050 --> 00:05:50.708 the best interests of the child.

NOTE Confidence: 0.34211177

00:05:50.710 --> 00:05:51.031 See,

NOTE Confidence: 0.34211177

00:05:51.031 --> 00:05:52.636 we're lussman died tragically at  
NOTE Confidence: 0.34211177

00:05:52.636 --> 00:05:54.948 a young age in a boating accident  
NOTE Confidence: 0.34211177

00:05:54.948 --> 00:05:57.425 in the early 1970s and one of the  
NOTE Confidence: 0.34211177

00:05:57.425 --> 00:06:00.085 leading lights in our in our field was  
NOTE Confidence: 0.34211177

00:06:00.085 --> 00:06:02.960 taken from us and shortly thereafter in 1973.  
NOTE Confidence: 0.34211177

00:06:02.960 --> 00:06:04.810 His family created this award,  
NOTE Confidence: 0.34211177

00:06:04.810 --> 00:06:06.785 and it's been given continuously  
NOTE Confidence: 0.34211177

00:06:06.785 --> 00:06:08.498 every year since 1973 with I,  
NOTE Confidence: 0.34211177

00:06:08.498 --> 00:06:08.850 I think,  
NOTE Confidence: 0.34211177

00:06:08.850 --> 00:06:11.940 puts us at 49 years.  
NOTE Confidence: 0.34211177

00:06:11.940 --> 00:06:12.885 As John said,  
NOTE Confidence: 0.34211177

00:06:12.885 --> 00:06:14.775 if you look at the the  
NOTE Confidence: 0.34211177

00:06:14.775 --> 00:06:16.340 plaque of past winners,  
NOTE Confidence: 0.34211177

00:06:16.340 --> 00:06:17.550 you'll see quite a few  
NOTE Confidence: 0.34211177

00:06:17.550 --> 00:06:18.518 leading lights of psychic.  
NOTE Confidence: 0.84228034

00:06:18.520 --> 00:06:20.134 If you're both at our institution

NOTE Confidence: 0.84228034

00:06:20.134 --> 00:06:21.210 and across the country,

NOTE Confidence: 0.84228034

00:06:21.210 --> 00:06:24.633 and so are our awardees today are

NOTE Confidence: 0.84228034

00:06:24.633 --> 00:06:26.890 joining an illustrious company.

NOTE Confidence: 0.87271613

00:06:28.110 --> 00:06:29.910 As I said, we're not only

NOTE Confidence: 0.8709535111111111

00:06:29.920 --> 00:06:32.185 celebrating the awardees and the

NOTE Confidence: 0.8709535111111111

00:06:32.185 --> 00:06:34.222 accomplishments of our trainings here

NOTE Confidence: 0.8709535111111111

00:06:34.222 --> 00:06:35.554 in the Yale Department of Psychiatry,

NOTE Confidence: 0.8709535111111111

00:06:35.560 --> 00:06:37.720 but also of their mentors.

NOTE Confidence: 0.8709535111111111

00:06:37.720 --> 00:06:39.496 None of us succeed without the

NOTE Confidence: 0.8709535111111111

00:06:39.496 --> 00:06:41.490 support of our of our mentors.

NOTE Confidence: 0.8709535111111111

00:06:41.490 --> 00:06:42.270 They're modeling.

NOTE Confidence: 0.8709535111111111

00:06:42.270 --> 00:06:45.236 You know financial support, their guidance,

NOTE Confidence: 0.8709535111111111

00:06:45.236 --> 00:06:47.476 and so we're going to have each of our

NOTE Confidence: 0.8709535111111111

00:06:47.476 --> 00:06:51.723 awardees introduced by by a key mentor and.

NOTE Confidence: 0.8709535111111111

00:06:51.723 --> 00:06:54.054 And while the focus today is on

NOTE Confidence: 0.8709535111111111

00:06:54.054 --> 00:06:55.810 the trainees and their work,  
NOTE Confidence: 0.8709535111111111

00:06:55.810 --> 00:06:59.177 we we applaud the mentors as well.  
NOTE Confidence: 0.8709535111111111

00:06:59.180 --> 00:07:01.574 So with no, I'm sorry I should just be.  
NOTE Confidence: 0.8709535111111111

00:07:01.580 --> 00:07:03.449 I've already thanked the the Lussman family.  
NOTE Confidence: 0.8709535111111111

00:07:03.450 --> 00:07:05.424 I also want to thank the  
NOTE Confidence: 0.8709535111111111

00:07:05.424 --> 00:07:06.740 Lussman Awards Review Committee,  
NOTE Confidence: 0.8709535111111111

00:07:06.740 --> 00:07:09.158 group of faculty who joined us,  
NOTE Confidence: 0.8709535111111111

00:07:09.160 --> 00:07:11.688 YOUNGSTON show Marina Picciotto.  
NOTE Confidence: 0.8709535111111111

00:07:11.688 --> 00:07:13.070 Wow, if I just rattle them off  
NOTE Confidence: 0.8709535111111111

00:07:13.070 --> 00:07:13.770 the top of my head,  
NOTE Confidence: 0.8709535111111111

00:07:13.770 --> 00:07:14.845 I'm going to leave someone  
NOTE Confidence: 0.8709535111111111

00:07:14.845 --> 00:07:16.240 out and that would be upset.  
NOTE Confidence: 0.8709535111111111

00:07:16.240 --> 00:07:18.552 But just I appreciate the Group of the  
NOTE Confidence: 0.8709535111111111

00:07:18.552 --> 00:07:20.884 Group of faculty who helped us review  
NOTE Confidence: 0.8709535111111111

00:07:20.884 --> 00:07:23.010 these for the last several years.  
NOTE Confidence: 0.8709535111111111

00:07:23.010 --> 00:07:25.050 So without further ado,

NOTE Confidence: 0.8709535111111111

00:07:25.050 --> 00:07:28.432 I will invite Bob Rosenheck guns to

NOTE Confidence: 0.8709535111111111

00:07:28.432 --> 00:07:30.686 introduce our first winner of us been

NOTE Confidence: 0.8709535111111111

00:07:30.686 --> 00:07:34.230 awarded first prize winner for 2022.

NOTE Confidence: 0.8709535111111111

00:07:34.230 --> 00:07:39.830 And that's the wrong one. All right?

NOTE Confidence: 0.8709535111111111

00:07:39.830 --> 00:07:42.306 So while we go ahead, go ahead.

NOTE Confidence: 0.8709535111111111

00:07:42.306 --> 00:07:43.676 I'm working out the technical.

NOTE Confidence: 0.584260775

00:07:43.970 --> 00:07:46.660 Yeah well, while we fiddled with the slides,

NOTE Confidence: 0.584260775

00:07:46.660 --> 00:07:49.450 I very happy to introduce Tanner

NOTE Confidence: 0.584260775

00:07:49.450 --> 00:07:53.620 boomers back from Grand Forks, ND.

NOTE Confidence: 0.584260775

00:07:53.620 --> 00:07:57.292 And of course, he has been a superstar

NOTE Confidence: 0.584260775

00:07:57.292 --> 00:08:00.570 who published 15 papers as a resident.

NOTE Confidence: 0.584260775

00:08:00.570 --> 00:08:03.699 And worked very closely with me and

NOTE Confidence: 0.584260775

00:08:03.699 --> 00:08:06.800 a group that was Co led by Greg Lee,

NOTE Confidence: 0.584260775

00:08:06.800 --> 00:08:08.416 who's a young investigator.

NOTE Confidence: 0.584260775

00:08:08.416 --> 00:08:11.000 All of you should get to know.

NOTE Confidence: 0.86296636

00:08:13.360 --> 00:08:16.828 Tanner, I thought his magnificent  
NOTE Confidence: 0.86296636

00:08:16.828 --> 00:08:20.220 productivity was a product of coming  
NOTE Confidence: 0.913016714285715

00:08:20.220 --> 00:08:23.514 to Yale, but in fact he was the superstar  
NOTE Confidence: 0.913016714285715

00:08:23.514 --> 00:08:26.250 before he came to Yale, graduating  
NOTE Confidence: 0.630762337

00:08:26.360 --> 00:08:29.500 summa \*\*\* laude from college and getting an  
NOTE Confidence: 0.630762337

00:08:29.500 --> 00:08:32.667 MPH from Hopkins and working with a number  
NOTE Confidence: 0.91191656

00:08:32.680 --> 00:08:36.228 of leading lights there.  
NOTE Confidence: 0.91191656

00:08:36.230 --> 00:08:37.802 His interests are broad.  
NOTE Confidence: 0.91191656

00:08:37.802 --> 00:08:39.767 His curiosity of is boundless,  
NOTE Confidence: 0.91191656

00:08:39.770 --> 00:08:42.170 and what I particularly would emphasize  
NOTE Confidence: 0.91191656

00:08:42.170 --> 00:08:45.726 is the not just the number of papers,  
NOTE Confidence: 0.91191656

00:08:45.730 --> 00:08:48.068 but the fact that he has emerged  
NOTE Confidence: 0.91191656

00:08:48.068 --> 00:08:50.429 as a very talented writer.  
NOTE Confidence: 0.91191656

00:08:50.430 --> 00:08:53.482 And I think we often don't recognize  
NOTE Confidence: 0.91191656

00:08:53.482 --> 00:08:56.891 how important it is to cultivate the  
NOTE Confidence: 0.91191656

00:08:56.891 --> 00:08:59.406 skills of clear scientific writing.

NOTE Confidence: 0.91191656

00:08:59.410 --> 00:09:02.133 And he's become just a pleasure to

NOTE Confidence: 0.91191656

00:09:02.133 --> 00:09:05.680 to read his work as it's developed.

NOTE Confidence: 0.91191656

00:09:05.680 --> 00:09:07.720 And so without.

NOTE Confidence: 0.91191656

00:09:07.720 --> 00:09:10.033 More ado, let me hand it over to Tanner,

NOTE Confidence: 0.91191656

00:09:10.040 --> 00:09:12.160 who will present his paper that

NOTE Confidence: 0.91191656

00:09:12.160 --> 00:09:13.579 appeared in JAMA Psychiatry.

NOTE Confidence: 0.907708724

00:09:16.490 --> 00:09:19.040 Well, thank you so much Doctor

NOTE Confidence: 0.907708724

00:09:19.040 --> 00:09:21.925 Rosenak and I just want to thank Bob.

NOTE Confidence: 0.907708724

00:09:21.930 --> 00:09:23.370 You know, despite what he

NOTE Confidence: 0.907708724

00:09:23.370 --> 00:09:24.522 says coming into residency,

NOTE Confidence: 0.907708724

00:09:24.530 --> 00:09:27.470 I knew very very little about about

NOTE Confidence: 0.907708724

00:09:27.470 --> 00:09:30.200 research and and most of what I've learned

NOTE Confidence: 0.907708724

00:09:30.200 --> 00:09:32.201 can be attributed to Doctor Rosenak,

NOTE Confidence: 0.907708724

00:09:32.201 --> 00:09:34.560 who's who's just been such an amazing

NOTE Confidence: 0.907708724

00:09:34.626 --> 00:09:36.565 mentor to me and I really could

NOTE Confidence: 0.907708724

00:09:36.565 --> 00:09:38.544 not have asked for a better mentor  
NOTE Confidence: 0.907708724

00:09:38.544 --> 00:09:40.584 when I came into to residency.  
NOTE Confidence: 0.907708724

00:09:40.584 --> 00:09:43.948 I also want to thank Gregory as.  
NOTE Confidence: 0.907708724

00:09:43.948 --> 00:09:46.882 Thompson, our senior author on this  
NOTE Confidence: 0.907708724

00:09:46.882 --> 00:09:49.932 paper who's been a friend and a mentor  
NOTE Confidence: 0.907708724

00:09:49.932 --> 00:09:51.600 to me over the last couple years,  
NOTE Confidence: 0.907708724

00:09:51.600 --> 00:09:51.859 especially.  
NOTE Confidence: 0.907708724

00:09:51.859 --> 00:09:53.672 And I also just want to thank  
NOTE Confidence: 0.907708724

00:09:53.672 --> 00:09:55.260 the the Lossman Foundation.  
NOTE Confidence: 0.907708724

00:09:55.260 --> 00:09:57.908 It was fun to hear more about about  
NOTE Confidence: 0.907708724

00:09:57.908 --> 00:09:59.764 Doctor Lossman for for their support  
NOTE Confidence: 0.907708724

00:09:59.764 --> 00:10:01.612 of of resident research and giving  
NOTE Confidence: 0.907708724

00:10:01.612 --> 00:10:03.798 us really the opportunity to share  
NOTE Confidence: 0.907708724

00:10:03.798 --> 00:10:05.618 our research with the department.  
NOTE Confidence: 0.907708724

00:10:05.620 --> 00:10:07.588 So thank you.  
NOTE Confidence: 0.907708724

00:10:07.590 --> 00:10:09.582 Turning to the the title of our paper



NOTE Confidence: 0.907708724

00:10:09.582 --> 00:10:11.660 over the next 15 or 20 minutes or so,

NOTE Confidence: 0.907708724

00:10:11.660 --> 00:10:13.683 I'm going to be talking about recent

NOTE Confidence: 0.907708724

00:10:13.683 --> 00:10:15.877 trends in the national suicide attempt

NOTE Confidence: 0.907708724

00:10:15.877 --> 00:10:17.977 rate and specifically looking at.

NOTE Confidence: 0.907708724

00:10:17.980 --> 00:10:19.924 The mental health utilization

NOTE Confidence: 0.907708724

00:10:19.924 --> 00:10:21.868 of individuals who attempted

NOTE Confidence: 0.907708724

00:10:21.868 --> 00:10:24.919 suicide from 2008 to 2019.

NOTE Confidence: 0.907708724

00:10:24.919 --> 00:10:27.913 Suicide prevention has been an interest

NOTE Confidence: 0.907708724

00:10:27.913 --> 00:10:31.280 of mine since since medical school,

NOTE Confidence: 0.907708724

00:10:31.280 --> 00:10:33.570 and I think it's one of not only the greatest

NOTE Confidence: 0.907708724

00:10:33.622 --> 00:10:35.758 challenges facing the field of psychiatry,

NOTE Confidence: 0.907708724

00:10:35.760 --> 00:10:37.182 but also one of our greatest

NOTE Confidence: 0.907708724

00:10:37.182 --> 00:10:38.130 current public health challenges.

NOTE Confidence: 0.907708724

00:10:38.130 --> 00:10:40.186 And so I think it's a really important

NOTE Confidence: 0.907708724

00:10:40.186 --> 00:10:42.022 topic that we need to continue to

NOTE Confidence: 0.907708724

00:10:42.022 --> 00:10:46.570 invest research in next slide, please.  
NOTE Confidence: 0.907708724

00:10:46.570 --> 00:10:48.210 And the reason that it's such a challenge  
NOTE Confidence: 0.907708724

00:10:48.210 --> 00:10:50.249 for us currently is over the last two years,  
NOTE Confidence: 0.907708724

00:10:50.250 --> 00:10:52.494 we've seen a pretty precipitous rise  
NOTE Confidence: 0.907708724

00:10:52.494 --> 00:10:55.048 in deaths by suicide in our country.  
NOTE Confidence: 0.907708724

00:10:55.050 --> 00:10:56.290 Our national suicide attempt,  
NOTE Confidence: 0.907708724

00:10:56.290 --> 00:10:58.150 our national suicide rate over the  
NOTE Confidence: 0.907708724

00:10:58.205 --> 00:11:00.950 last two decades, has risen by 35%,  
NOTE Confidence: 0.907708724

00:11:00.950 --> 00:11:04.196 and that's in the context of declines  
NOTE Confidence: 0.907708724

00:11:04.196 --> 00:11:07.452 that we saw in the 1980s and the 1990s.  
NOTE Confidence: 0.907708724

00:11:07.452 --> 00:11:09.062 It's also very concerning because  
NOTE Confidence: 0.907708724

00:11:09.062 --> 00:11:10.850 over the last two decades,  
NOTE Confidence: 0.907708724

00:11:10.850 --> 00:11:12.578 other developed countries across the world,  
NOTE Confidence: 0.907708724

00:11:12.580 --> 00:11:14.040 especially countries in Europe,  
NOTE Confidence: 0.907708724

00:11:14.040 --> 00:11:15.865 have actually seen a decline  
NOTE Confidence: 0.907708724

00:11:15.865 --> 00:11:17.390 in their suicide rate.

NOTE Confidence: 0.907708724  
00:11:17.390 --> 00:11:19.245 While we've continued to see  
NOTE Confidence: 0.907708724  
00:11:19.245 --> 00:11:22.250 a pretty steady increase.  
NOTE Confidence: 0.907708724  
00:11:22.250 --> 00:11:23.942 Next slide,  
NOTE Confidence: 0.907708724  
00:11:23.942 --> 00:11:24.788 please.  
NOTE Confidence: 0.907708724  
00:11:24.790 --> 00:11:26.030 And when we're thinking about  
NOTE Confidence: 0.907708724  
00:11:26.030 --> 00:11:26.526 suicide prevention,  
NOTE Confidence: 0.907708724  
00:11:26.530 --> 00:11:28.470 it's not only important to  
NOTE Confidence: 0.907708724  
00:11:28.470 --> 00:11:30.450 look at deaths by suicide,  
NOTE Confidence: 0.907708724  
00:11:30.450 --> 00:11:32.473 but it's also important to look at  
NOTE Confidence: 0.907708724  
00:11:32.473 --> 00:11:34.675 trends in all types of suicidal  
NOTE Confidence: 0.907708724  
00:11:34.675 --> 00:11:36.785 behavior across the suicide continuum.  
NOTE Confidence: 0.907708724  
00:11:36.790 --> 00:11:38.652 So this was data that was just  
NOTE Confidence: 0.907708724  
00:11:38.652 --> 00:11:40.289 released by Samsa for last year.  
NOTE Confidence: 0.907708724  
00:11:40.290 --> 00:11:41.232 For year 2021.  
NOTE Confidence: 0.907708724  
00:11:41.232 --> 00:11:44.195 You can see at the bottom of the pyramid  
NOTE Confidence: 0.907708724

00:11:44.195 --> 00:11:46.865 here at 12.2 million adults are reported

NOTE Confidence: 0.907708724

00:11:46.865 --> 00:11:49.210 serious thoughts of suicide last year,

NOTE Confidence: 0.907708724

00:11:49.210 --> 00:11:51.465 and that corresponds to almost

NOTE Confidence: 0.907708724

00:11:51.465 --> 00:11:53.810 5% of the total US population,

NOTE Confidence: 0.907708724

00:11:53.810 --> 00:11:55.781 one in 20.

NOTE Confidence: 0.907708724

00:11:55.781 --> 00:11:59.060 Individuals 1.2% of the total US

NOTE Confidence: 0.907708724

00:11:59.060 --> 00:12:01.156 population reported making suicide

NOTE Confidence: 0.907708724

00:12:01.156 --> 00:12:04.313 plans in the last year .5% about 1.2

NOTE Confidence: 0.907708724

00:12:04.313 --> 00:12:05.877 million reported suicide attempts

NOTE Confidence: 0.907708724

00:12:05.877 --> 00:12:09.118 and a much smaller fraction of those

NOTE Confidence: 0.907708724

00:12:09.118 --> 00:12:11.424 individuals died by suicide, about

NOTE Confidence: 0.907708724

00:12:11.424 --> 00:12:15.278 46,000 so still way too high of a number.

NOTE Confidence: 0.907708724

00:12:15.280 --> 00:12:16.060 Next slide, please.

NOTE Confidence: 0.904560355882353

00:12:18.840 --> 00:12:20.868 And so while the majority of

NOTE Confidence: 0.904560355882353

00:12:20.868 --> 00:12:22.220 individuals who attempt suicide

NOTE Confidence: 0.904560355882353

00:12:22.285 --> 00:12:23.979 don't go on to die by suicide,

NOTE Confidence: 0.904560355882353  
00:12:23.980 --> 00:12:25.775 we know that suicide attempt  
NOTE Confidence: 0.904560355882353  
00:12:25.775 --> 00:12:27.570 continues to remain the strongest  
NOTE Confidence: 0.904560355882353  
00:12:27.637 --> 00:12:29.617 predictor of future suicide and is  
NOTE Confidence: 0.904560355882353  
00:12:29.617 --> 00:12:31.699 an important group for us to study.  
NOTE Confidence: 0.904560355882353  
00:12:31.700 --> 00:12:33.480 Longitudinal studies indicate that  
NOTE Confidence: 0.904560355882353  
00:12:33.480 --> 00:12:36.328 anywhere from 7 to 13% of individuals  
NOTE Confidence: 0.904560355882353  
00:12:36.328 --> 00:12:38.820 who attempt suicide will go on to  
NOTE Confidence: 0.904560355882353  
00:12:38.896 --> 00:12:41.158 die by suicide in their lifetime,  
NOTE Confidence: 0.904560355882353  
00:12:41.160 --> 00:12:43.350 and the majority of these deaths  
NOTE Confidence: 0.904560355882353  
00:12:43.350 --> 00:12:44.810 estimated anywhere between 70  
NOTE Confidence: 0.904560355882353  
00:12:44.876 --> 00:12:46.856 to 80% tend to occur in the 12  
NOTE Confidence: 0.904560355882353  
00:12:46.856 --> 00:12:48.470 months after a suicide attempt.  
NOTE Confidence: 0.904560355882353  
00:12:48.470 --> 00:12:50.806 And so we know this year after a  
NOTE Confidence: 0.904560355882353  
00:12:50.806 --> 00:12:52.552 suicide attempt is a really critical  
NOTE Confidence: 0.904560355882353  
00:12:52.552 --> 00:12:54.727 period of time for us to intervene  
NOTE Confidence: 0.904560355882353

00:12:54.727 --> 00:12:56.603 and prevention strategies really  
NOTE Confidence: 0.904560355882353

00:12:56.603 --> 00:12:58.948 rely on individuals receiving some  
NOTE Confidence: 0.904560355882353

00:12:58.950 --> 00:13:01.105 sort of mental health intervention  
NOTE Confidence: 0.904560355882353

00:13:01.105 --> 00:13:02.829 after a suicide attempt.  
NOTE Confidence: 0.904560355882353

00:13:02.830 --> 00:13:05.588 Yet we know that a fairly large  
NOTE Confidence: 0.904560355882353

00:13:05.588 --> 00:13:07.997 amount of individuals don't actually  
NOTE Confidence: 0.904560355882353

00:13:07.997 --> 00:13:10.614 receive services in the year after  
NOTE Confidence: 0.904560355882353

00:13:10.614 --> 00:13:12.810 a suicide as a suicide attempt,  
NOTE Confidence: 0.904560355882353

00:13:12.810 --> 00:13:16.026 and we don't know this percentage very well.  
NOTE Confidence: 0.904560355882353

00:13:16.030 --> 00:13:17.450 We don't actually have a  
NOTE Confidence: 0.904560355882353

00:13:17.450 --> 00:13:18.586 great understanding of what.  
NOTE Confidence: 0.904560355882353

00:13:18.590 --> 00:13:20.954 Percent of individuals actually  
NOTE Confidence: 0.904560355882353

00:13:20.954 --> 00:13:24.500 receive services in proximity to their  
NOTE Confidence: 0.904560355882353

00:13:24.592 --> 00:13:26.860 suicide attempt because most of the  
NOTE Confidence: 0.904560355882353

00:13:26.860 --> 00:13:28.705 studies that have been done on this  
NOTE Confidence: 0.904560355882353

00:13:28.705 --> 00:13:30.707 topic have been done either in fully

NOTE Confidence: 0.904560355882353

00:13:30.707 --> 00:13:32.454 insured samples or in individuals who

NOTE Confidence: 0.904560355882353

00:13:32.454 --> 00:13:34.512 receive care after a suicide after a

NOTE Confidence: 0.904560355882353

00:13:34.512 --> 00:13:36.372 suicide attempt because they present

NOTE Confidence: 0.904560355882353

00:13:36.372 --> 00:13:38.234 to emergency departments or they

NOTE Confidence: 0.904560355882353

00:13:38.234 --> 00:13:40.118 get admitted to an inpatient unit.

NOTE Confidence: 0.904560355882353

00:13:40.120 --> 00:13:41.944 Several studies that have been done

NOTE Confidence: 0.904560355882353

00:13:41.944 --> 00:13:45.440 in a large HMO population of a fully

NOTE Confidence: 0.904560355882353

00:13:45.440 --> 00:13:48.630 insured sample show that about 40%.

NOTE Confidence: 0.904560355882353

00:13:48.630 --> 00:13:50.555 Suicide Attempters had a healthcare

NOTE Confidence: 0.904560355882353

00:13:50.555 --> 00:13:52.480 visit within the week before

NOTE Confidence: 0.904560355882353

00:13:52.546 --> 00:13:54.978 their attempt and 95% had a visit

NOTE Confidence: 0.904560355882353

00:13:54.978 --> 00:13:56.386 within the preceding year.

NOTE Confidence: 0.904560355882353

00:13:56.390 --> 00:13:56.658 Yeah,

NOTE Confidence: 0.904560355882353

00:13:56.658 --> 00:13:57.462 like I said,

NOTE Confidence: 0.904560355882353

00:13:57.462 --> 00:13:59.476 we know that a large percentage of

NOTE Confidence: 0.904560355882353

00:13:59.476 --> 00:14:00.852 individuals actually don't receive  
NOTE Confidence: 0.904560355882353

00:14:00.852 --> 00:14:02.944 care in proximity to their attempt  
NOTE Confidence: 0.904560355882353

00:14:02.944 --> 00:14:04.846 and and looking at veterans and  
NOTE Confidence: 0.904560355882353

00:14:04.846 --> 00:14:06.104 the Veterans Health Administration  
NOTE Confidence: 0.904560355882353

00:14:06.104 --> 00:14:07.928 is a good example of this.  
NOTE Confidence: 0.904560355882353

00:14:07.930 --> 00:14:11.461 So in 2018 it was estimated that 63%  
NOTE Confidence: 0.904560355882353

00:14:11.461 --> 00:14:13.778 of veterans who died by suicide didn't  
NOTE Confidence: 0.904560355882353

00:14:13.778 --> 00:14:16.130 have an encounter within the VA in  
NOTE Confidence: 0.904560355882353

00:14:16.130 --> 00:14:18.619 the 12 months prior to their death.  
NOTE Confidence: 0.904560355882353

00:14:18.620 --> 00:14:19.640 And so.  
NOTE Confidence: 0.904560355882353

00:14:19.640 --> 00:14:21.170 An alternative way,  
NOTE Confidence: 0.904560355882353

00:14:21.170 --> 00:14:23.025 and perhaps a more accurate  
NOTE Confidence: 0.904560355882353

00:14:23.025 --> 00:14:24.509 approach to really understanding  
NOTE Confidence: 0.904560355882353

00:14:24.509 --> 00:14:26.635 how often individuals who attempt  
NOTE Confidence: 0.904560355882353

00:14:26.635 --> 00:14:28.327 suicide are receiving services  
NOTE Confidence: 0.904560355882353

00:14:28.327 --> 00:14:30.109 in proximity to their death,



NOTE Confidence: 0.904560355882353

00:14:30.110 --> 00:14:32.102 maybe to use population based survey

NOTE Confidence: 0.904560355882353

00:14:32.102 --> 00:14:34.538 data of individuals who are insured and

NOTE Confidence: 0.904560355882353

00:14:34.538 --> 00:14:36.283 individuals who aren't individuals who

NOTE Confidence: 0.904560355882353

00:14:36.283 --> 00:14:38.590 got care after their suicide attempt,

NOTE Confidence: 0.904560355882353

00:14:38.590 --> 00:14:40.844 and individuals who have gotten no care,

NOTE Confidence: 0.904560355882353

00:14:40.850 --> 00:14:43.069 and so that was the approach that

NOTE Confidence: 0.904560355882353

00:14:43.069 --> 00:14:45.337 we wanted to take in our study.

NOTE Confidence: 0.904560355882353

00:14:45.340 --> 00:14:46.460 So, next slide, please.

NOTE Confidence: 0.867036149565217

00:14:48.700 --> 00:14:50.968 So this was the title of our paper that

NOTE Confidence: 0.867036149565217

00:14:50.968 --> 00:14:53.333 was published this spring and we were

NOTE Confidence: 0.867036149565217

00:14:53.333 --> 00:14:55.579 interested in looking at 4 main issues.

NOTE Confidence: 0.867036149565217

00:14:55.580 --> 00:14:57.884 The first is what are recent trends in

NOTE Confidence: 0.867036149565217

00:14:57.884 --> 00:15:00.140 past year suicide attempts from years

NOTE Confidence: 0.867036149565217

00:15:00.140 --> 00:15:03.756 2008 to 2019 among adults in the US.

NOTE Confidence: 0.867036149565217

00:15:03.760 --> 00:15:06.189 We also wanted to know what risk

NOTE Confidence: 0.867036149565217

00:15:06.189 --> 00:15:08.129 factors were associated with increased  
NOTE Confidence: 0.867036149565217

00:15:08.129 --> 00:15:10.637 suicide attempts over this time period.  
NOTE Confidence: 0.867036149565217

00:15:10.640 --> 00:15:13.124 Third, we wanted to understand that  
NOTE Confidence: 0.867036149565217

00:15:13.124 --> 00:15:15.320 amongst individuals who attempted suicide,  
NOTE Confidence: 0.867036149565217

00:15:15.320 --> 00:15:16.830 what were their self reported  
NOTE Confidence: 0.867036149565217

00:15:16.830 --> 00:15:18.340 trends in using mental health?  
NOTE Confidence: 0.867036149565217

00:15:18.340 --> 00:15:20.482 Services during the year of their  
NOTE Confidence: 0.867036149565217

00:15:20.482 --> 00:15:22.487 attempt and finally of individuals  
NOTE Confidence: 0.867036149565217

00:15:22.487 --> 00:15:24.527 who didn't receive services.  
NOTE Confidence: 0.867036149565217

00:15:24.530 --> 00:15:27.802 We wanted to know what were their self  
NOTE Confidence: 0.867036149565217

00:15:27.802 --> 00:15:30.378 reported barriers to receiving that care.  
NOTE Confidence: 0.867036149565217

00:15:30.380 --> 00:15:32.260 Next please.  
NOTE Confidence: 0.867036149565217

00:15:32.260 --> 00:15:33.956 So just a quick note on our method.  
NOTE Confidence: 0.867036149565217

00:15:33.960 --> 00:15:36.466 So we used a population based nationally  
NOTE Confidence: 0.867036149565217

00:15:36.466 --> 00:15:38.164 representative survey data from the  
NOTE Confidence: 0.867036149565217

00:15:38.164 --> 00:15:40.159 National Survey on Drug Use and Health,

NOTE Confidence: 0.867036149565217

00:15:40.160 --> 00:15:43.240 which is a population based survey that's

NOTE Confidence: 0.867036149565217

00:15:43.240 --> 00:15:46.068 administered annually by Samsa and it

NOTE Confidence: 0.867036149565217

00:15:46.068 --> 00:15:47.988 administers computer questionnaires to

NOTE Confidence: 0.867036149565217

00:15:47.988 --> 00:15:50.830 individuals at their household addresses,

NOTE Confidence: 0.867036149565217

00:15:50.830 --> 00:15:53.610 or delivers in person questionnaires

NOTE Confidence: 0.867036149565217

00:15:53.610 --> 00:15:55.834 by a trained interviewer,

NOTE Confidence: 0.867036149565217

00:15:55.840 --> 00:15:58.006 and so our sample included adults

NOTE Confidence: 0.867036149565217

00:15:58.006 --> 00:16:01.372 over the age of 18 from 2008 to 2019.

NOTE Confidence: 0.867036149565217

00:16:01.372 --> 00:16:04.036 And the Nysda assesses suicide attempts

NOTE Confidence: 0.867036149565217

00:16:04.036 --> 00:16:06.790 with a relatively simple question.

NOTE Confidence: 0.867036149565217

00:16:06.790 --> 00:16:08.505 It asks in the last 12 months,

NOTE Confidence: 0.867036149565217

00:16:08.510 --> 00:16:10.406 did you try to kill yourself?

NOTE Confidence: 0.867036149565217

00:16:10.410 --> 00:16:12.300 So in this way it really tries to get

NOTE Confidence: 0.867036149565217

00:16:12.300 --> 00:16:14.070 at suicide attempts with fatal intent

NOTE Confidence: 0.867036149565217

00:16:14.070 --> 00:16:16.527 and it tries to screen out other types

NOTE Confidence: 0.867036149565217

00:16:16.527 --> 00:16:18.327 of suicidal behavior such as non  
NOTE Confidence: 0.867036149565217

00:16:18.327 --> 00:16:20.475 suicidal self injury and this resulted  
NOTE Confidence: 0.867036149565217

00:16:20.475 --> 00:16:23.157 in us having a pretty large sample  
NOTE Confidence: 0.867036149565217

00:16:23.157 --> 00:16:25.803 of close to half a million adults.  
NOTE Confidence: 0.867036149565217

00:16:25.810 --> 00:16:28.129 Next slide please.  
NOTE Confidence: 0.867036149565217

00:16:28.130 --> 00:16:30.286 And so for our first question are  
NOTE Confidence: 0.867036149565217

00:16:30.286 --> 00:16:32.750 what are recent trends in past year  
NOTE Confidence: 0.867036149565217

00:16:32.750 --> 00:16:34.793 suicide attempts from 2008 to 2019?  
NOTE Confidence: 0.867036149565217

00:16:34.793 --> 00:16:37.473 The bottom line here is we found that  
NOTE Confidence: 0.867036149565217

00:16:37.473 --> 00:16:39.603 the suicide attempt rate increased  
NOTE Confidence: 0.867036149565217

00:16:39.603 --> 00:16:42.970 from 481 per 100,000 individuals to  
NOTE Confidence: 0.867036149565217

00:16:42.970 --> 00:16:45.255 564 per 100,000 individuals which  
NOTE Confidence: 0.867036149565217

00:16:45.255 --> 00:16:47.772 corresponded to about a 23% increase  
NOTE Confidence: 0.867036149565217

00:16:47.772 --> 00:16:50.159 when we adjusted for other changes in  
NOTE Confidence: 0.867036149565217

00:16:50.159 --> 00:16:52.650 the population over this time period.  
NOTE Confidence: 0.867036149565217

00:16:52.650 --> 00:16:54.974 And you can see the pretty precipitous

NOTE Confidence: 0.867036149565217  
00:16:54.974 --> 00:16:57.970 rise in the graph here from 2008 2009.  
NOTE Confidence: 0.867036149565217  
00:16:57.970 --> 00:17:01.560 All the way to 2018-2019.  
NOTE Confidence: 0.867036149565217  
00:17:01.560 --> 00:17:03.879 Next slide, please.  
NOTE Confidence: 0.867036149565217  
00:17:03.880 --> 00:17:04.166 Secondly,  
NOTE Confidence: 0.867036149565217  
00:17:04.166 --> 00:17:05.024 as I said,  
NOTE Confidence: 0.867036149565217  
00:17:05.024 --> 00:17:06.740 we were interested in what risk  
NOTE Confidence: 0.867036149565217  
00:17:06.801 --> 00:17:08.616 factors were associated with this  
NOTE Confidence: 0.867036149565217  
00:17:08.616 --> 00:17:10.431 increase in suicide attempts and  
NOTE Confidence: 0.867036149565217  
00:17:10.493 --> 00:17:12.448 we found a significant increases  
NOTE Confidence: 0.867036149565217  
00:17:12.448 --> 00:17:14.012 in several different subgroups,  
NOTE Confidence: 0.867036149565217  
00:17:14.020 --> 00:17:16.100 but especially among the unemployed,  
NOTE Confidence: 0.867036149565217  
00:17:16.100 --> 00:17:16.776 the unemployed,  
NOTE Confidence: 0.867036149565217  
00:17:16.776 --> 00:17:18.804 their suicide attempt rate more than  
NOTE Confidence: 0.867036149565217  
00:17:18.804 --> 00:17:20.777 doubled over the course of the study.  
NOTE Confidence: 0.867036149565217  
00:17:20.780 --> 00:17:23.475 We also saw a pretty large increases  
NOTE Confidence: 0.867036149565217

00:17:23.475 --> 00:17:26.331 among young adults aged 18 to 25  
NOTE Confidence: 0.867036149565217

00:17:26.331 --> 00:17:27.955 individuals with substance use  
NOTE Confidence: 0.867036149565217

00:17:27.955 --> 00:17:29.849 disorders and individuals who  
NOTE Confidence: 0.867036149565217

00:17:29.849 --> 00:17:31.857 were not currently married,  
NOTE Confidence: 0.867036149565217

00:17:31.860 --> 00:17:33.849 and after we tried to control for all these.  
NOTE Confidence: 0.867036149565217

00:17:33.850 --> 00:17:35.485 Factors and put them all  
NOTE Confidence: 0.867036149565217

00:17:35.485 --> 00:17:36.793 into a multivariate model.  
NOTE Confidence: 0.867036149565217

00:17:36.800 --> 00:17:39.400 We found that the time trend of increasing  
NOTE Confidence: 0.867036149565217

00:17:39.400 --> 00:17:41.142 suicide attempts over the course of  
NOTE Confidence: 0.867036149565217

00:17:41.142 --> 00:17:42.839 our study still remains significant,  
NOTE Confidence: 0.867036149565217

00:17:42.839 --> 00:17:45.197 which means that we weren't able  
NOTE Confidence: 0.867036149565217

00:17:45.197 --> 00:17:47.594 to identify all of the factors  
NOTE Confidence: 0.867036149565217

00:17:47.594 --> 00:17:49.340 that were responsible for this  
NOTE Confidence: 0.867036149565217

00:17:49.340 --> 00:17:50.500 rise in suicide attempt,  
NOTE Confidence: 0.867036149565217

00:17:50.500 --> 00:17:52.375 and there's likely other factors  
NOTE Confidence: 0.867036149565217

00:17:52.375 --> 00:17:54.704 that we didn't have access to

NOTE Confidence: 0.867036149565217  
00:17:54.704 --> 00:17:56.232 that were likely contributing  
NOTE Confidence: 0.867036149565217  
00:17:56.232 --> 00:17:58.142 to this increase in suicide  
NOTE Confidence: 0.902304600952381  
00:17:58.207 --> 00:18:01.039 attempts. Next slide, please.  
NOTE Confidence: 0.902304600952381  
00:18:01.040 --> 00:18:02.410 Now, turning to mental health  
NOTE Confidence: 0.902304600952381  
00:18:02.410 --> 00:18:04.100 service use in the last year.  
NOTE Confidence: 0.902304600952381  
00:18:04.100 --> 00:18:06.347 We wanted to know what were the  
NOTE Confidence: 0.902304600952381  
00:18:06.347 --> 00:18:07.978 trends among individuals who attempted  
NOTE Confidence: 0.902304600952381  
00:18:07.978 --> 00:18:10.113 suicide in their use of past year,  
NOTE Confidence: 0.902304600952381  
00:18:10.120 --> 00:18:11.884 mental health services and what we found  
NOTE Confidence: 0.902304600952381  
00:18:11.884 --> 00:18:13.619 was that there was no significant change  
NOTE Confidence: 0.902304600952381  
00:18:13.619 --> 00:18:15.530 in any of the services we looked at.  
NOTE Confidence: 0.902304600952381  
00:18:15.530 --> 00:18:17.785 We looked at outpatient inpatient  
NOTE Confidence: 0.902304600952381  
00:18:17.785 --> 00:18:19.589 and psychotropic medication use  
NOTE Confidence: 0.902304600952381  
00:18:19.589 --> 00:18:22.133 from 2008 to 2019 and if you can  
NOTE Confidence: 0.902304600952381  
00:18:22.133 --> 00:18:24.639 see the the dark blue line here,  
NOTE Confidence: 0.902304600952381

00:18:24.640 --> 00:18:26.160 this was prescription medication use.  
NOTE Confidence: 0.902304600952381

00:18:26.160 --> 00:18:28.136 So this was the most common type of  
NOTE Confidence: 0.902304600952381

00:18:28.136 --> 00:18:29.851 mental health service received by  
NOTE Confidence: 0.902304600952381

00:18:29.851 --> 00:18:31.407 individuals who attempted suicide.  
NOTE Confidence: 0.902304600952381

00:18:31.410 --> 00:18:34.138 Anywhere from 40 to 50% of individuals  
NOTE Confidence: 0.902304600952381

00:18:34.138 --> 00:18:36.292 who attempted suicide in our study  
NOTE Confidence: 0.902304600952381

00:18:36.292 --> 00:18:38.023 reported receiving some sort of  
NOTE Confidence: 0.902304600952381

00:18:38.023 --> 00:18:39.925 psychotropic medication in the last year.  
NOTE Confidence: 0.902304600952381

00:18:39.930 --> 00:18:41.870 Outpatient services were then the  
NOTE Confidence: 0.902304600952381

00:18:41.870 --> 00:18:44.206 next most common and right around  
NOTE Confidence: 0.902304600952381

00:18:44.206 --> 00:18:46.159 40% of individuals reported  
NOTE Confidence: 0.902304600952381

00:18:46.159 --> 00:18:47.788 receiving outpatient services.  
NOTE Confidence: 0.902304600952381

00:18:47.790 --> 00:18:49.515 A smaller amount received inpatient  
NOTE Confidence: 0.902304600952381

00:18:49.515 --> 00:18:51.680 services and a much smaller amount.  
NOTE Confidence: 0.902304600952381

00:18:51.680 --> 00:18:54.084 Received substance use services.  
NOTE Confidence: 0.902304600952381

00:18:54.084 --> 00:18:57.190 Next slide, please.



NOTE Confidence: 0.902304600952381  
00:18:57.190 --> 00:18:59.215 And so finally we wanted to know what were  
NOTE Confidence: 0.902304600952381  
00:18:59.215 --> 00:19:01.056 the percent of individuals who reported  
NOTE Confidence: 0.902304600952381  
00:19:01.056 --> 00:19:03.310 needing services but did not get services.  
NOTE Confidence: 0.902304600952381  
00:19:03.310 --> 00:19:05.983 And so in this most recent year in 2019,  
NOTE Confidence: 0.902304600952381  
00:19:05.990 --> 00:19:08.825 we found that 45% almost half of  
NOTE Confidence: 0.902304600952381  
00:19:08.825 --> 00:19:11.104 individuals who attempted suicide reported  
NOTE Confidence: 0.902304600952381  
00:19:11.104 --> 00:19:14.086 needing services but not receiving them.  
NOTE Confidence: 0.902304600952381  
00:19:14.090 --> 00:19:15.650 And when we looked at the  
NOTE Confidence: 0.902304600952381  
00:19:15.650 --> 00:19:16.690 most common reported reasons  
NOTE Confidence: 0.902304600952381  
00:19:16.743 --> 00:19:18.188 that they didn't receive care,  
NOTE Confidence: 0.902304600952381  
00:19:18.190 --> 00:19:19.675 about half of individuals said  
NOTE Confidence: 0.902304600952381  
00:19:19.675 --> 00:19:21.160 they didn't receive care because  
NOTE Confidence: 0.902304600952381  
00:19:21.213 --> 00:19:22.628 they couldn't afford the cost,  
NOTE Confidence: 0.902304600952381  
00:19:22.630 --> 00:19:24.688 about 1/4 of individuals said they simply  
NOTE Confidence: 0.902304600952381  
00:19:24.688 --> 00:19:26.967 didn't know where to go for treatment and 16.  
NOTE Confidence: 0.902304600952381

00:19:26.970 --> 00:19:28.325 Percent were either concerned about  
NOTE Confidence: 0.902304600952381

00:19:28.325 --> 00:19:30.144 the opinions of others or were  
NOTE Confidence: 0.902304600952381

00:19:30.144 --> 00:19:31.380 concerned about confidentiality,  
NOTE Confidence: 0.902304600952381

00:19:31.380 --> 00:19:33.966 which both are related to mental  
NOTE Confidence: 0.902304600952381

00:19:33.966 --> 00:19:35.690 health stigma related concerns  
NOTE Confidence: 0.902304600952381

00:19:35.766 --> 00:19:37.920 about seeking care for.  
NOTE Confidence: 0.902304600952381

00:19:37.920 --> 00:19:39.760 For suicidality.  
NOTE Confidence: 0.902304600952381

00:19:39.760 --> 00:19:40.486 Next slide.  
NOTE Confidence: 0.902304600952381

00:19:40.486 --> 00:19:44.579 So when we look at a summary of our findings,  
NOTE Confidence: 0.902304600952381

00:19:44.580 --> 00:19:46.176 the first point is there's been a  
NOTE Confidence: 0.902304600952381

00:19:46.176 --> 00:19:47.580 substantial increase in suicide attempts,  
NOTE Confidence: 0.902304600952381

00:19:47.580 --> 00:19:49.602 about a 23% rise in suicide  
NOTE Confidence: 0.902304600952381

00:19:49.602 --> 00:19:52.508 attempts from 08 to 2019 without any  
NOTE Confidence: 0.902304600952381

00:19:52.508 --> 00:19:54.973 corresponding increase in service use.  
NOTE Confidence: 0.902304600952381

00:19:54.980 --> 00:19:57.017 We found that while mental illness was  
NOTE Confidence: 0.902304600952381

00:19:57.017 --> 00:19:58.759 highly associated with suicide attempts,

NOTE Confidence: 0.902304600952381  
00:19:58.760 --> 00:20:00.464 the greatest increase has actually occurred  
NOTE Confidence: 0.902304600952381  
00:20:00.464 --> 00:20:01.940 among individuals without mental illness.  
NOTE Confidence: 0.902304600952381  
00:20:01.940 --> 00:20:03.770 It's occurred among individuals who  
NOTE Confidence: 0.902304600952381  
00:20:03.770 --> 00:20:05.600 are unemployed and young adults.  
NOTE Confidence: 0.902304600952381  
00:20:05.600 --> 00:20:07.600 Individuals with substance use disorders,  
NOTE Confidence: 0.902304600952381  
00:20:07.600 --> 00:20:10.636 or individuals who are never married.  
NOTE Confidence: 0.902304600952381  
00:20:10.640 --> 00:20:12.910 We also found that only 40% of  
NOTE Confidence: 0.902304600952381  
00:20:12.910 --> 00:20:14.310 individuals who attempted suicide.  
NOTE Confidence: 0.902304600952381  
00:20:14.310 --> 00:20:16.044 At any sort of outpatient mental  
NOTE Confidence: 0.902304600952381  
00:20:16.044 --> 00:20:18.232 health visit in the past year and  
NOTE Confidence: 0.902304600952381  
00:20:18.232 --> 00:20:19.847 nearly half of individuals reported  
NOTE Confidence: 0.902304600952381  
00:20:19.847 --> 00:20:21.610 an unmet need for treatment,  
NOTE Confidence: 0.902304600952381  
00:20:21.610 --> 00:20:24.938 which was largely due to cost barriers or  
NOTE Confidence: 0.902304600952381  
00:20:24.938 --> 00:20:27.968 not knowing where to go to obtain care.  
NOTE Confidence: 0.902304600952381  
00:20:27.970 --> 00:20:30.286 So turning now to the implications,  
NOTE Confidence: 0.902304600952381

00:20:30.290 --> 00:20:33.710 the first implication of our study  
NOTE Confidence: 0.902304600952381

00:20:33.710 --> 00:20:34.350 next bullet.  
NOTE Confidence: 0.874666677619048

00:20:36.660 --> 00:20:39.284 Was that service use in our study was  
NOTE Confidence: 0.874666677619048

00:20:39.284 --> 00:20:41.293 significantly less than in other studies  
NOTE Confidence: 0.874666677619048

00:20:41.293 --> 00:20:43.760 that have looked at fully insured samples.  
NOTE Confidence: 0.874666677619048

00:20:43.760 --> 00:20:45.454 So like I said in our study,  
NOTE Confidence: 0.874666677619048

00:20:45.460 --> 00:20:48.876 only about 40% reported an outpatient visit,  
NOTE Confidence: 0.874666677619048

00:20:48.880 --> 00:20:51.982 where in the previously studied insured  
NOTE Confidence: 0.874666677619048

00:20:51.982 --> 00:20:54.602 samples upwards of 95% reported an  
NOTE Confidence: 0.874666677619048

00:20:54.602 --> 00:20:56.018 outpatient mental health visit,  
NOTE Confidence: 0.874666677619048

00:20:56.020 --> 00:20:58.547 and so when we're thinking about research,  
NOTE Confidence: 0.874666677619048

00:20:58.550 --> 00:21:01.245 it's important to to think and to  
NOTE Confidence: 0.874666677619048

00:21:01.245 --> 00:21:03.142 remember that that these insured  
NOTE Confidence: 0.874666677619048

00:21:03.142 --> 00:21:04.638 samples are fully treatment,  
NOTE Confidence: 0.874666677619048

00:21:04.640 --> 00:21:06.716 seeking samples of individuals who receive.  
NOTE Confidence: 0.874666677619048

00:21:06.720 --> 00:21:08.835 Care and emergency departments after

NOTE Confidence: 0.874666677619048  
00:21:08.835 --> 00:21:10.950 their attempt may actually overestimate  
NOTE Confidence: 0.874666677619048  
00:21:11.009 --> 00:21:12.911 the percent of individuals who are  
NOTE Confidence: 0.874666677619048  
00:21:12.911 --> 00:21:15.129 receiving care after a suicide attempt.  
NOTE Confidence: 0.874666677619048  
00:21:15.130 --> 00:21:16.202 But perhaps more importantly,  
NOTE Confidence: 0.874666677619048  
00:21:16.202 --> 00:21:17.274 I think it's concerning.  
NOTE Confidence: 0.874666677619048  
00:21:17.280 --> 00:21:19.560 Given that most of our current  
NOTE Confidence: 0.874666677619048  
00:21:19.560 --> 00:21:20.700 suicide prevention strategies  
NOTE Confidence: 0.874666677619048  
00:21:20.700 --> 00:21:22.218 really rely on healthcare,  
NOTE Confidence: 0.874666677619048  
00:21:22.220 --> 00:21:24.355 contact, our most common prevention  
NOTE Confidence: 0.874666677619048  
00:21:24.355 --> 00:21:25.636 strategies right now.  
NOTE Confidence: 0.874666677619048  
00:21:25.640 --> 00:21:27.844 Include things like a  
NOTE Confidence: 0.874666677619048  
00:21:27.844 --> 00:21:29.497 routine suicide screening,  
NOTE Confidence: 0.874666677619048  
00:21:29.500 --> 00:21:31.672 making sure individuals experiencing  
NOTE Confidence: 0.874666677619048  
00:21:31.672 --> 00:21:34.387 suicidality receive evidence based treatment,  
NOTE Confidence: 0.874666677619048  
00:21:34.390 --> 00:21:35.845 and making sure individuals receive  
NOTE Confidence: 0.874666677619048

00:21:35.845 --> 00:21:37.300 safety planning before they leave.  
NOTE Confidence: 0.874666677619048

00:21:37.300 --> 00:21:39.385 Training patient units or our  
NOTE Confidence: 0.874666677619048

00:21:39.385 --> 00:21:40.219 emergency departments,  
NOTE Confidence: 0.874666677619048

00:21:40.220 --> 00:21:42.540 but it's impossible to really do any of  
NOTE Confidence: 0.874666677619048

00:21:42.540 --> 00:21:44.324 these evidence based interventions unless  
NOTE Confidence: 0.874666677619048

00:21:44.324 --> 00:21:46.616 people are walking through the doors,  
NOTE Confidence: 0.874666677619048

00:21:46.620 --> 00:21:48.085 and unless we're seeing them  
NOTE Confidence: 0.874666677619048

00:21:48.085 --> 00:21:49.257 in our healthcare settings.  
NOTE Confidence: 0.874666677619048

00:21:49.260 --> 00:21:51.150 And So what I'd like to talk  
NOTE Confidence: 0.874666677619048

00:21:51.150 --> 00:21:52.480 about next is really,  
NOTE Confidence: 0.874666677619048

00:21:52.480 --> 00:21:53.182 I think,  
NOTE Confidence: 0.874666677619048

00:21:53.182 --> 00:21:55.288 a potential need to diversify our  
NOTE Confidence: 0.874666677619048

00:21:55.288 --> 00:21:56.397 suicide prevention interventions  
NOTE Confidence: 0.874666677619048

00:21:56.397 --> 00:21:58.812 to not only focus on high risk  
NOTE Confidence: 0.874666677619048

00:21:58.812 --> 00:22:00.658 individuals who frequently have contact  
NOTE Confidence: 0.874666677619048

00:22:00.658 --> 00:22:02.842 with us in the healthcare system,

NOTE Confidence: 0.874666677619048  
00:22:02.850 --> 00:22:04.110 but to also look at more public,  
NOTE Confidence: 0.874666677619048  
00:22:04.110 --> 00:22:05.934 health oriented interventions that  
NOTE Confidence: 0.874666677619048  
00:22:05.934 --> 00:22:08.670 begin to address the social conditions.  
NOTE Confidence: 0.874666677619048  
00:22:08.670 --> 00:22:10.692 Which people live?  
NOTE Confidence: 0.874666677619048  
00:22:10.692 --> 00:22:12.040 Next point,  
NOTE Confidence: 0.874666677619048  
00:22:12.040 --> 00:22:14.002 our findings also just demonstrate a  
NOTE Confidence: 0.874666677619048  
00:22:14.002 --> 00:22:15.996 very large unmet need for treatment  
NOTE Confidence: 0.874666677619048  
00:22:15.996 --> 00:22:18.201 during the most high risk period for  
NOTE Confidence: 0.874666677619048  
00:22:18.201 --> 00:22:20.748 fatal reattempts, and so we know,  
NOTE Confidence: 0.874666677619048  
00:22:20.748 --> 00:22:22.296 based on prior literature,  
NOTE Confidence: 0.874666677619048  
00:22:22.300 --> 00:22:24.232 that the most high risk time for  
NOTE Confidence: 0.874666677619048  
00:22:24.232 --> 00:22:26.512 dying after a suicide attempt is in  
NOTE Confidence: 0.874666677619048  
00:22:26.512 --> 00:22:28.600 the year after that suicide attempt.  
NOTE Confidence: 0.874666677619048  
00:22:28.600 --> 00:22:30.686 Yet our study found that nearly half  
NOTE Confidence: 0.874666677619048  
00:22:30.686 --> 00:22:32.630 of individuals are reporting an unmet  
NOTE Confidence: 0.874666677619048

00:22:32.630 --> 00:22:34.616 need for treatment during this time,

NOTE Confidence: 0.874666677619048

00:22:34.620 --> 00:22:37.540 which really speaks to.

NOTE Confidence: 0.874666677619048

00:22:37.540 --> 00:22:39.484 Just how big of an issue

NOTE Confidence: 0.874666677619048

00:22:39.484 --> 00:22:40.780 access continues to be,

NOTE Confidence: 0.874666677619048

00:22:40.780 --> 00:22:42.022 and I know that this is

NOTE Confidence: 0.874666677619048

00:22:42.022 --> 00:22:43.320 something that all of you know,

NOTE Confidence: 0.874666677619048

00:22:43.320 --> 00:22:44.892 especially those of you who who

NOTE Confidence: 0.874666677619048

00:22:44.892 --> 00:22:46.253 work in our emergency departments

NOTE Confidence: 0.874666677619048

00:22:46.253 --> 00:22:47.825 or in inpatient units and try

NOTE Confidence: 0.874666677619048

00:22:47.825 --> 00:22:50.118 to get care in the community for

NOTE Confidence: 0.874666677619048

00:22:50.118 --> 00:22:51.574 individuals after they're discharging.

NOTE Confidence: 0.874666677619048

00:22:51.580 --> 00:22:54.376 That access continues to remain a

NOTE Confidence: 0.874666677619048

00:22:54.376 --> 00:22:56.240 significant issue and specifically

NOTE Confidence: 0.874666677619048

00:22:56.310 --> 00:22:58.613 cost was cited as the number one

NOTE Confidence: 0.874666677619048

00:22:58.613 --> 00:23:00.560 barrier to care in our study.

NOTE Confidence: 0.874666677619048

00:23:00.560 --> 00:23:02.042 It's also important to note that



NOTE Confidence: 0.874666677619048  
00:23:02.042 --> 00:23:04.396 most of the data in our study was  
NOTE Confidence: 0.874666677619048  
00:23:04.396 --> 00:23:06.036 collected after implementation of the  
NOTE Confidence: 0.874666677619048  
00:23:06.036 --> 00:23:07.928 Affordable Care Act when we had a lot of.  
NOTE Confidence: 0.874666677619048  
00:23:07.930 --> 00:23:09.938 Different policies and insurance  
NOTE Confidence: 0.874666677619048  
00:23:09.938 --> 00:23:11.946 expansions that were really  
NOTE Confidence: 0.874666677619048  
00:23:11.946 --> 00:23:14.258 targeted at lowering the cost  
NOTE Confidence: 0.874666677619048  
00:23:14.258 --> 00:23:16.308 of care and improving access,  
NOTE Confidence: 0.874666677619048  
00:23:16.310 --> 00:23:18.795 but it is discouraging to see that  
NOTE Confidence: 0.874666677619048  
00:23:18.795 --> 00:23:20.845 cost still remains such a barrier  
NOTE Confidence: 0.874666677619048  
00:23:20.845 --> 00:23:24.020 to care for folks next slide.  
NOTE Confidence: 0.874666677619048  
00:23:24.020 --> 00:23:26.743 And so when we're looking at potential  
NOTE Confidence: 0.874666677619048  
00:23:26.743 --> 00:23:29.727 interventions to to work on in the future,  
NOTE Confidence: 0.874666677619048  
00:23:29.730 --> 00:23:31.170 I think it's important that there's  
NOTE Confidence: 0.874666677619048  
00:23:31.170 --> 00:23:32.406 really kind of two potential  
NOTE Confidence: 0.874666677619048  
00:23:32.406 --> 00:23:33.774 areas that we can look at.  
NOTE Confidence: 0.874666677619048

00:23:33.780 --> 00:23:36.105 The first is interventions within  
NOTE Confidence: 0.874666677619048

00:23:36.105 --> 00:23:37.965 the formal healthcare system.  
NOTE Confidence: 0.86598027

00:23:37.970 --> 00:23:41.640 Next slide. And so there are a  
NOTE Confidence: 0.86598027

00:23:41.640 --> 00:23:42.920 number of evidence based strategies  
NOTE Confidence: 0.86598027

00:23:42.968 --> 00:23:44.363 within the formal healthcare system  
NOTE Confidence: 0.86598027

00:23:44.363 --> 00:23:46.239 that we can continue to focus on.  
NOTE Confidence: 0.86598027

00:23:46.240 --> 00:23:48.298 Like I said, routine suicide screening,  
NOTE Confidence: 0.86598027

00:23:48.300 --> 00:23:50.210 not only in psychiatric settings  
NOTE Confidence: 0.86598027

00:23:50.210 --> 00:23:52.120 but also in medical settings.  
NOTE Confidence: 0.86598027

00:23:52.120 --> 00:23:54.017 There's been a fair amount of evidence  
NOTE Confidence: 0.86598027

00:23:54.017 --> 00:23:55.983 to show that brief interventions in  
NOTE Confidence: 0.86598027

00:23:55.983 --> 00:23:57.813 the emergency department and follow  
NOTE Confidence: 0.86598027

00:23:57.813 --> 00:24:00.031 up contact through postcards or phone  
NOTE Confidence: 0.86598027

00:24:00.031 --> 00:24:01.811 calls after patients are discharged  
NOTE Confidence: 0.86598027

00:24:01.811 --> 00:24:03.676 from our emergency departments,  
NOTE Confidence: 0.86598027

00:24:03.676 --> 00:24:05.964 can lower suicide attempts and

NOTE Confidence: 0.86598027

00:24:05.964 --> 00:24:07.676 suicide rates after discharge,

NOTE Confidence: 0.86598027

00:24:07.680 --> 00:24:09.450 and we know that suicide safety

NOTE Confidence: 0.86598027

00:24:09.450 --> 00:24:10.335 planning is a.

NOTE Confidence: 0.86598027

00:24:10.340 --> 00:24:11.384 And it's based intervention,

NOTE Confidence: 0.86598027

00:24:11.384 --> 00:24:14.050 so I think we need to continue to make

NOTE Confidence: 0.86598027

00:24:14.050 --> 00:24:15.795 sure that our emergency departments

NOTE Confidence: 0.86598027

00:24:15.795 --> 00:24:17.806 and healthcare systems are equipped to

NOTE Confidence: 0.86598027

00:24:17.806 --> 00:24:19.581 really implement these interventions.

NOTE Confidence: 0.86598027

00:24:19.581 --> 00:24:23.560 But I think we also need next slide,

NOTE Confidence: 0.86598027

00:24:23.560 --> 00:24:25.824 public health oriented interventions

NOTE Confidence: 0.86598027

00:24:25.824 --> 00:24:28.654 outside of the healthcare system.

NOTE Confidence: 0.86598027

00:24:28.660 --> 00:24:29.956 Interventions that really begin

NOTE Confidence: 0.86598027

00:24:29.956 --> 00:24:31.576 to address the social conditions

NOTE Confidence: 0.86598027

00:24:31.576 --> 00:24:33.602 in which people are living and the

NOTE Confidence: 0.86598027

00:24:33.602 --> 00:24:35.134 social conditions that we know

NOTE Confidence: 0.86598027

00:24:35.134 --> 00:24:36.259 precede suicidal behavior.

NOTE Confidence: 0.86598027

00:24:36.260 --> 00:24:37.380 And so in our study,

NOTE Confidence: 0.86598027

00:24:37.380 --> 00:24:38.288 for example,

NOTE Confidence: 0.86598027

00:24:38.288 --> 00:24:40.104 individuals who were unemployed

NOTE Confidence: 0.86598027

00:24:40.104 --> 00:24:41.466 showed the greatest.

NOTE Confidence: 0.86598027

00:24:41.470 --> 00:24:43.570 Increase in suicide attempts over

NOTE Confidence: 0.86598027

00:24:43.570 --> 00:24:44.830 the study period.

NOTE Confidence: 0.86598027

00:24:44.830 --> 00:24:46.990 There's been a fair amount of

NOTE Confidence: 0.86598027

00:24:46.990 --> 00:24:48.998 evidence to suggest that states

NOTE Confidence: 0.86598027

00:24:48.998 --> 00:24:50.998 with more generous unemployment

NOTE Confidence: 0.86598027

00:24:50.998 --> 00:24:53.498 benefits actually so reduced suicide

NOTE Confidence: 0.86598027

00:24:53.566 --> 00:24:56.457 rate at the state level after those

NOTE Confidence: 0.86598027

00:24:56.457 --> 00:24:58.777 more generous unemployment benefits

NOTE Confidence: 0.86598027

00:24:58.777 --> 00:25:02.008 are implemented next.

NOTE Confidence: 0.86598027

00:25:02.010 --> 00:25:03.746 The same can be true for anti poverty.

NOTE Confidence: 0.86598027

00:25:03.750 --> 00:25:05.815 Income supports things like temporary

NOTE Confidence: 0.86598027

00:25:05.815 --> 00:25:07.467 assistance for needy families

NOTE Confidence: 0.86598027

00:25:07.467 --> 00:25:08.769 or TANF benefits.

NOTE Confidence: 0.86598027

00:25:08.770 --> 00:25:10.894 There's a fair amount of evidence

NOTE Confidence: 0.86598027

00:25:10.894 --> 00:25:13.140 to support that states with more

NOTE Confidence: 0.86598027

00:25:13.140 --> 00:25:14.660 generous TANF benefits actually

NOTE Confidence: 0.86598027

00:25:14.660 --> 00:25:16.929 see a reduction in their suicide

NOTE Confidence: 0.86598027

00:25:16.929 --> 00:25:18.644 rate at the state level.

NOTE Confidence: 0.86598027

00:25:18.650 --> 00:25:20.722 One particularly interesting modeling

NOTE Confidence: 0.86598027

00:25:20.722 --> 00:25:22.794 study from economist estimated

NOTE Confidence: 0.86598027

00:25:22.794 --> 00:25:25.593 that we may be able to reduce 3000

NOTE Confidence: 0.86598027

00:25:25.593 --> 00:25:26.908 suicide deaths in our country.

NOTE Confidence: 0.86598027

00:25:26.910 --> 00:25:29.230 That's one in nine suicide deaths each year.

NOTE Confidence: 0.86598027

00:25:29.230 --> 00:25:31.460 If we were to improve.

NOTE Confidence: 0.86598027

00:25:31.460 --> 00:25:33.880 Increased tanaff benefits by

NOTE Confidence: 0.86598027

00:25:33.880 --> 00:25:36.300 a relatively marginal amount.

NOTE Confidence: 0.86598027

00:25:36.300 --> 00:25:36.756 Next slide,  
NOTE Confidence: 0.86598027

00:25:36.756 --> 00:25:38.352 I think we need to continue to  
NOTE Confidence: 0.86598027

00:25:38.352 --> 00:25:39.733 invest in Community based crisis  
NOTE Confidence: 0.86598027

00:25:39.733 --> 00:25:41.383 response which is receiving a lot  
NOTE Confidence: 0.86598027

00:25:41.433 --> 00:25:43.225 of attention right now to make sure  
NOTE Confidence: 0.86598027

00:25:43.225 --> 00:25:44.772 that we're reaching people during  
NOTE Confidence: 0.86598027

00:25:44.772 --> 00:25:47.088 times of crisis and referring them  
NOTE Confidence: 0.86598027

00:25:47.088 --> 00:25:49.798 to an appropriate level of care.  
NOTE Confidence: 0.86598027

00:25:49.800 --> 00:25:50.126 Next,  
NOTE Confidence: 0.86598027

00:25:50.126 --> 00:25:52.082 we need to continue to expand  
NOTE Confidence: 0.86598027

00:25:52.082 --> 00:25:54.075 gatekeeper trainings to make sure that  
NOTE Confidence: 0.86598027

00:25:54.075 --> 00:25:56.315 lay individuals in schools and in churches,  
NOTE Confidence: 0.86598027

00:25:56.320 --> 00:25:58.395 people that frequently come into  
NOTE Confidence: 0.86598027

00:25:58.395 --> 00:26:00.055 contact with suicidal individuals,  
NOTE Confidence: 0.86598027

00:26:00.060 --> 00:26:02.802 feel comfortable doing a basic suicide  
NOTE Confidence: 0.86598027

00:26:02.802 --> 00:26:05.118 risk assessment and referring individuals

NOTE Confidence: 0.86598027

00:26:05.118 --> 00:26:09.050 to an appropriate level of care next.

NOTE Confidence: 0.86598027

00:26:09.050 --> 00:26:11.274 We need to continue to look at means

NOTE Confidence: 0.86598027

00:26:11.274 --> 00:26:13.257 control when we look at systematic

NOTE Confidence: 0.86598027

00:26:13.257 --> 00:26:15.303 reviews and meta analysis of effective

NOTE Confidence: 0.86598027

00:26:15.361 --> 00:26:17.177 suicide interventions means control

NOTE Confidence: 0.86598027

00:26:17.177 --> 00:26:18.993 consistently demonstrates the most

NOTE Confidence: 0.86598027

00:26:18.993 --> 00:26:21.760 amount of evidence at being able to

NOTE Confidence: 0.86598027

00:26:21.760 --> 00:26:24.452 reduce our suicide rates and and so

NOTE Confidence: 0.86598027

00:26:24.452 --> 00:26:26.756 this is mainly focused on firearm

NOTE Confidence: 0.86598027

00:26:26.756 --> 00:26:28.871 restriction for higher high risk

NOTE Confidence: 0.86598027

00:26:28.871 --> 00:26:30.996 individuals and also focusing on

NOTE Confidence: 0.86598027

00:26:30.996 --> 00:26:33.665 safe firearm storage for individuals

NOTE Confidence: 0.86598027

00:26:33.665 --> 00:26:35.480 who possess firearms.

NOTE Confidence: 0.86598027

00:26:35.480 --> 00:26:36.110 And finally,

NOTE Confidence: 0.86598027

00:26:36.110 --> 00:26:38.315 this would be a talk on epidemiology

NOTE Confidence: 0.86598027

00:26:38.315 --> 00:26:39.659 or health services.  
NOTE Confidence: 0.86598027

00:26:39.660 --> 00:26:41.684 If we didn't focus on data and really  
NOTE Confidence: 0.86598027

00:26:41.684 --> 00:26:43.479 improving our our surveillance systems.  
NOTE Confidence: 0.86598027

00:26:43.480 --> 00:26:46.918 Right now, the CDC is only.  
NOTE Confidence: 0.86598027

00:26:46.920 --> 00:26:48.468 Tracking and monitoring deaths  
NOTE Confidence: 0.86598027

00:26:48.468 --> 00:26:50.790 by suicide and we don't really  
NOTE Confidence: 0.853836689347826

00:26:50.859 --> 00:26:53.259 have any monitoring systems or surveillance  
NOTE Confidence: 0.853836689347826

00:26:53.259 --> 00:26:56.258 data on other types of suicidal behavior.  
NOTE Confidence: 0.853836689347826

00:26:56.260 --> 00:26:58.060 Things like non suicidal self  
NOTE Confidence: 0.853836689347826

00:26:58.060 --> 00:26:59.500 injury or suicide attempts.  
NOTE Confidence: 0.853836689347826

00:26:59.500 --> 00:27:01.500 And so my last slide.  
NOTE Confidence: 0.853836689347826

00:27:01.500 --> 00:27:03.892 I just like to talk a little bit  
NOTE Confidence: 0.853836689347826

00:27:03.892 --> 00:27:05.989 about these surveillance systems.  
NOTE Confidence: 0.853836689347826

00:27:05.990 --> 00:27:08.807 And so this is a map of the current  
NOTE Confidence: 0.853836689347826

00:27:08.810 --> 00:27:10.198 CDC state level surveillance,  
NOTE Confidence: 0.853836689347826

00:27:10.198 --> 00:27:13.497 and so you can see on this map that



NOTE Confidence: 0.853836689347826  
00:27:13.497 --> 00:27:15.402 CDC basically tracks which states  
NOTE Confidence: 0.853836689347826  
00:27:15.402 --> 00:27:18.010 have the highest rates of suicides,  
NOTE Confidence: 0.853836689347826  
00:27:18.010 --> 00:27:20.350 and in this map it's the  
NOTE Confidence: 0.853836689347826  
00:27:20.350 --> 00:27:21.910 states with dark blue.  
NOTE Confidence: 0.853836689347826  
00:27:21.910 --> 00:27:23.482 But this sort of map isn't  
NOTE Confidence: 0.853836689347826  
00:27:23.482 --> 00:27:24.530 really all that actionable.  
NOTE Confidence: 0.853836689347826  
00:27:24.530 --> 00:27:26.777 It doesn't really tell us what might  
NOTE Confidence: 0.853836689347826  
00:27:26.777 --> 00:27:28.789 be occurring at the state level.  
NOTE Confidence: 0.853836689347826  
00:27:28.790 --> 00:27:30.848 What might be the high risk populations  
NOTE Confidence: 0.853836689347826  
00:27:30.848 --> 00:27:33.011 in these States and so one alternative  
NOTE Confidence: 0.853836689347826  
00:27:33.011 --> 00:27:34.841 approach would be to really expand  
NOTE Confidence: 0.853836689347826  
00:27:34.899 --> 00:27:36.555 our ability to do county level.  
NOTE Confidence: 0.853836689347826  
00:27:36.560 --> 00:27:39.998 Surveillance next slide.  
NOTE Confidence: 0.853836689347826  
00:27:40.000 --> 00:27:41.610 And so an example of of county  
NOTE Confidence: 0.853836689347826  
00:27:41.610 --> 00:27:42.596 level surveillance may be  
NOTE Confidence: 0.853836689347826

00:27:42.596 --> 00:27:43.826 something that looks like this.  
NOTE Confidence: 0.853836689347826

00:27:43.830 --> 00:27:46.238 This was a a recent geographic analysis  
NOTE Confidence: 0.853836689347826

00:27:46.238 --> 00:27:48.721 that we did trying to identify high  
NOTE Confidence: 0.853836689347826

00:27:48.721 --> 00:27:51.400 risk counties in the US for suicide.  
NOTE Confidence: 0.853836689347826

00:27:51.400 --> 00:27:53.608 So all the counties in red are actually  
NOTE Confidence: 0.853836689347826

00:27:53.608 --> 00:27:56.167 the 50 counties in the US whose suicide  
NOTE Confidence: 0.853836689347826

00:27:56.167 --> 00:27:58.246 rates are over triple the national  
NOTE Confidence: 0.853836689347826

00:27:58.246 --> 00:28:00.406 average and whose rates continue to  
NOTE Confidence: 0.853836689347826

00:28:00.406 --> 00:28:02.492 increase at a rate much at a rate  
NOTE Confidence: 0.853836689347826

00:28:02.492 --> 00:28:04.379 much higher than the national average.  
NOTE Confidence: 0.853836689347826

00:28:04.380 --> 00:28:05.676 And so this type of data,  
NOTE Confidence: 0.853836689347826

00:28:05.680 --> 00:28:06.226 I think,  
NOTE Confidence: 0.853836689347826

00:28:06.226 --> 00:28:07.318 is much more actionable.  
NOTE Confidence: 0.853836689347826

00:28:07.320 --> 00:28:08.784 It would allow us to really  
NOTE Confidence: 0.853836689347826

00:28:08.784 --> 00:28:09.516 target our interventions.  
NOTE Confidence: 0.853836689347826

00:28:09.520 --> 00:28:11.632 Or grant funding to these particular

NOTE Confidence: 0.853836689347826

00:28:11.632 --> 00:28:13.935 counties to begin to understand what

NOTE Confidence: 0.853836689347826

00:28:13.935 --> 00:28:16.010 is happening at these counties.

NOTE Confidence: 0.853836689347826

00:28:16.010 --> 00:28:18.355 What are the high risk populations and

NOTE Confidence: 0.853836689347826

00:28:18.355 --> 00:28:21.100 what might we target to begin to reduce

NOTE Confidence: 0.853836689347826

00:28:21.100 --> 00:28:23.420 the suicide rates in these counties?

NOTE Confidence: 0.853836689347826

00:28:23.420 --> 00:28:25.000 Next slide.

NOTE Confidence: 0.853836689347826

00:28:25.000 --> 00:28:27.088 And so finally, I just want to acknowledge

NOTE Confidence: 0.853836689347826

00:28:27.088 --> 00:28:28.980 my my mentors on this project.

NOTE Confidence: 0.853836689347826

00:28:28.980 --> 00:28:29.846 Again.

NOTE Confidence: 0.853836689347826

00:28:29.846 --> 00:28:31.578 Doctor rosenak.

NOTE Confidence: 0.853836689347826

00:28:31.580 --> 00:28:33.458 Doctor Reed and again give special

NOTE Confidence: 0.853836689347826

00:28:33.458 --> 00:28:36.090 thanks to the to the Seymour Lossman

NOTE Confidence: 0.853836689347826

00:28:36.090 --> 00:28:38.280 Foundation for sponsoring this award.

NOTE Confidence: 0.853836689347826

00:28:38.280 --> 00:28:39.460 So thank you so much.

NOTE Confidence: 0.838325736666667

00:28:44.740 --> 00:28:46.738 Thank you Tanner. That was great.

NOTE Confidence: 0.838325736666667

00:28:46.740 --> 00:28:49.110 Such an important topic and  
NOTE Confidence: 0.838325736666667

00:28:49.110 --> 00:28:51.006 really very clearly presented.  
NOTE Confidence: 0.838325736666667

00:28:51.010 --> 00:28:53.346 We do have because in addition to his  
NOTE Confidence: 0.838325736666667

00:28:53.346 --> 00:28:55.007 other manifold talents that you've  
NOTE Confidence: 0.838325736666667

00:28:55.007 --> 00:28:56.692 heard about Tanners proven himself  
NOTE Confidence: 0.838325736666667

00:28:56.692 --> 00:28:58.837 to be a master of time control,  
NOTE Confidence: 0.838325736666667

00:28:58.840 --> 00:29:00.212 and so we have a minute or  
NOTE Confidence: 0.838325736666667

00:29:00.212 --> 00:29:01.360 two here for questions.  
NOTE Confidence: 0.838325736666667

00:29:01.360 --> 00:29:03.772 If anyone has questions or comments  
NOTE Confidence: 0.838325736666667

00:29:03.772 --> 00:29:06.730 before we go on to our next top.  
NOTE Confidence: 0.838325736666667

00:29:06.730 --> 00:29:10.130 Power. How much of a factor  
NOTE Confidence: 0.838325736666667

00:29:10.130 --> 00:29:11.830 do you think that since cost  
NOTE Confidence: 0.93331011125

00:29:11.840 --> 00:29:15.304 seems to be so much of an issue?  
NOTE Confidence: 0.93331011125

00:29:15.310 --> 00:29:17.435 How big an issue and how much  
NOTE Confidence: 0.93331011125

00:29:17.435 --> 00:29:19.716 of a role does the fact that  
NOTE Confidence: 0.93331011125

00:29:19.716 --> 00:29:21.208 psychiatrists frequently don't even

NOTE Confidence: 0.93331011125

00:29:21.210 --> 00:29:23.406 don't take insurance must much less?

NOTE Confidence: 0.93331011125

00:29:23.410 --> 00:29:26.640 Medic, Medicare or Medicaid?

NOTE Confidence: 0.928251595

00:29:28.950 --> 00:29:30.406 Yeah, I think I think that's a really,

NOTE Confidence: 0.928251595

00:29:30.410 --> 00:29:33.134 really important issue and I think

NOTE Confidence: 0.928251595

00:29:33.134 --> 00:29:35.520 most of us you know who who take care

NOTE Confidence: 0.928251595

00:29:35.520 --> 00:29:36.913 of patients on this call know that

NOTE Confidence: 0.928251595

00:29:36.913 --> 00:29:38.245 it's not necessarily our patients with

NOTE Confidence: 0.928251595

00:29:38.245 --> 00:29:39.713 public insurance that we have a hard

NOTE Confidence: 0.928251595

00:29:39.713 --> 00:29:41.054 time finding out patient care for,

NOTE Confidence: 0.928251595

00:29:41.054 --> 00:29:42.656 but it's our patients with private

NOTE Confidence: 0.928251595

00:29:42.656 --> 00:29:44.270 insurance and our patients who are

NOTE Confidence: 0.928251595

00:29:44.270 --> 00:29:45.818 uninsured and that actually in this

NOTE Confidence: 0.928251595

00:29:45.864 --> 00:29:47.574 particular study we found that suicide

NOTE Confidence: 0.928251595

00:29:47.574 --> 00:29:49.152 attempt rates have been increasing

NOTE Confidence: 0.928251595

00:29:49.152 --> 00:29:50.880 amongst those two populations.

NOTE Confidence: 0.928251595

00:29:50.880 --> 00:29:52.696 Individuals with private insurance  
NOTE Confidence: 0.928251595

00:29:52.696 --> 00:29:54.966 and individuals who are uninsured  
NOTE Confidence: 0.928251595

00:29:54.970 --> 00:29:57.088 and so the access problem,  
NOTE Confidence: 0.928251595

00:29:57.090 --> 00:29:58.526 I think, really is.  
NOTE Confidence: 0.928251595

00:29:58.526 --> 00:30:01.138 Was focused on on those two two  
NOTE Confidence: 0.928251595

00:30:01.138 --> 00:30:02.330 groups of individuals.  
NOTE Confidence: 0.742421490588235

00:30:08.330 --> 00:30:10.052 And are you noted that your strongest  
NOTE Confidence: 0.742421490588235

00:30:10.052 --> 00:30:11.410 predictors of the OR correlates  
NOTE Confidence: 0.742421490588235

00:30:11.410 --> 00:30:12.845 of the increased suicide rates,  
NOTE Confidence: 0.742421490588235

00:30:12.850 --> 00:30:14.242 weren't mental health diagnosed?  
NOTE Confidence: 0.742421490588235

00:30:14.242 --> 00:30:16.330 They were age and unemployment and  
NOTE Confidence: 0.742421490588235

00:30:16.390 --> 00:30:18.160 the other factors that you listed.  
NOTE Confidence: 0.742421490588235

00:30:18.160 --> 00:30:20.449 But did you look at mental health?  
NOTE Confidence: 0.742421490588235

00:30:20.450 --> 00:30:22.378 Did mental health diagnosis  
NOTE Confidence: 0.742421490588235

00:30:22.378 --> 00:30:23.824 increase in parallel?  
NOTE Confidence: 0.742421490588235

00:30:23.830 --> 00:30:25.648 And if you look at them as a mediator,

NOTE Confidence: 0.742421490588235

00:30:25.650 --> 00:30:26.938 maybe unemployment leads to

NOTE Confidence: 0.742421490588235

00:30:26.938 --> 00:30:28.226 an increase in depression,

NOTE Confidence: 0.742421490588235

00:30:28.230 --> 00:30:30.178 which mediates the increase.

NOTE Confidence: 0.742421490588235

00:30:30.178 --> 00:30:31.639 Made of suicide.

NOTE Confidence: 0.838381154285714

00:30:33.070 --> 00:30:34.366 Good question, good question.

NOTE Confidence: 0.838381154285714

00:30:34.366 --> 00:30:37.263 We didn't look at it as a mediator and

NOTE Confidence: 0.838381154285714

00:30:37.263 --> 00:30:39.630 one of the limitations of the the NIS.

NOTE Confidence: 0.838381154285714

00:30:39.630 --> 00:30:41.712 That data set is it? It doesn't.

NOTE Confidence: 0.838381154285714

00:30:41.712 --> 00:30:42.976 It's focused on substance.

NOTE Confidence: 0.838381154285714

00:30:42.980 --> 00:30:45.150 Use mainly doesn't focus on mental health

NOTE Confidence: 0.838381154285714

00:30:45.150 --> 00:30:48.134 and so we only know kind of in the data

NOTE Confidence: 0.838381154285714

00:30:48.134 --> 00:30:50.042 set of major depressive episodes as

NOTE Confidence: 0.838381154285714

00:30:50.042 --> 00:30:51.989 well as serious psychological distress

NOTE Confidence: 0.838381154285714

00:30:51.989 --> 00:30:54.873 which is a nonspecific kind of marker

NOTE Confidence: 0.838381154285714

00:30:54.873 --> 00:30:57.218 or indicator of psychological distress.

NOTE Confidence: 0.838381154285714

00:30:57.220 --> 00:30:58.176 In the last year.  
NOTE Confidence: 0.838381154285714

00:30:58.176 --> 00:31:00.444 So it doesn't give us a lot of  
NOTE Confidence: 0.838381154285714

00:31:00.444 --> 00:31:01.996 information about mental illness.  
NOTE Confidence: 0.838381154285714

00:31:02.000 --> 00:31:03.420 We did find that.  
NOTE Confidence: 0.838381154285714

00:31:03.420 --> 00:31:05.195 Individuals with depression and and  
NOTE Confidence: 0.838381154285714

00:31:05.195 --> 00:31:07.736 serious psychological distress or highly  
NOTE Confidence: 0.838381154285714

00:31:07.736 --> 00:31:09.428 associated with attempting suicide.  
NOTE Confidence: 0.838381154285714

00:31:09.430 --> 00:31:11.495 But we didn't actually see  
NOTE Confidence: 0.838381154285714

00:31:11.495 --> 00:31:13.718 increases in the suicide attempt  
NOTE Confidence: 0.838381154285714

00:31:13.718 --> 00:31:15.526 rate amongst these populations.  
NOTE Confidence: 0.838381154285714

00:31:15.530 --> 00:31:17.085 That was more focused on  
NOTE Confidence: 0.838381154285714

00:31:17.085 --> 00:31:18.329 individuals who are unemployed.  
NOTE Confidence: 0.838381154285714

00:31:18.330 --> 00:31:20.020 Individuals with substance use disorders.  
NOTE Confidence: 0.838381154285714

00:31:20.020 --> 00:31:20.668 Like I said,  
NOTE Confidence: 0.838381154285714

00:31:20.668 --> 00:31:21.964 or individuals who were never married.  
NOTE Confidence: 0.6203412

00:31:23.540 --> 00:31:27.040 Right? Thank you and congratulations again



NOTE Confidence: 0.6203412

00:31:27.040 --> 00:31:29.969 Tanner for your for your first place.

NOTE Confidence: 0.6203412

00:31:29.970 --> 00:31:32.560 Last minute award you will be receiving

NOTE Confidence: 0.6203412

00:31:32.560 --> 00:31:35.136 both a certificate and and a cache award.

NOTE Confidence: 0.6203412

00:31:35.140 --> 00:31:36.756 Can't give it to you in person today,

NOTE Confidence: 0.6203412

00:31:36.760 --> 00:31:40.162 but that will be on its way to you.

NOTE Confidence: 0.6203412

00:31:40.170 --> 00:31:43.794 All right, I'd now like to invite Renato

NOTE Confidence: 0.6203412

00:31:43.794 --> 00:31:47.342 Pallanti to introduce the first of our

NOTE Confidence: 0.6203412

00:31:47.342 --> 00:31:49.460 Co 2nd place awardees Daniel Tiley.

NOTE Confidence: 0.95561993

00:31:51.010 --> 00:31:52.760 Good morning everyone. It's

NOTE Confidence: 0.89011207

00:31:52.770 --> 00:31:55.000 a pleasure to introduce Doctor

NOTE Confidence: 0.788324925

00:31:55.010 --> 00:31:57.260 Daniel Kelly. He's a third year

NOTE Confidence: 0.788324925

00:31:57.270 --> 00:32:00.900 resident and role in the NRP program.

NOTE Confidence: 0.788324925

00:32:01.070 --> 00:32:04.250 After completing his MDPC training at

NOTE Confidence: 0.788324925

00:32:04.250 --> 00:32:06.620 the SUNY Upstate Medical University,

NOTE Confidence: 0.6803325633333333

00:32:06.630 --> 00:32:08.640 under the mentorship of Doctor

NOTE Confidence: 0.3914062775

00:32:08.650 --> 00:32:11.760 Steven and Steven Paul. Then  
NOTE Confidence: 0.8954201

00:32:11.770 --> 00:32:14.400 join my group in December 2019 and since  
NOTE Confidence: 0.8954201

00:32:14.400 --> 00:32:17.520 then it became a key member of my team,  
NOTE Confidence: 0.8954201

00:32:17.520 --> 00:32:19.350 leading several analysis and  
NOTE Confidence: 0.8954201

00:32:19.350 --> 00:32:21.230 contributed to many projects.  
NOTE Confidence: 0.712010666666667

00:32:21.300 --> 00:32:21.999 Going to happen.  
NOTE Confidence: 0.750708918

00:32:22.510 --> 00:32:24.700 He did all of these also having  
NOTE Confidence: 0.750708918

00:32:24.700 --> 00:32:27.230 a very busy clinical schedule.  
NOTE Confidence: 0.8461319

00:32:28.240 --> 00:32:29.980 Because of his accomplishment this  
NOTE Confidence: 0.4682278828

00:32:29.990 --> 00:32:32.590 year, then received the Chairs Choice Award  
NOTE Confidence: 0.94983824

00:32:32.600 --> 00:32:34.746 from the Society of Biological  
NOTE Confidence: 0.94983824

00:32:34.746 --> 00:32:36.250 Psychiatry additionally into  
NOTE Confidence: 0.755507486666667

00:32:36.900 --> 00:32:39.210 2020 also received the D3 Award  
NOTE Confidence: 0.93637142

00:32:39.220 --> 00:32:42.002 from our department to work on  
NOTE Confidence: 0.93637142

00:32:42.002 --> 00:32:44.174 a study to extract high quality  
NOTE Confidence: 0.93637142

00:32:44.174 --> 00:32:46.040 depression digital phenotypes

NOTE Confidence: 0.7035666375  
00:32:46.040 --> 00:32:48.119 from the Yale New Haven Health System.  
NOTE Confidence: 0.7035666375  
00:32:48.120 --> 00:32:50.650 Electronical triggers today  
NOTE Confidence: 0.83792452  
00:32:50.720 --> 00:32:52.508 is going to present his work  
NOTE Confidence: 0.607158624  
00:32:52.560 --> 00:32:54.700 recently published in JAMA Psychiatry,  
NOTE Confidence: 0.607158624  
00:32:54.700 --> 00:32:56.460 where we showed the complex  
NOTE Confidence: 0.607158624  
00:32:56.460 --> 00:32:59.010 dynamics linking. Psychopathology  
NOTE Confidence: 0.85844733  
00:32:59.010 --> 00:33:02.260 and immune function using genetic data. So  
NOTE Confidence: 0.483257283333333  
00:33:02.270 --> 00:33:04.230 without further ado please then.  
NOTE Confidence: 0.8221846825  
00:33:06.510 --> 00:33:09.245 Thank you Renato for that  
NOTE Confidence: 0.8221846825  
00:33:09.245 --> 00:33:10.886 really generous introduction.  
NOTE Confidence: 0.8221846825  
00:33:10.890 --> 00:33:14.004 I want to make sure y'all can see my  
NOTE Confidence: 0.8221846825  
00:33:14.004 --> 00:33:16.436 screen that I think I've done it wrong.  
NOTE Confidence: 0.894462238  
00:33:21.810 --> 00:33:26.260 So if I do this, can you see my slides?  
NOTE Confidence: 0.894462238  
00:33:26.260 --> 00:33:29.448 Presenter View presenter view. How about now.  
NOTE Confidence: 0.82906115  
00:33:29.850 --> 00:33:33.420 Hang on one SEC there we go perfect. OK,  
NOTE Confidence: 0.8630118925

00:33:34.220 --> 00:33:36.257 so the work I'm going to be  
NOTE Confidence: 0.8630118925

00:33:36.257 --> 00:33:38.986 presenting to you today is in the  
NOTE Confidence: 0.8630118925

00:33:38.986 --> 00:33:42.008 area of genetic epidemiology and  
NOTE Confidence: 0.8630118925

00:33:42.008 --> 00:33:43.960 it's specifically cross disorder,  
NOTE Confidence: 0.8630118925

00:33:43.960 --> 00:33:44.940 genetic epidemiology.  
NOTE Confidence: 0.8630118925

00:33:44.940 --> 00:33:47.390 Looking at relationships between psychiatric  
NOTE Confidence: 0.8630118925

00:33:47.390 --> 00:33:49.780 disorders and some related phenotypes,  
NOTE Confidence: 0.8630118925

00:33:49.780 --> 00:33:53.140 not quite disorders, personality traits,  
NOTE Confidence: 0.8630118925

00:33:53.140 --> 00:33:56.110 and basically representative.  
NOTE Confidence: 0.8630118925

00:33:56.110 --> 00:33:59.340 Sample available sample of autoimmune  
NOTE Confidence: 0.8630118925

00:33:59.340 --> 00:34:01.102 diseases, allergic conditions  
NOTE Confidence: 0.8630118925

00:34:01.102 --> 00:34:02.770 and inflammatory conditions.  
NOTE Confidence: 0.8630118925

00:34:02.770 --> 00:34:05.976 So kind of like running the gamut.  
NOTE Confidence: 0.8630118925

00:34:05.980 --> 00:34:07.762 Two things that are important to  
NOTE Confidence: 0.8630118925

00:34:07.762 --> 00:34:10.111 know about this is that this is  
NOTE Confidence: 0.8630118925

00:34:10.111 --> 00:34:11.575 basically leveraging GWAS data.

NOTE Confidence: 0.8630118925  
00:34:11.580 --> 00:34:13.715 So genome Wide Association study  
NOTE Confidence: 0.8630118925  
00:34:13.715 --> 00:34:16.769 data which looks at the effects of  
NOTE Confidence: 0.8630118925  
00:34:16.769 --> 00:34:19.170 changes in the letter, the base,  
NOTE Confidence: 0.8630118925  
00:34:19.170 --> 00:34:21.690 the letter base pair at different positions,  
NOTE Confidence: 0.8630118925  
00:34:21.690 --> 00:34:23.655 positions in the genome in  
NOTE Confidence: 0.8630118925  
00:34:23.655 --> 00:34:25.227 association with the disorder.  
NOTE Confidence: 0.8630118925  
00:34:25.230 --> 00:34:27.095 So these are basically data  
NOTE Confidence: 0.8630118925  
00:34:27.095 --> 00:34:28.587 that were generated elsewhere,  
NOTE Confidence: 0.8630118925  
00:34:28.590 --> 00:34:30.314 usually by large consortia,  
NOTE Confidence: 0.8630118925  
00:34:30.314 --> 00:34:32.469 and I'm using the data,  
NOTE Confidence: 0.8630118925  
00:34:32.470 --> 00:34:34.415 repurposing it and putting it  
NOTE Confidence: 0.8630118925  
00:34:34.415 --> 00:34:36.360 together for some novel analysis.  
NOTE Confidence: 0.9165150825  
00:34:40.360 --> 00:34:43.496 This is the the sort of the citation.  
NOTE Confidence: 0.9165150825  
00:34:43.500 --> 00:34:44.320 If you're interested in  
NOTE Confidence: 0.9165150825  
00:34:44.320 --> 00:34:45.345 learning more of the details,  
NOTE Confidence: 0.9165150825

00:34:45.350 --> 00:34:47.357 we won't be able to get into many of  
NOTE Confidence: 0.9165150825

00:34:47.357 --> 00:34:49.650 the details today with the limited time.  
NOTE Confidence: 0.9165150825

00:34:49.650 --> 00:34:51.442 But for some context,  
NOTE Confidence: 0.9165150825

00:34:51.442 --> 00:34:53.682 if you search the literature,  
NOTE Confidence: 0.9165150825

00:34:53.690 --> 00:34:55.565 you'll find no shortage of  
NOTE Confidence: 0.9165150825

00:34:55.565 --> 00:34:57.065 reviews and meta analysis.  
NOTE Confidence: 0.9165150825

00:34:57.070 --> 00:34:59.574 Looking at epidemiologic associations  
NOTE Confidence: 0.9165150825

00:34:59.574 --> 00:35:02.704 between different immune related conditions  
NOTE Confidence: 0.9165150825

00:35:02.704 --> 00:35:05.838 and different psychiatric conditions.  
NOTE Confidence: 0.9165150825

00:35:05.840 --> 00:35:07.984 What what I think is not clear yet  
NOTE Confidence: 0.9165150825

00:35:07.984 --> 00:35:10.431 is whether there are specificity in  
NOTE Confidence: 0.9165150825

00:35:10.431 --> 00:35:12.279 these relationships across disorders,  
NOTE Confidence: 0.9165150825

00:35:12.280 --> 00:35:13.690 or whether the patterns are really  
NOTE Confidence: 0.9165150825

00:35:13.690 --> 00:35:15.700 more or less the same across disorders.  
NOTE Confidence: 0.9165150825

00:35:15.700 --> 00:35:17.776 It's sort of an open question  
NOTE Confidence: 0.9165150825

00:35:17.776 --> 00:35:19.560 and something that we're we're

NOTE Confidence: 0.9165150825

00:35:19.560 --> 00:35:21.540 using genetic data to look at.

NOTE Confidence: 0.9165150825

00:35:21.540 --> 00:35:23.732 So epidemiologists are interested

NOTE Confidence: 0.9165150825

00:35:23.732 --> 00:35:25.924 in explaining these associations,

NOTE Confidence: 0.9165150825

00:35:25.930 --> 00:35:29.180 and there's different possible explanations.

NOTE Confidence: 0.9165150825

00:35:29.180 --> 00:35:31.404 One thing that might be happening is there

NOTE Confidence: 0.9165150825

00:35:31.404 --> 00:35:33.659 could be a causal effect of 1 disorder,

NOTE Confidence: 0.9165150825

00:35:33.660 --> 00:35:36.280 increasing the risk for another.

NOTE Confidence: 0.9165150825

00:35:36.280 --> 00:35:36.984 Of course,

NOTE Confidence: 0.9165150825

00:35:36.984 --> 00:35:39.096 it's really hard to demonstrate causal

NOTE Confidence: 0.9165150825

00:35:39.096 --> 00:35:41.371 effects on a population scale, really.

NOTE Confidence: 0.9165150825

00:35:41.371 --> 00:35:43.326 You need good experiments to

NOTE Confidence: 0.9165150825

00:35:43.326 --> 00:35:44.890 to demonstrate causal effects,

NOTE Confidence: 0.9165150825

00:35:44.890 --> 00:35:48.070 and that's just not possible here.

NOTE Confidence: 0.9165150825

00:35:48.070 --> 00:35:48.970 In general, you know,

NOTE Confidence: 0.9165150825

00:35:48.970 --> 00:35:50.731 so one hypothesis is that immune disorders

NOTE Confidence: 0.9165150825

00:35:50.731 --> 00:35:52.199 are causing psychiatric disorders,  
NOTE Confidence: 0.9165150825

00:35:52.200 --> 00:35:55.200 and we have some basis to to say  
NOTE Confidence: 0.9165150825

00:35:55.200 --> 00:35:57.650 that that might be possible.  
NOTE Confidence: 0.9165150825

00:35:57.650 --> 00:36:00.331 So we know from clinical observations that  
NOTE Confidence: 0.9165150825

00:36:00.331 --> 00:36:02.699 immune diseases that infiltrate the CNS,  
NOTE Confidence: 0.9165150825

00:36:02.700 --> 00:36:04.850 so things like multiple sclerosis,  
NOTE Confidence: 0.9165150825

00:36:04.850 --> 00:36:09.135 lupus vasculitis and also auto  
NOTE Confidence: 0.9165150825

00:36:09.135 --> 00:36:11.706 antibody mediated encephalitis,  
NOTE Confidence: 0.9165150825

00:36:11.710 --> 00:36:13.426 we see those with autoimmune disease,  
NOTE Confidence: 0.9165150825

00:36:13.430 --> 00:36:15.630 but also after infections like  
NOTE Confidence: 0.9165150825

00:36:15.630 --> 00:36:17.390 COVID and paraneoplastic syndrome,  
NOTE Confidence: 0.9165150825

00:36:17.390 --> 00:36:19.434 so these can cause.  
NOTE Confidence: 0.9165150825

00:36:19.434 --> 00:36:20.456 Neuropsychiatric syndromes,  
NOTE Confidence: 0.9165150825

00:36:20.460 --> 00:36:22.992 but it's important to know that  
NOTE Confidence: 0.9165150825

00:36:22.992 --> 00:36:25.084 they're relatively quite rare,  
NOTE Confidence: 0.9165150825

00:36:25.084 --> 00:36:28.816 and also usually there are other



NOTE Confidence: 0.9165150825

00:36:28.816 --> 00:36:31.221 neurological findings changes in mental

NOTE Confidence: 0.9165150825

00:36:31.221 --> 00:36:33.156 changes in overall mental status,

NOTE Confidence: 0.9165150825

00:36:33.160 --> 00:36:34.580 fluctuating level of consciousness.

NOTE Confidence: 0.9165150825

00:36:34.580 --> 00:36:37.100 People are ill when they have these.

NOTE Confidence: 0.9165150825

00:36:37.100 --> 00:36:38.084 Oftentimes it's very,

NOTE Confidence: 0.9165150825

00:36:38.084 --> 00:36:40.052 very rare for them to present

NOTE Confidence: 0.9165150825

00:36:40.052 --> 00:36:41.968 with only psychiatric symptoms.

NOTE Confidence: 0.905106165263158

00:36:44.270 --> 00:36:46.400 And then we know from experimental

NOTE Confidence: 0.905106165263158

00:36:46.400 --> 00:36:49.552 data in humans and in animals that if

NOTE Confidence: 0.905106165263158

00:36:49.552 --> 00:36:51.632 you administer an immune disturbance,

NOTE Confidence: 0.905106165263158

00:36:51.640 --> 00:36:53.180 if you administer cytokines,

NOTE Confidence: 0.905106165263158

00:36:53.180 --> 00:36:55.732 or if you administer bacterial endotoxin,

NOTE Confidence: 0.905106165263158

00:36:55.732 --> 00:36:58.262 basically you can induce behaviors

NOTE Confidence: 0.905106165263158

00:36:58.262 --> 00:37:01.205 in people and in animals that

NOTE Confidence: 0.905106165263158

00:37:01.205 --> 00:37:03.005 that are sickness behavior.

NOTE Confidence: 0.905106165263158

00:37:03.010 --> 00:37:05.500 And these are also accompanied by  
NOTE Confidence: 0.905106165263158

00:37:05.500 --> 00:37:07.160 emotional and cognitive changes,  
NOTE Confidence: 0.905106165263158

00:37:07.160 --> 00:37:10.758 some of which seem to recapitulate features  
NOTE Confidence: 0.905106165263158

00:37:10.758 --> 00:37:13.527 of depression depending on who you ask.  
NOTE Confidence: 0.905106165263158

00:37:13.530 --> 00:37:15.054 And then from animal  
NOTE Confidence: 0.905106165263158

00:37:15.054 --> 00:37:16.578 models of adult exposure,  
NOTE Confidence: 0.905106165263158

00:37:16.580 --> 00:37:18.605 but also gestational exposure to  
NOTE Confidence: 0.905106165263158

00:37:18.605 --> 00:37:20.630 different types of immune disturbance,  
NOTE Confidence: 0.905106165263158

00:37:20.630 --> 00:37:22.670 we know that there are  
NOTE Confidence: 0.905106165263158

00:37:22.670 --> 00:37:24.302 neurodevelopmental effects and there  
NOTE Confidence: 0.905106165263158

00:37:24.302 --> 00:37:26.469 are social behavioral effects.  
NOTE Confidence: 0.905106165263158

00:37:26.470 --> 00:37:29.338 The figures that I'm showing here  
NOTE Confidence: 0.905106165263158

00:37:29.338 --> 00:37:33.487 so that the top right is a pet FDG  
NOTE Confidence: 0.905106165263158

00:37:33.487 --> 00:37:36.306 study looking at it was actually a  
NOTE Confidence: 0.905106165263158

00:37:36.306 --> 00:37:38.610 a pet dopamine binding study looking  
NOTE Confidence: 0.905106165263158

00:37:38.690 --> 00:37:41.384 at changes before and after the

NOTE Confidence: 0.905106165263158

00:37:41.384 --> 00:37:43.680 administration of of interferon alpha.

NOTE Confidence: 0.905106165263158

00:37:43.680 --> 00:37:45.660 In the context of treating hepatitis

NOTE Confidence: 0.905106165263158

00:37:45.660 --> 00:37:48.017 CI believe and the bottom is looking

NOTE Confidence: 0.905106165263158

00:37:48.017 --> 00:37:50.285 at newborn neurons in a mouse model.

NOTE Confidence: 0.792783256666667

00:37:53.150 --> 00:37:55.964 I another hypothesis is that psychiatric

NOTE Confidence: 0.792783256666667

00:37:55.964 --> 00:37:58.476 disorders are somehow causing immune

NOTE Confidence: 0.792783256666667

00:37:58.476 --> 00:38:00.728 disorders or contributing causally.

NOTE Confidence: 0.872716138333333

00:38:03.990 --> 00:38:06.660 Clinical observation points to the idea

NOTE Confidence: 0.872716138333333

00:38:06.660 --> 00:38:09.629 that stress might be important here.

NOTE Confidence: 0.872716138333333

00:38:09.630 --> 00:38:12.666 We know that acute psychological stress,

NOTE Confidence: 0.872716138333333

00:38:12.670 --> 00:38:15.310 a laboratory stressor like the tree

NOTE Confidence: 0.872716138333333

00:38:15.310 --> 00:38:17.696 or social stressor produces autonomic

NOTE Confidence: 0.872716138333333

00:38:17.696 --> 00:38:19.828 changes and neuroendocrine changes,

NOTE Confidence: 0.872716138333333

00:38:19.830 --> 00:38:21.730 and also measurable changes

NOTE Confidence: 0.872716138333333

00:38:21.730 --> 00:38:23.630 in peripheral immune markers.

NOTE Confidence: 0.872716138333333

00:38:23.630 --> 00:38:25.317 So when you stress a healthy participant,  
NOTE Confidence: 0.8727161383333333

00:38:25.320 --> 00:38:27.076 there are transient increases  
NOTE Confidence: 0.8727161383333333

00:38:27.076 --> 00:38:30.330 in I-1 beta IL 6 TNF alpha.  
NOTE Confidence: 0.8727161383333333

00:38:30.330 --> 00:38:31.078 What's really?  
NOTE Confidence: 0.8727161383333333

00:38:31.078 --> 00:38:32.200 I think interesting.  
NOTE Confidence: 0.8727161383333333

00:38:32.200 --> 00:38:34.755 That individual differences in the  
NOTE Confidence: 0.8727161383333333

00:38:34.755 --> 00:38:37.310 subjective experience of that stressful  
NOTE Confidence: 0.8727161383333333

00:38:37.379 --> 00:38:40.572 experience actually are correlated  
NOTE Confidence: 0.8727161383333333

00:38:40.572 --> 00:38:42.940 with different different aspects  
NOTE Confidence: 0.8727161383333333

00:38:42.940 --> 00:38:45.040 of the changes in the peripheral  
NOTE Confidence: 0.8727161383333333

00:38:45.040 --> 00:38:47.159 immune milieu and and the anti  
NOTE Confidence: 0.8727161383333333

00:38:47.159 --> 00:38:48.523 inflammatory cortisol and milieu.  
NOTE Confidence: 0.911948807058823

00:38:50.900 --> 00:38:54.169 We also know from human studies that  
NOTE Confidence: 0.911948807058823

00:38:54.169 --> 00:38:56.764 self reported stress or objective  
NOTE Confidence: 0.911948807058823

00:38:56.764 --> 00:38:59.991 measures of deprivation or poverty are  
NOTE Confidence: 0.911948807058823

00:38:59.991 --> 00:39:02.817 predictive of symptom severity in humans.

NOTE Confidence: 0.911948807058823

00:39:02.820 --> 00:39:05.256 For a number of immune related disorders,

NOTE Confidence: 0.911948807058823

00:39:05.260 --> 00:39:07.374 and we know from animal models of

NOTE Confidence: 0.911948807058823

00:39:07.374 --> 00:39:09.137 immune related disorders that if you

NOTE Confidence: 0.911948807058823

00:39:09.137 --> 00:39:10.999 if you subject those animals to stress,

NOTE Confidence: 0.911948807058823

00:39:11.000 --> 00:39:13.204 it worsens the histological

NOTE Confidence: 0.911948807058823

00:39:13.204 --> 00:39:14.857 progression of disease.

NOTE Confidence: 0.911948807058823

00:39:14.860 --> 00:39:17.464 And that's probably best understood for

NOTE Confidence: 0.911948807058823

00:39:17.464 --> 00:39:20.100 asthmatic conditions and and inflammatory.

NOTE Confidence: 0.911948807058823

00:39:20.100 --> 00:39:21.408 Health conditions in

NOTE Confidence: 0.911948807058823

00:39:21.408 --> 00:39:22.280 intermetallic conditions.

NOTE Confidence: 0.782401675

00:39:24.460 --> 00:39:27.115 And there's also the possibility

NOTE Confidence: 0.782401675

00:39:27.115 --> 00:39:28.708 of bidirectional effects.

NOTE Confidence: 0.782401675

00:39:28.710 --> 00:39:30.186 That's actually suggested by

NOTE Confidence: 0.782401675

00:39:30.186 --> 00:39:32.031 some of the longitudinal studies

NOTE Confidence: 0.782401675

00:39:32.031 --> 00:39:33.628 that look at the temporal.

NOTE Confidence: 0.782401675

00:39:33.630 --> 00:39:35.430 You know the temporal patterning  
NOTE Confidence: 0.782401675

00:39:35.430 --> 00:39:36.510 of these associations,  
NOTE Confidence: 0.782401675

00:39:36.510 --> 00:39:38.772 and then I wanted to mention  
NOTE Confidence: 0.782401675

00:39:38.772 --> 00:39:40.839 here that there's a large  
NOTE Confidence: 0.782401675

00:39:40.839 --> 00:39:43.199 body of literature looking at.  
NOTE Confidence: 0.782401675

00:39:43.200 --> 00:39:44.960 Psychiatric samples people as  
NOTE Confidence: 0.782401675

00:39:44.960 --> 00:39:46.720 seen for psychiatric disorders,  
NOTE Confidence: 0.782401675

00:39:46.720 --> 00:39:50.500 and they show group differences in a  
NOTE Confidence: 0.782401675

00:39:50.500 --> 00:39:53.619 variety of peripheral immune markers,  
NOTE Confidence: 0.782401675

00:39:53.620 --> 00:39:54.820 so it's not really clear what  
NOTE Confidence: 0.782401675

00:39:54.820 --> 00:39:55.770 the significance of that is.  
NOTE Confidence: 0.782401675

00:39:55.770 --> 00:39:57.107 We're so we're sort of left with  
NOTE Confidence: 0.782401675

00:39:57.107 --> 00:40:00.300 a chicken or egg problem there.  
NOTE Confidence: 0.782401675

00:40:00.300 --> 00:40:02.540 There are other explanations too.  
NOTE Confidence: 0.782401675

00:40:02.540 --> 00:40:04.540 Another possibility is that there's  
NOTE Confidence: 0.782401675

00:40:04.540 --> 00:40:06.140 some shared underlying biology,

NOTE Confidence: 0.782401675

00:40:06.140 --> 00:40:08.125 so maybe there's a shared

NOTE Confidence: 0.782401675

00:40:08.125 --> 00:40:08.919 pathological mechanism,

NOTE Confidence: 0.782401675

00:40:08.920 --> 00:40:10.905 or there could also be

NOTE Confidence: 0.782401675

00:40:10.905 --> 00:40:12.096 correlated genetic mechanisms.

NOTE Confidence: 0.782401675

00:40:12.100 --> 00:40:13.264 So so different mechanisms,

NOTE Confidence: 0.782401675

00:40:13.264 --> 00:40:15.350 but they travel together on the genome

NOTE Confidence: 0.782401675

00:40:15.350 --> 00:40:17.338 because they're so close to each other.

NOTE Confidence: 0.782401675

00:40:17.340 --> 00:40:19.305 It's also possible that there's

NOTE Confidence: 0.782401675

00:40:19.305 --> 00:40:21.005 some external causal factors.

NOTE Confidence: 0.782401675

00:40:21.005 --> 00:40:23.615 Some third variable effects going on.

NOTE Confidence: 0.782401675

00:40:23.620 --> 00:40:25.126 If things that come to mind

NOTE Confidence: 0.782401675

00:40:25.126 --> 00:40:25.879 are environmental exposures,

NOTE Confidence: 0.782401675

00:40:25.880 --> 00:40:28.632 social determinants of health.

NOTE Confidence: 0.782401675

00:40:28.632 --> 00:40:32.760 And a related hypothesis is that.

NOTE Confidence: 0.782401675

00:40:32.760 --> 00:40:35.483 There is actually a true causal factor

NOTE Confidence: 0.782401675

00:40:35.483 --> 00:40:37.731 that's just correlated with one of  
NOTE Confidence: 0.782401675

00:40:37.731 --> 00:40:39.759 your phenotypes and causal for the  
NOTE Confidence: 0.782401675

00:40:39.759 --> 00:40:42.268 second or mediation is possible,  
NOTE Confidence: 0.782401675

00:40:42.268 --> 00:40:46.780 so one phenotype may cause may cause.  
NOTE Confidence: 0.782401675

00:40:46.780 --> 00:40:48.870 As the actual causal phenotype  
NOTE Confidence: 0.782401675

00:40:48.870 --> 00:40:50.542 leading to the outcome,  
NOTE Confidence: 0.782401675

00:40:50.550 --> 00:40:53.278 and so when I think about this possibility,  
NOTE Confidence: 0.782401675

00:40:53.280 --> 00:40:55.305 I think about things like  
NOTE Confidence: 0.782401675

00:40:55.305 --> 00:40:56.520 health related behaviors.  
NOTE Confidence: 0.782401675

00:40:56.520 --> 00:41:00.666 So substance use aspects of BMI,  
NOTE Confidence: 0.782401675

00:41:00.670 --> 00:41:02.383 exercise, diet, sleep,  
NOTE Confidence: 0.782401675

00:41:02.383 --> 00:41:02.954 duration,  
NOTE Confidence: 0.782401675

00:41:02.954 --> 00:41:06.140 but also social connectedness and then  
NOTE Confidence: 0.782401675

00:41:06.140 --> 00:41:08.390 the social determinants of health.  
NOTE Confidence: 0.782401675

00:41:08.390 --> 00:41:10.150 And then individual differences in  
NOTE Confidence: 0.782401675

00:41:10.150 --> 00:41:11.206 the stress response.



NOTE Confidence: 0.782401675

00:41:11.210 --> 00:41:12.770 Also possible mediator here.

NOTE Confidence: 0.858645745

00:41:15.980 --> 00:41:19.196 For completion, it's also possible that

NOTE Confidence: 0.858645745

00:41:19.200 --> 00:41:20.910 mediating or confounding effects are

NOTE Confidence: 0.858645745

00:41:20.910 --> 00:41:22.870 happening in the other direction too.

NOTE Confidence: 0.858645745

00:41:22.870 --> 00:41:25.330 So these are relevant for

NOTE Confidence: 0.858645745

00:41:25.330 --> 00:41:26.806 understanding the next.

NOTE Confidence: 0.858645745

00:41:26.810 --> 00:41:29.290 The next slide here.

NOTE Confidence: 0.858645745

00:41:29.290 --> 00:41:32.843 So what we did was we assessed genetic

NOTE Confidence: 0.858645745

00:41:32.843 --> 00:41:34.100 correlations between psychiatric

NOTE Confidence: 0.858645745

00:41:34.163 --> 00:41:35.947 and immune related disorders,

NOTE Confidence: 0.858645745

00:41:35.950 --> 00:41:38.050 and we did this using the LD

NOTE Confidence: 0.858645745

00:41:38.050 --> 00:41:38.950 score regression method.

NOTE Confidence: 0.858645745

00:41:38.950 --> 00:41:41.470 So this method basically looks at all

NOTE Confidence: 0.858645745

00:41:41.470 --> 00:41:44.091 of the positions on the genome and

NOTE Confidence: 0.858645745

00:41:44.091 --> 00:41:46.293 looks at the association for disorder

NOTE Confidence: 0.858645745

00:41:46.363 --> 00:41:48.612 A&B and and looks to see if they're

NOTE Confidence: 0.858645745

00:41:48.612 --> 00:41:50.782 significant and if they're in the same

NOTE Confidence: 0.858645745

00:41:50.782 --> 00:41:52.327 or opposite directions of effect.

NOTE Confidence: 0.858645745

00:41:52.330 --> 00:41:53.682 And it kind of.

NOTE Confidence: 0.858645745

00:41:53.682 --> 00:41:55.502 That summarizes that data

NOTE Confidence: 0.858645745

00:41:55.502 --> 00:41:57.478 across the whole genome.

NOTE Confidence: 0.858645745

00:41:57.480 --> 00:42:00.516 To describe the proportion of shared

NOTE Confidence: 0.858645745

00:42:00.516 --> 00:42:02.540 heritability between the disorders,

NOTE Confidence: 0.858645745

00:42:02.540 --> 00:42:04.990 I know that's a lot.

NOTE Confidence: 0.858645745

00:42:04.990 --> 00:42:06.831 I'm going to kind of walk you

NOTE Confidence: 0.858645745

00:42:06.831 --> 00:42:08.669 through it because the slide is busy,

NOTE Confidence: 0.858645745

00:42:08.670 --> 00:42:12.054 so we found a predominance of

NOTE Confidence: 0.858645745

00:42:12.054 --> 00:42:13.746 positive genetic correlations.

NOTE Confidence: 0.858645745

00:42:13.750 --> 00:42:15.780 They were modest in strength.

NOTE Confidence: 0.858645745

00:42:15.780 --> 00:42:18.390 The correlation coefficients were between,

NOTE Confidence: 0.858645745

00:42:18.390 --> 00:42:20.052 you know, point.

NOTE Confidence: 0.858645745  
00:42:20.052 --> 00:42:20.606 Basically,  
NOTE Confidence: 0.858645745  
00:42:20.606 --> 00:42:24.410 .8 to point .20.  
NOTE Confidence: 0.858645745  
00:42:24.410 --> 00:42:29.290 .08 I'm sorry to .2 and we saw kind  
NOTE Confidence: 0.858645745  
00:42:29.290 --> 00:42:31.198 of a clustering of correlations  
NOTE Confidence: 0.858645745  
00:42:31.198 --> 00:42:33.214 involving the inflammatory bowel  
NOTE Confidence: 0.858645745  
00:42:33.214 --> 00:42:36.132 disorders but also one of the  
NOTE Confidence: 0.858645745  
00:42:36.132 --> 00:42:37.788 biliary disorders and lupus,  
NOTE Confidence: 0.858645745  
00:42:37.790 --> 00:42:40.130 and those seem to be positively  
NOTE Confidence: 0.858645745  
00:42:40.130 --> 00:42:41.690 related to schizophrenia and  
NOTE Confidence: 0.858645745  
00:42:41.755 --> 00:42:43.507 mood and anxiety disorders.  
NOTE Confidence: 0.858645745  
00:42:43.510 --> 00:42:45.550 We also saw predominance of positive  
NOTE Confidence: 0.858645745  
00:42:45.550 --> 00:42:47.750 relationships for asthma and hypothyroidism,  
NOTE Confidence: 0.858645745  
00:42:47.750 --> 00:42:50.080 and those included a slightly  
NOTE Confidence: 0.858645745  
00:42:50.080 --> 00:42:51.944 different set of psychiatric  
NOTE Confidence: 0.858645745  
00:42:51.944 --> 00:42:54.906 phenotypes for some immune phenotypes.  
NOTE Confidence: 0.858645745

00:42:54.906 --> 00:42:56.970 Like celiac disease and another  
NOTE Confidence: 0.858645745

00:42:56.970 --> 00:42:59.130 of the biliary diseases we saw  
NOTE Confidence: 0.858645745

00:42:59.199 --> 00:43:01.437 sort of a mixed pattern across  
NOTE Confidence: 0.858645745

00:43:01.437 --> 00:43:03.516 disorders with some positive and  
NOTE Confidence: 0.858645745

00:43:03.516 --> 00:43:05.600 some negative correlation across  
NOTE Confidence: 0.858645745

00:43:05.600 --> 00:43:07.163 different psychiatric traits.  
NOTE Confidence: 0.858645745

00:43:07.170 --> 00:43:09.222 And then some of the immune  
NOTE Confidence: 0.858645745

00:43:09.222 --> 00:43:11.698 related disorders seem to have a  
NOTE Confidence: 0.858645745

00:43:11.698 --> 00:43:13.249 predominantly negative correlation  
NOTE Confidence: 0.858645745

00:43:13.249 --> 00:43:15.146 across across the psychiatric traits.  
NOTE Confidence: 0.858645745

00:43:15.146 --> 00:43:17.210 At least the ones that were  
NOTE Confidence: 0.858645745

00:43:17.273 --> 00:43:18.518 available to measure.  
NOTE Confidence: 0.858645745

00:43:18.520 --> 00:43:20.190 And.  
NOTE Confidence: 0.858645745

00:43:20.190 --> 00:43:22.218 Another thing that we did here  
NOTE Confidence: 0.858645745

00:43:22.218 --> 00:43:24.184 is we included genetic data for  
NOTE Confidence: 0.858645745

00:43:24.184 --> 00:43:25.654 these additional risk factors that

NOTE Confidence: 0.858645745

00:43:25.654 --> 00:43:27.710 I showed you on the last slide.

NOTE Confidence: 0.858645745

00:43:27.710 --> 00:43:29.250 So the health related behaviors,

NOTE Confidence: 0.858645745

00:43:29.250 --> 00:43:30.474 the sleeping behaviors,

NOTE Confidence: 0.858645745

00:43:30.474 --> 00:43:34.516 and what we found was that many of

NOTE Confidence: 0.858645745

00:43:34.516 --> 00:43:37.284 these potentially confounding or

NOTE Confidence: 0.858645745

00:43:37.284 --> 00:43:39.916 mediating phenotypes show significant

NOTE Confidence: 0.858645745

00:43:39.916 --> 00:43:42.525 genetic correlations with both

NOTE Confidence: 0.858645745

00:43:42.525 --> 00:43:44.749 immune and psychiatric disorders.

NOTE Confidence: 0.858645745

00:43:44.750 --> 00:43:46.898 The effect sizes were stronger for

NOTE Confidence: 0.858645745

00:43:46.898 --> 00:43:48.850 the psychiatric disorders on average.

NOTE Confidence: 0.944730125714286

00:43:52.240 --> 00:43:55.102 So the next thing we did was we wanted

NOTE Confidence: 0.944730125714286

00:43:55.102 --> 00:43:58.174 to use genetic data to try to answer

NOTE Confidence: 0.944730125714286

00:43:58.174 --> 00:44:00.846 the question of whether whether a is

NOTE Confidence: 0.944730125714286

00:44:00.846 --> 00:44:03.442 causing B or B is causing A and the

NOTE Confidence: 0.944730125714286

00:44:03.442 --> 00:44:05.370 way we did that was with a method

NOTE Confidence: 0.944730125714286

00:44:05.434 --> 00:44:07.258 called Mendelian randomization,  
NOTE Confidence: 0.944730125714286

00:44:07.260 --> 00:44:09.290 and it's a complex method.  
NOTE Confidence: 0.944730125714286

00:44:09.290 --> 00:44:11.829 I can't explain all the details of it, but.  
NOTE Confidence: 0.944730125714286

00:44:11.829 --> 00:44:15.341 The brief version is that if we assume  
NOTE Confidence: 0.944730125714286

00:44:15.341 --> 00:44:18.619 that the causal loci for phenotype,  
NOTE Confidence: 0.944730125714286

00:44:18.620 --> 00:44:20.153 if we assume that we know the  
NOTE Confidence: 0.944730125714286

00:44:20.153 --> 00:44:21.680 cause of LOCI for phenotype A,  
NOTE Confidence: 0.944730125714286

00:44:21.680 --> 00:44:23.780 we can then look at phenotype B.  
NOTE Confidence: 0.944730125714286

00:44:23.780 --> 00:44:25.520 Those same positions on the genome,  
NOTE Confidence: 0.944730125714286

00:44:25.520 --> 00:44:27.110 and we can.  
NOTE Confidence: 0.944730125714286

00:44:27.110 --> 00:44:30.050 We can ask, do those also show risk  
NOTE Confidence: 0.944730125714286

00:44:30.050 --> 00:44:32.660 for free and type B in those positions?  
NOTE Confidence: 0.944730125714286

00:44:32.660 --> 00:44:33.648 And if that's true,  
NOTE Confidence: 0.944730125714286

00:44:33.648 --> 00:44:35.130 there might be a causal effect  
NOTE Confidence: 0.944730125714286

00:44:35.180 --> 00:44:36.068 in that direction,  
NOTE Confidence: 0.944730125714286

00:44:36.070 --> 00:44:37.820 and we can ask the opposite question.

NOTE Confidence: 0.944730125714286  
00:44:37.820 --> 00:44:40.340 The causal loci for phenotype B?  
NOTE Confidence: 0.944730125714286  
00:44:40.340 --> 00:44:41.870 Do they show any evidence  
NOTE Confidence: 0.944730125714286  
00:44:41.870 --> 00:44:43.400 of effects in phenotype a?  
NOTE Confidence: 0.944730125714286  
00:44:43.400 --> 00:44:46.376 So it's a it's a more directional analysis.  
NOTE Confidence: 0.944730125714286  
00:44:46.380 --> 00:44:48.326 So for all of the 44 correlations  
NOTE Confidence: 0.944730125714286  
00:44:48.326 --> 00:44:50.317 I showed you in the last slide,  
NOTE Confidence: 0.944730125714286  
00:44:50.320 --> 00:44:52.692 we basically performed this  
NOTE Confidence: 0.944730125714286  
00:44:52.692 --> 00:44:53.878 analysis bidirectionally.  
NOTE Confidence: 0.944730125714286  
00:44:53.880 --> 00:44:55.435 So testing both directions of  
NOTE Confidence: 0.944730125714286  
00:44:55.435 --> 00:44:57.843 effect and we found a total of  
NOTE Confidence: 0.944730125714286  
00:44:57.843 --> 00:44:59.427 nine significant effects here,  
NOTE Confidence: 0.944730125714286  
00:44:59.430 --> 00:45:01.302 and again I'll walk you through  
NOTE Confidence: 0.944730125714286  
00:45:01.302 --> 00:45:03.238 this slide because it's a bit busy.  
NOTE Confidence: 0.944730125714286  
00:45:03.240 --> 00:45:06.426 So eight of these effects were  
NOTE Confidence: 0.944730125714286  
00:45:06.426 --> 00:45:08.019 effects of psychiatric.  
NOTE Confidence: 0.944730125714286

00:45:08.020 --> 00:45:09.660 Patrick phenotypes on immune phenotypes  
NOTE Confidence: 0.944730125714286

00:45:09.660 --> 00:45:11.830 and seven of them were positive,  
NOTE Confidence: 0.944730125714286

00:45:11.830 --> 00:45:15.071 so the solid Red Arrows that you  
NOTE Confidence: 0.944730125714286

00:45:15.071 --> 00:45:19.350 see on the figure are all pointing  
NOTE Confidence: 0.944730125714286

00:45:19.350 --> 00:45:22.190 from various psychiatric phenotypes  
NOTE Confidence: 0.944730125714286

00:45:22.190 --> 00:45:25.540 to various immune phenotypes.  
NOTE Confidence: 0.944730125714286

00:45:25.540 --> 00:45:26.054 Specifically,  
NOTE Confidence: 0.944730125714286

00:45:26.054 --> 00:45:29.138 we saw effects involving major depression,  
NOTE Confidence: 0.944730125714286

00:45:29.140 --> 00:45:29.685 schizophrenia,  
NOTE Confidence: 0.944730125714286

00:45:29.685 --> 00:45:32.955 and also this process disorder phenotype,  
NOTE Confidence: 0.944730125714286

00:45:32.960 --> 00:45:35.390 which is composed of I think,  
NOTE Confidence: 0.944730125714286

00:45:35.390 --> 00:45:36.902 8 different psychiatric disorders.  
NOTE Confidence: 0.944730125714286

00:45:36.902 --> 00:45:38.792 But but depression and schizophrenia  
NOTE Confidence: 0.944730125714286

00:45:38.792 --> 00:45:40.401 figure heavily in those because  
NOTE Confidence: 0.944730125714286

00:45:40.401 --> 00:45:42.171 they're some of the largest samples,  
NOTE Confidence: 0.944730125714286

00:45:42.180 --> 00:45:44.100 so the effects are modest.



NOTE Confidence: 0.944730125714286

00:45:44.100 --> 00:45:46.913 The average odds ratio was 1.1.

NOTE Confidence: 0.944730125714286

00:45:46.913 --> 00:45:49.384 The largest effect that we saw was

NOTE Confidence: 0.944730125714286

00:45:49.384 --> 00:45:51.520 an effective depression on asthma

NOTE Confidence: 0.944730125714286

00:45:51.520 --> 00:45:53.872 and then the smallest effect was

NOTE Confidence: 0.944730125714286

00:45:53.872 --> 00:45:55.710 the cross disorder affect on.

NOTE Confidence: 0.944730125714286

00:45:55.710 --> 00:45:56.150 Asthma,

NOTE Confidence: 0.944730125714286

00:45:56.150 --> 00:45:58.790 so the way to understand these

NOTE Confidence: 0.944730125714286

00:45:58.790 --> 00:46:02.060 is the genetic liability for the

NOTE Confidence: 0.944730125714286

00:46:02.060 --> 00:46:04.258 psychiatric trait increases increases

NOTE Confidence: 0.944730125714286

00:46:04.258 --> 00:46:06.226 the genetic liability for the immune

NOTE Confidence: 0.944730125714286

00:46:06.226 --> 00:46:08.040 related trade and the window when

NOTE Confidence: 0.85049644

00:46:08.050 --> 00:46:08.900 you'd like to do it.

NOTE Confidence: 0.823253875555556

00:46:11.180 --> 00:46:13.202 One of these, one of these

NOTE Confidence: 0.823253875555556

00:46:13.202 --> 00:46:14.213 relationships was negative,

NOTE Confidence: 0.823253875555556

00:46:14.220 --> 00:46:17.120 so risk tolerance was associated

NOTE Confidence: 0.823253875555556

00:46:17.120 --> 00:46:19.440 with decreased genetic liability  
NOTE Confidence: 0.823253875555556

00:46:19.440 --> 00:46:22.630 to allergic rhinitis for hay fever.  
NOTE Confidence: 0.866894973529412

00:46:25.390 --> 00:46:28.102 And we had some effects that did not  
NOTE Confidence: 0.866894973529412

00:46:28.102 --> 00:46:30.607 survive the sensitivity testing and  
NOTE Confidence: 0.866894973529412

00:46:30.607 --> 00:46:32.947 then the multivariable adjustment.  
NOTE Confidence: 0.866894973529412

00:46:32.950 --> 00:46:35.729 So you can see that sort of  
NOTE Confidence: 0.866894973529412

00:46:35.730 --> 00:46:38.058 dashed blue line on the bottom.  
NOTE Confidence: 0.866894973529412

00:46:38.060 --> 00:46:39.660 It's dashed because the relationship  
NOTE Confidence: 0.866894973529412

00:46:39.660 --> 00:46:41.575 was interrupted and the things that  
NOTE Confidence: 0.866894973529412

00:46:41.575 --> 00:46:43.381 interrupted it were all of the Gray  
NOTE Confidence: 0.866894973529412

00:46:43.381 --> 00:46:45.079 phenotypes on the bottom that have  
NOTE Confidence: 0.866894973529412

00:46:45.079 --> 00:46:46.489 little lines pointing toward it.  
NOTE Confidence: 0.866894973529412

00:46:46.490 --> 00:46:47.770 So body mass index,  
NOTE Confidence: 0.866894973529412

00:46:47.770 --> 00:46:49.370 cognitive processing all of those  
NOTE Confidence: 0.866894973529412

00:46:49.370 --> 00:46:51.408 seem to attenuate the relationship,  
NOTE Confidence: 0.866894973529412

00:46:51.410 --> 00:46:53.225 suggesting that the relationship could

NOTE Confidence: 0.866894973529412  
00:46:53.225 --> 00:46:55.510 potentially be mediated by other factors.  
NOTE Confidence: 0.866894973529412  
00:46:55.810 --> 00:46:56.130 Right?  
NOTE Confidence: 0.8953953225  
00:46:57.260 --> 00:47:00.630 It's up to him. Can I ask people to  
NOTE Confidence: 0.8953953225  
00:47:00.630 --> 00:47:02.900 mute please? Other than that, thanks,  
NOTE Confidence: 0.729539275  
00:47:02.910 --> 00:47:04.258 yeah we had time.  
NOTE Confidence: 0.23590999  
00:47:06.450 --> 00:47:09.534 We we saw one we saw one effect  
NOTE Confidence: 0.23590999  
00:47:09.534 --> 00:47:10.950 of hypothyroidism on MDD.  
NOTE Confidence: 0.23590999  
00:47:10.950 --> 00:47:13.884 It was it was not significant  
NOTE Confidence: 0.23590999  
00:47:13.884 --> 00:47:15.840 after multivariable adjustment so.  
NOTE Confidence: 0.23590999  
00:47:15.840 --> 00:47:17.060 And so we didn't make.  
NOTE Confidence: 0.23590999  
00:47:17.060 --> 00:47:20.910 We didn't consider it a robust basically.  
NOTE Confidence: 0.23590999  
00:47:20.910 --> 00:47:23.766 So interpretation discussion.  
NOTE Confidence: 0.23590999  
00:47:23.766 --> 00:47:25.838 Basically, these genetic analysis  
NOTE Confidence: 0.23590999  
00:47:25.838 --> 00:47:28.395 find stronger support for the  
NOTE Confidence: 0.23590999  
00:47:28.395 --> 00:47:30.059 idea that psychiatric disorders  
NOTE Confidence: 0.23590999

00:47:30.059 --> 00:47:31.723 might be contributing causally  
NOTE Confidence: 0.23590999

00:47:31.723 --> 00:47:33.708 to immune related disorders.  
NOTE Confidence: 0.23590999

00:47:33.710 --> 00:47:34.810 We found relatively little  
NOTE Confidence: 0.23590999

00:47:34.810 --> 00:47:36.560 evidence in the opposite direction.  
NOTE Confidence: 0.85818719

00:47:38.870 --> 00:47:40.856 There are a number of limitations  
NOTE Confidence: 0.85818719

00:47:40.856 --> 00:47:42.530 that I don't necessarily think  
NOTE Confidence: 0.85818719

00:47:42.530 --> 00:47:43.760 we need to get into here,  
NOTE Confidence: 0.85818719

00:47:43.760 --> 00:47:46.646 but in context, so there is.  
NOTE Confidence: 0.85818719

00:47:46.650 --> 00:47:47.766 There is epidemiologic  
NOTE Confidence: 0.85818719

00:47:47.766 --> 00:47:49.626 support for MDD and asthma.  
NOTE Confidence: 0.85818719

00:47:49.630 --> 00:47:51.890 There is less consistent epidemiologic  
NOTE Confidence: 0.85818719

00:47:51.890 --> 00:47:54.150 support for schizophrenia and the  
NOTE Confidence: 0.85818719

00:47:54.213 --> 00:47:56.563 inflammatory bowel disorders and there's  
NOTE Confidence: 0.85818719

00:47:56.563 --> 00:47:58.913 really no literature linking risks  
NOTE Confidence: 0.85818719

00:47:58.985 --> 00:48:01.115 risk taking behavior to hay fever.  
NOTE Confidence: 0.85818719

00:48:01.120 --> 00:48:03.648 And we do replicate the results of some

NOTE Confidence: 0.85818719  
00:48:03.648 --> 00:48:05.610 prior Mendelian randomization studies,  
NOTE Confidence: 0.85818719  
00:48:05.610 --> 00:48:06.510 which is encouraging.  
NOTE Confidence: 0.768223305  
00:48:08.660 --> 00:48:12.356 Our results do need to be reconciled with.  
NOTE Confidence: 0.768223305  
00:48:12.360 --> 00:48:14.551 A lot of epidemiologic studies that find  
NOTE Confidence: 0.768223305  
00:48:14.551 --> 00:48:17.061 that a prior immune disorder increases the  
NOTE Confidence: 0.768223305  
00:48:17.061 --> 00:48:19.920 risk for a subsequence like yatrik disorder,  
NOTE Confidence: 0.768223305  
00:48:19.920 --> 00:48:21.840 so the temporal patterning in these  
NOTE Confidence: 0.768223305  
00:48:21.840 --> 00:48:23.599 studies is opposite what we what.  
NOTE Confidence: 0.768223305  
00:48:23.600 --> 00:48:27.630 What our data suggests so.  
NOTE Confidence: 0.768223305  
00:48:27.630 --> 00:48:29.286 I was trying to think about  
NOTE Confidence: 0.768223305  
00:48:29.286 --> 00:48:30.390 ways to explain that,  
NOTE Confidence: 0.768223305  
00:48:30.390 --> 00:48:32.766 and one of the the line of thinking  
NOTE Confidence: 0.768223305  
00:48:32.766 --> 00:48:35.267 that I followed is that you know  
NOTE Confidence: 0.768223305  
00:48:35.267 --> 00:48:37.102 on the whole these immune,  
NOTE Confidence: 0.768223305  
00:48:37.110 --> 00:48:38.510 these immune related disorders,  
NOTE Confidence: 0.768223305

00:48:38.510 --> 00:48:39.910 particularly like the inflammatory  
NOTE Confidence: 0.768223305

00:48:39.910 --> 00:48:40.610 bowel disorders.  
NOTE Confidence: 0.768223305

00:48:40.610 --> 00:48:43.490 They're rare, whereas psychiatric  
NOTE Confidence: 0.768223305

00:48:43.490 --> 00:48:46.370 symptoms are relatively common.  
NOTE Confidence: 0.768223305

00:48:46.370 --> 00:48:49.079 And it's possible that people who are  
NOTE Confidence: 0.768223305

00:48:49.079 --> 00:48:51.559 being ascertained for an immune disorder  
NOTE Confidence: 0.768223305

00:48:51.559 --> 00:48:53.649 have some amount of subclinical,  
NOTE Confidence: 0.768223305

00:48:53.650 --> 00:48:56.230 undiagnosed psychiatric illness  
NOTE Confidence: 0.768223305

00:48:56.230 --> 00:48:59.201 ahead beforehand that that is  
NOTE Confidence: 0.768223305

00:48:59.201 --> 00:49:02.120 likely just based on the how common  
NOTE Confidence: 0.768223305

00:49:02.213 --> 00:49:05.680 psychiatric symptoms are.  
NOTE Confidence: 0.768223305

00:49:05.680 --> 00:49:08.151 We also have to reconcile our work  
NOTE Confidence: 0.768223305

00:49:08.151 --> 00:49:10.772 with some some studies that look  
NOTE Confidence: 0.768223305

00:49:10.772 --> 00:49:12.684 at cytokine concentrations and  
NOTE Confidence: 0.768223305

00:49:12.684 --> 00:49:14.371 psychiatric disorders that seem  
NOTE Confidence: 0.768223305

00:49:14.371 --> 00:49:16.375 to suggest the cytokines are are

NOTE Confidence: 0.768223305

00:49:16.380 --> 00:49:18.188 causal for psychiatric disorders.

NOTE Confidence: 0.81069451175

00:49:20.350 --> 00:49:22.696 And then future studies in this

NOTE Confidence: 0.81069451175

00:49:22.696 --> 00:49:25.514 in this area are going to need

NOTE Confidence: 0.81069451175

00:49:25.514 --> 00:49:28.084 to include these third variable

NOTE Confidence: 0.81069451175

00:49:28.084 --> 00:49:30.140 confounding or mediating phenotypes.

NOTE Confidence: 0.81069451175

00:49:30.140 --> 00:49:32.505 And because they exert outsize

NOTE Confidence: 0.81069451175

00:49:32.505 --> 00:49:35.432 effects on the data in the future,

NOTE Confidence: 0.81069451175

00:49:35.432 --> 00:49:38.120 I would love to integrate markers of HP,

NOTE Confidence: 0.81069451175

00:49:38.120 --> 00:49:40.890 a access functioning inflammatory markers,

NOTE Confidence: 0.81069451175

00:49:40.890 --> 00:49:41.814 immune cell counts,

NOTE Confidence: 0.81069451175

00:49:41.814 --> 00:49:44.410 there's GWAS data for these sorts of things.

NOTE Confidence: 0.81069451175

00:49:44.410 --> 00:49:47.273 And then of course, it's possible that

NOTE Confidence: 0.81069451175

00:49:47.273 --> 00:49:50.000 larger data sets may actually yield.

NOTE Confidence: 0.81069451175

00:49:50.000 --> 00:49:52.724 May actually yield bidirectional effects or

NOTE Confidence: 0.81069451175

00:49:52.724 --> 00:49:56.179 effects of immune on psychiatric disorders.

NOTE Confidence: 0.81069451175

00:49:56.180 --> 00:49:57.212 So that.  
NOTE Confidence: 0.81069451175

00:49:57.212 --> 00:50:00.980 It's my study and thank you for listening.  
NOTE Confidence: 0.81069451175

00:50:00.980 --> 00:50:04.051 Thanks for the department and the  
NOTE Confidence: 0.81069451175

00:50:04.051 --> 00:50:07.406 Lesbian Foundation and family and.  
NOTE Confidence: 0.81069451175

00:50:07.410 --> 00:50:09.780 The award the the panel who  
NOTE Confidence: 0.81069451175

00:50:09.780 --> 00:50:10.965 made the decisions.  
NOTE Confidence: 0.81069451175

00:50:10.970 --> 00:50:12.105 Yeah and thanks Renato and  
NOTE Confidence: 0.81069451175

00:50:12.105 --> 00:50:13.558 my lab mates for getting you  
NOTE Confidence: 0.81069451175

00:50:13.558 --> 00:50:14.626 know making this possible.  
NOTE Confidence: 0.821605645

00:50:16.840 --> 00:50:18.286 Thank you Dan.  
NOTE Confidence: 0.821605645

00:50:18.286 --> 00:50:20.696 Really interesting work with some  
NOTE Confidence: 0.821605645

00:50:20.696 --> 00:50:23.299 some provocative and counterintuitive.  
NOTE Confidence: 0.821605645

00:50:23.300 --> 00:50:25.600 Things to think about in  
NOTE Confidence: 0.821605645

00:50:25.600 --> 00:50:26.344 the interest of time,  
NOTE Confidence: 0.821605645

00:50:26.344 --> 00:50:27.376 we're going to move straight on.  
NOTE Confidence: 0.821605645

00:50:27.380 --> 00:50:28.250 Can I ask you into?



NOTE Confidence: 0.57839638

00:50:31.040 --> 00:50:34.340 To close your smile. Yeah.

NOTE Confidence: 0.92525885

00:50:37.440 --> 00:50:38.650 And we will move on.

NOTE Confidence: 0.781692

00:50:42.020 --> 00:50:44.924 So our other Co Co 2nd place

NOTE Confidence: 0.781692

00:50:44.924 --> 00:50:48.914 winners are a pair of of of cranes,

NOTE Confidence: 0.781692

00:50:48.914 --> 00:50:51.716 Zach Harvey Neck and Terrell Holloway,

NOTE Confidence: 0.781692

00:50:51.720 --> 00:50:54.035 and they've asked me to

NOTE Confidence: 0.781692

00:50:54.035 --> 00:50:55.424 briefly introduce them.

NOTE Confidence: 0.781692

00:50:55.430 --> 00:50:57.746 Terrell and Zach are both senior

NOTE Confidence: 0.781692

00:50:57.746 --> 00:50:59.872 residents in the Neuroscience Research

NOTE Confidence: 0.781692

00:50:59.872 --> 00:51:01.726 Training program and have really been

NOTE Confidence: 0.781692

00:51:01.726 --> 00:51:02.746 wonderful members of the program,

NOTE Confidence: 0.781692

00:51:02.750 --> 00:51:04.660 not only with the the

NOTE Confidence: 0.781692

00:51:04.660 --> 00:51:06.188 science that you'll hear,

NOTE Confidence: 0.781692

00:51:06.190 --> 00:51:09.109 but also as clinical leaders and also

NOTE Confidence: 0.781692

00:51:09.109 --> 00:51:11.755 as just wonderful citizens and and and

NOTE Confidence: 0.781692

00:51:11.755 --> 00:51:13.770 and leaders in the residency as a whole.

NOTE Confidence: 0.781692

00:51:13.770 --> 00:51:16.050 In the NTP in particular.

NOTE Confidence: 0.781692

00:51:16.050 --> 00:51:17.915 Terrell did his bachelor's at

NOTE Confidence: 0.781692

00:51:17.915 --> 00:51:20.699 Brown and his MD at Mount Sinai

NOTE Confidence: 0.781692

00:51:20.700 --> 00:51:21.910 before and during his MD.

NOTE Confidence: 0.781692

00:51:21.910 --> 00:51:23.795 He did some really first

NOTE Confidence: 0.781692

00:51:23.795 --> 00:51:25.303 rate basic science work.

NOTE Confidence: 0.781692

00:51:25.310 --> 00:51:26.639 Looking at neurotransmitter

NOTE Confidence: 0.781692

00:51:26.639 --> 00:51:28.411 mechanisms with with relevance

NOTE Confidence: 0.781692

00:51:28.411 --> 00:51:31.376 to some of our recent interests

NOTE Confidence: 0.781692

00:51:31.376 --> 00:51:32.948 in psychedelics interesting.

NOTE Confidence: 0.781692

00:51:32.950 --> 00:51:34.094 And then when he came here,

NOTE Confidence: 0.781692

00:51:34.094 --> 00:51:36.070 he shifted his focus to to what

NOTE Confidence: 0.781692

00:51:36.070 --> 00:51:38.000 you're going to hear about today,

NOTE Confidence: 0.781692

00:51:38.000 --> 00:51:40.046 which is the focus of social

NOTE Confidence: 0.781692

00:51:40.046 --> 00:51:42.293 determinants of health and in particular

NOTE Confidence: 0.781692

00:51:42.293 --> 00:51:44.343 race and racism on psychiatric

NOTE Confidence: 0.781692

00:51:44.343 --> 00:51:46.230 outcomes and this combination.

NOTE Confidence: 0.781692

00:51:46.230 --> 00:51:47.850 Of a focus on social determinants

NOTE Confidence: 0.781692

00:51:47.850 --> 00:51:49.988 of health and a deep understanding

NOTE Confidence: 0.781692

00:51:49.988 --> 00:51:51.976 of underlying molecular mechanisms.

NOTE Confidence: 0.781692

00:51:51.980 --> 00:51:53.762 Puts Terrell in a really special

NOTE Confidence: 0.781692

00:51:53.762 --> 00:51:55.695 position to be able to do syncratic

NOTE Confidence: 0.781692

00:51:55.695 --> 00:51:57.670 synergistic work with the type

NOTE Confidence: 0.781692

00:51:57.670 --> 00:52:00.100 you're going to hear about today.

NOTE Confidence: 0.781692

00:52:00.100 --> 00:52:03.046 So I Carbanak did his bachelor's at Duke

NOTE Confidence: 0.781692

00:52:03.046 --> 00:52:04.456 in biomedical engineering and biology,

NOTE Confidence: 0.781692

00:52:04.460 --> 00:52:07.754 and then he did his PhD in at Michigan,

NOTE Confidence: 0.781692

00:52:07.760 --> 00:52:09.839 where he studied the aging in the

NOTE Confidence: 0.781692

00:52:09.839 --> 00:52:12.004 lowly fruit fly chrysocolla and when

NOTE Confidence: 0.781692

00:52:12.004 --> 00:52:14.180 he came to the NTP here at Yale,

NOTE Confidence: 0.781692

00:52:14.180 --> 00:52:16.910 he he kept that focus on aging.

NOTE Confidence: 0.781692

00:52:16.910 --> 00:52:18.793 But switched to something we like to

NOTE Confidence: 0.781692

00:52:18.793 --> 00:52:21.088 think of as a little bit less slowly

NOTE Confidence: 0.781692

00:52:21.088 --> 00:52:22.911 that the human power human mechanisms

NOTE Confidence: 0.781692

00:52:22.911 --> 00:52:24.927 of aging and how they're influenced

NOTE Confidence: 0.781692

00:52:24.927 --> 00:52:28.990 by stress and psychiatric phenotypes.

NOTE Confidence: 0.781692

00:52:28.990 --> 00:52:30.593 I love that the two of them

NOTE Confidence: 0.781692

00:52:30.593 --> 00:52:31.670 Co submit this paper.

NOTE Confidence: 0.781692

00:52:31.670 --> 00:52:33.550 I can't remember that happening

NOTE Confidence: 0.781692

00:52:33.550 --> 00:52:35.430 in the previous last minute.

NOTE Confidence: 0.781692

00:52:35.430 --> 00:52:36.390 Last minute words,

NOTE Confidence: 0.781692

00:52:36.390 --> 00:52:39.047 but it it speaks to this this strength

NOTE Confidence: 0.781692

00:52:39.047 --> 00:52:41.476 not only of their science but also

NOTE Confidence: 0.781692

00:52:41.476 --> 00:52:44.038 of their their collaborative spirit,

NOTE Confidence: 0.781692

00:52:44.040 --> 00:52:46.704 and it's great to see to see their

NOTE Confidence: 0.781692

00:52:46.704 --> 00:52:48.618 work synergizing like it does here.

NOTE Confidence: 0.781692

00:52:48.620 --> 00:52:50.306 I know they're going to acknowledge

NOTE Confidence: 0.781692

00:52:50.306 --> 00:52:51.720 their mentors during the talk,

NOTE Confidence: 0.781692

00:52:51.720 --> 00:52:53.440 but I want to give a shout out

NOTE Confidence: 0.781692

00:52:53.440 --> 00:52:54.290 to Derrick Gordon.

NOTE Confidence: 0.781692

00:52:54.290 --> 00:52:56.628 Would you just Sinha and could shoot?

NOTE Confidence: 0.781692

00:52:56.630 --> 00:52:57.713 Metric this one.

NOTE Confidence: 0.781692

00:52:57.713 --> 00:52:59.879 Terrell is that take you awhile.

NOTE Confidence: 0.877216765714286

00:53:00.970 --> 00:53:02.538 Thank you very much for the introduction,

NOTE Confidence: 0.877216765714286

00:53:02.540 --> 00:53:05.648 Chris. And thank you all for

NOTE Confidence: 0.877216765714286

00:53:05.650 --> 00:53:07.350 taking part in this presentation.

NOTE Confidence: 0.877216765714286

00:53:07.350 --> 00:53:09.842 Zach and I will be alternating the

NOTE Confidence: 0.877216765714286

00:53:09.842 --> 00:53:11.932 slides throughout and so you know just

NOTE Confidence: 0.877216765714286

00:53:11.932 --> 00:53:14.030 as a means of just giving you a sense of

NOTE Confidence: 0.877216765714286

00:53:14.030 --> 00:53:15.750 how this is going to go back and forth.

NOTE Confidence: 0.877216765714286

00:53:15.750 --> 00:53:16.359 Just presenting that,

NOTE Confidence: 0.877216765714286

00:53:16.359 --> 00:53:19.640 could you go to the next slide, please?

NOTE Confidence: 0.877216765714286

00:53:19.640 --> 00:53:22.304 We have no disclosures to to share in

NOTE Confidence: 0.877216765714286

00:53:22.304 --> 00:53:24.783 regards to any conflicts of interest and

NOTE Confidence: 0.877216765714286

00:53:24.783 --> 00:53:28.095 and just as it means of like how big

NOTE Confidence: 0.877216765714286

00:53:28.095 --> 00:53:30.345 this slide this this presentation was,

NOTE Confidence: 0.877216765714286

00:53:30.350 --> 00:53:31.512 we had to curtail it a little

NOTE Confidence: 0.877216765714286

00:53:31.512 --> 00:53:32.739 bit just to accommodate time.

NOTE Confidence: 0.877216765714286

00:53:32.740 --> 00:53:35.150 And so to start off.

NOTE Confidence: 0.877216765714286

00:53:35.150 --> 00:53:36.218 As we all know,

NOTE Confidence: 0.877216765714286

00:53:36.218 --> 00:53:37.820 there's been a lot of epidemiologic

NOTE Confidence: 0.877216765714286

00:53:37.878 --> 00:53:39.633 data that has demonstrated this

NOTE Confidence: 0.877216765714286

00:53:39.633 --> 00:53:41.037 long standing mortality gap

NOTE Confidence: 0.877216765714286

00:53:41.037 --> 00:53:42.810 between black and white Americans.

NOTE Confidence: 0.877216765714286

00:53:42.810 --> 00:53:44.746 As we can see on the slide on

NOTE Confidence: 0.877216765714286

00:53:44.746 --> 00:53:46.868 the the graph below to the left,

NOTE Confidence: 0.877216765714286

00:53:46.870 --> 00:53:49.108 we see that though that there's

NOTE Confidence: 0.877216765714286

00:53:49.108 --> 00:53:50.227 been a decreasing.

NOTE Confidence: 0.877216765714286

00:53:50.230 --> 00:53:51.810 Uh, decreasing age and mortality,

NOTE Confidence: 0.877216765714286

00:53:51.810 --> 00:53:54.336 or decreasing deaths per 100,000 over

NOTE Confidence: 0.877216765714286

00:53:54.336 --> 00:53:57.508 the years that have gone on since 2014.

NOTE Confidence: 0.877216765714286

00:53:57.510 --> 00:53:59.407 But we still see is a persistent

NOTE Confidence: 0.877216765714286

00:53:59.407 --> 00:54:01.009 gap between the life expectancy

NOTE Confidence: 0.877216765714286

00:54:01.009 --> 00:54:02.824 of black and white Americans.

NOTE Confidence: 0.877216765714286

00:54:02.830 --> 00:54:04.800 Similarly looking to their right

NOTE Confidence: 0.877216765714286

00:54:04.800 --> 00:54:07.410 and the CDC as reported in 2020,

NOTE Confidence: 0.877216765714286

00:54:07.410 --> 00:54:09.530 this health life expectancy

NOTE Confidence: 0.877216765714286

00:54:09.530 --> 00:54:11.242 gap has actually persisted.

NOTE Confidence: 0.877216765714286

00:54:11.242 --> 00:54:13.524 And also in light of the the

NOTE Confidence: 0.877216765714286

00:54:13.524 --> 00:54:15.229 pandemic has actually increased.

NOTE Confidence: 0.877216765714286

00:54:15.230 --> 00:54:17.270 And so.

NOTE Confidence: 0.877216765714286

00:54:17.270 --> 00:54:20.078 Given the fact that there have also been

NOTE Confidence: 0.877216765714286

00:54:20.078 --> 00:54:22.056 external factors such as differential  
NOTE Confidence: 0.877216765714286

00:54:22.056 --> 00:54:24.480 access to care and institutional bias,  
NOTE Confidence: 0.877216765714286

00:54:24.480 --> 00:54:25.926 that may inform some of these,  
NOTE Confidence: 0.877216765714286

00:54:25.930 --> 00:54:27.505 these disparities growing  
NOTE Confidence: 0.877216765714286

00:54:27.505 --> 00:54:30.130 literature has shown that increase,  
NOTE Confidence: 0.877216765714286

00:54:30.130 --> 00:54:30.605 increasingly,  
NOTE Confidence: 0.877216765714286

00:54:30.605 --> 00:54:33.930 that biomarkers of health also are different,  
NOTE Confidence: 0.877216765714286

00:54:33.930 --> 00:54:35.970 and these two different populations,  
NOTE Confidence: 0.877216765714286

00:54:35.970 --> 00:54:38.946 just to name a few as.  
NOTE Confidence: 0.877216765714286

00:54:38.950 --> 00:54:41.530 Doctor Tylee House was able to  
NOTE Confidence: 0.877216765714286

00:54:41.530 --> 00:54:43.254 introduce earlier sciatic kinds of  
NOTE Confidence: 0.877216765714286

00:54:43.254 --> 00:54:44.406 health and signatory cytokines.  
NOTE Confidence: 0.877216765714286

00:54:44.410 --> 00:54:46.447 In particular have been shown to be  
NOTE Confidence: 0.877216765714286

00:54:46.447 --> 00:54:48.469 increased in African American populations.  
NOTE Confidence: 0.877216765714286

00:54:48.470 --> 00:54:50.828 In addition to.  
NOTE Confidence: 0.877216765714286

00:54:50.830 --> 00:54:52.610 Increases and changes in.



NOTE Confidence: 0.762682601333333  
00:54:55.430 --> 00:54:57.716 Methylation and also in telomere length  
NOTE Confidence: 0.762682601333333  
00:54:57.716 --> 00:55:00.594 in regards to how short and telling  
NOTE Confidence: 0.762682601333333  
00:55:00.594 --> 00:55:03.162 your life like in African American  
NOTE Confidence: 0.762682601333333  
00:55:03.162 --> 00:55:05.585 populations and so in trying to understand  
NOTE Confidence: 0.762682601333333  
00:55:05.585 --> 00:55:07.750 what it is that's driving this,  
NOTE Confidence: 0.762682601333333  
00:55:07.750 --> 00:55:09.070 this mortality gap.  
NOTE Confidence: 0.762682601333333  
00:55:09.070 --> 00:55:10.958 One of the ways we're that we were  
NOTE Confidence: 0.762682601333333  
00:55:10.958 --> 00:55:12.750 looking at what we were interested in  
NOTE Confidence: 0.762682601333333  
00:55:12.750 --> 00:55:14.353 looking to see is how epigenetically  
NOTE Confidence: 0.762682601333333  
00:55:14.353 --> 00:55:16.341 if this will also pan out to  
NOTE Confidence: 0.762682601333333  
00:55:16.341 --> 00:55:18.365 show these differences and may  
NOTE Confidence: 0.762682601333333  
00:55:18.365 --> 00:55:20.305 inform this mortality gap.  
NOTE Confidence: 0.762682601333333  
00:55:20.310 --> 00:55:21.090 Next slide please.  
NOTE Confidence: 0.50405788  
00:55:22.940 --> 00:55:26.100 Estrel so one way we can conceptualize  
NOTE Confidence: 0.50405788  
00:55:26.100 --> 00:55:28.580 these health disparities is is  
NOTE Confidence: 0.50405788

00:55:28.580 --> 00:55:30.564 a accelerated biological aging.  
NOTE Confidence: 0.50405788

00:55:30.570 --> 00:55:32.266 Because black individuals in  
NOTE Confidence: 0.50405788

00:55:32.266 --> 00:55:34.156 America might be dying earlier  
NOTE Confidence: 0.50405788

00:55:34.156 --> 00:55:35.750 because they're aging faster.  
NOTE Confidence: 0.50405788

00:55:35.750 --> 00:55:37.820 Prior work has shown that that  
NOTE Confidence: 0.50405788

00:55:37.820 --> 00:55:39.664 life experiences like trauma and  
NOTE Confidence: 0.50405788

00:55:39.664 --> 00:55:42.052 life lifetime adversity can lead to  
NOTE Confidence: 0.50405788

00:55:42.052 --> 00:55:43.944 accelerated biological aging and and  
NOTE Confidence: 0.50405788

00:55:43.944 --> 00:55:46.026 we know that black Americans face  
NOTE Confidence: 0.50405788

00:55:46.026 --> 00:55:48.109 higher levels of stress and trauma.  
NOTE Confidence: 0.50405788

00:55:48.110 --> 00:55:49.958 Recent development developments and  
NOTE Confidence: 0.50405788

00:55:49.958 --> 00:55:52.730 epigenetics have led to epigenetic clocks,  
NOTE Confidence: 0.50405788

00:55:52.730 --> 00:55:54.296 one of which is called brimmage,  
NOTE Confidence: 0.50405788

00:55:54.300 --> 00:55:55.630 that we'll be using here,  
NOTE Confidence: 0.50405788

00:55:55.630 --> 00:55:57.826 which are sets of epigenetic markers  
NOTE Confidence: 0.50405788

00:55:57.826 --> 00:56:00.076 that have really been trained to

NOTE Confidence: 0.50405788

00:56:00.076 --> 00:56:01.876 predict aging related outcomes and

NOTE Confidence: 0.50405788

00:56:01.876 --> 00:56:04.297 allow us to estimate a biological

NOTE Confidence: 0.50405788

00:56:04.297 --> 00:56:06.427 age even in healthy populations.

NOTE Confidence: 0.50405788

00:56:06.430 --> 00:56:06.850 Next slide.

NOTE Confidence: 0.84185266

00:56:08.690 --> 00:56:10.510 So taking both of those things

NOTE Confidence: 0.84185266

00:56:10.510 --> 00:56:12.070 together and we were interested

NOTE Confidence: 0.833240545789474

00:56:12.123 --> 00:56:14.445 in in a Community example here in New Haven,

NOTE Confidence: 0.833240545789474

00:56:14.450 --> 00:56:17.136 in analyzing to see whether or not there

NOTE Confidence: 0.833240545789474

00:56:17.136 --> 00:56:19.278 was any difference in this genetic clock

NOTE Confidence: 0.833240545789474

00:56:19.278 --> 00:56:20.968 between black and white Americans,

NOTE Confidence: 0.833240545789474

00:56:20.970 --> 00:56:23.562 and also what potential factors may

NOTE Confidence: 0.833240545789474

00:56:23.562 --> 00:56:26.149 inform this difference in aging rate.

NOTE Confidence: 0.833240545789474

00:56:26.150 --> 00:56:28.130 And so if you could go to the next slide,

NOTE Confidence: 0.833240545789474

00:56:28.130 --> 00:56:29.918 please we actually through

NOTE Confidence: 0.833240545789474

00:56:29.918 --> 00:56:31.706 the yellow stress Center,

NOTE Confidence: 0.833240545789474

00:56:31.710 --> 00:56:36.746 had recruited a cohort of about 400 healthy  
NOTE Confidence: 0.833240545789474

00:56:36.746 --> 00:56:39.686 volunteers and essentially had assessed.  
NOTE Confidence: 0.833240545789474

00:56:39.690 --> 00:56:41.582 Various psychological managers through  
NOTE Confidence: 0.833240545789474

00:56:41.582 --> 00:56:43.947 the cumulative adversity inventory which  
NOTE Confidence: 0.833240545789474

00:56:43.947 --> 00:56:47.420 is 140 interview survey that assessed  
NOTE Confidence: 0.833240545789474

00:56:47.420 --> 00:56:50.420 traumatic life offense chronic stress,  
NOTE Confidence: 0.833240545789474

00:56:50.420 --> 00:56:52.695 major life events and recent life events.  
NOTE Confidence: 0.833240545789474

00:56:52.700 --> 00:56:54.458 In addition, that's not shown here.  
NOTE Confidence: 0.833240545789474

00:56:54.460 --> 00:56:56.884 We had assessed health through self  
NOTE Confidence: 0.833240545789474

00:56:56.884 --> 00:56:59.000 reported Cornell Medical Index survey,  
NOTE Confidence: 0.833240545789474

00:56:59.000 --> 00:57:01.712 which is another 195 battery question  
NOTE Confidence: 0.833240545789474

00:57:01.712 --> 00:57:04.460 assessing their health in addition to.  
NOTE Confidence: 0.833240545789474

00:57:04.460 --> 00:57:05.828 Collecting biological samples,  
NOTE Confidence: 0.833240545789474

00:57:05.828 --> 00:57:06.740 whole blood,  
NOTE Confidence: 0.833240545789474

00:57:06.740 --> 00:57:09.524 from which we we we extracted  
NOTE Confidence: 0.833240545789474

00:57:09.524 --> 00:57:11.727 DNA and also cortisol,

NOTE Confidence: 0.833240545789474  
00:57:11.727 --> 00:57:16.569 ACTH and other biomarkers of health.  
NOTE Confidence: 0.833240545789474  
00:57:16.570 --> 00:57:17.758 Next slide, please.  
NOTE Confidence: 0.851453605  
00:57:19.340 --> 00:57:21.748 And so, like Trell was saying,  
NOTE Confidence: 0.851453605  
00:57:21.748 --> 00:57:23.140 we wanted to do this in  
NOTE Confidence: 0.821557089333333  
00:57:23.190 --> 00:57:24.300 a in a healthy cohort,  
NOTE Confidence: 0.821557089333333  
00:57:24.300 --> 00:57:27.037 we this population has no chronic diseases,  
NOTE Confidence: 0.821557089333333  
00:57:27.040 --> 00:57:30.844 no substance use outside of nicotine or no  
NOTE Confidence: 0.821557089333333  
00:57:30.844 --> 00:57:33.016 substance use disorders outside of nicotine.  
NOTE Confidence: 0.821557089333333  
00:57:33.020 --> 00:57:35.198 They're not on any prescription medications.  
NOTE Confidence: 0.821557089333333  
00:57:35.200 --> 00:57:37.657 We did limit our analysis to only  
NOTE Confidence: 0.821557089333333  
00:57:37.657 --> 00:57:40.261 individuals who identified as black or white  
NOTE Confidence: 0.821557089333333  
00:57:40.261 --> 00:57:42.116 through the sample size considerations,  
NOTE Confidence: 0.821557089333333  
00:57:42.120 --> 00:57:44.094 and these groups did have some  
NOTE Confidence: 0.821557089333333  
00:57:44.094 --> 00:57:45.710 notable differences in in BMI,  
NOTE Confidence: 0.821557089333333  
00:57:45.710 --> 00:57:48.218 alcohol use, and years of education,  
NOTE Confidence: 0.821557089333333

00:57:48.220 --> 00:57:49.990 but they were similar in gender.

NOTE Confidence: 0.821557089333333

00:57:49.990 --> 00:57:51.550 Age, income and current health

NOTE Confidence: 0.821557089333333

00:57:51.550 --> 00:57:53.975 status and I do want to emphasize

NOTE Confidence: 0.821557089333333

00:57:53.975 --> 00:57:55.567 that health status aspect.

NOTE Confidence: 0.821557089333333

00:57:55.570 --> 00:57:56.266 Uh, you know.

NOTE Confidence: 0.821557089333333

00:57:56.266 --> 00:57:57.890 The Cornell Medical Index is is a

NOTE Confidence: 0.821557089333333

00:57:57.941 --> 00:57:59.645 very comprehensive questionnaire of

NOTE Confidence: 0.821557089333333

00:57:59.645 --> 00:58:01.349 medical and psychiatric symptoms,

NOTE Confidence: 0.821557089333333

00:58:01.350 --> 00:58:03.155 and we saw no significant

NOTE Confidence: 0.821557089333333

00:58:03.155 --> 00:58:04.960 difference between black and white

NOTE Confidence: 0.821557089333333

00:58:05.023 --> 00:58:06.887 participants on these measures.

NOTE Confidence: 0.821557089333333

00:58:06.890 --> 00:58:07.370 Next slide.

NOTE Confidence: 0.9011665275

00:58:08.890 --> 00:58:10.780 So when we look at the psychological

NOTE Confidence: 0.9011665275

00:58:10.780 --> 00:58:12.019 measures and compare the two,

NOTE Confidence: 0.9011665275

00:58:12.020 --> 00:58:14.407 what we find is that black participants

NOTE Confidence: 0.9011665275

00:58:14.407 --> 00:58:17.010 report more stress and more trauma in

NOTE Confidence: 0.9011665275

00:58:17.010 --> 00:58:18.905 comparison to their white counterparts.

NOTE Confidence: 0.9011665275

00:58:18.910 --> 00:58:20.104 Next slide, please.

NOTE Confidence: 0.9011665275

00:58:20.104 --> 00:58:22.094 And when we then correlate

NOTE Confidence: 0.9011665275

00:58:22.094 --> 00:58:24.389 that with the biological data,

NOTE Confidence: 0.9011665275

00:58:24.390 --> 00:58:26.568 what we see in the left side is that

NOTE Confidence: 0.9011665275

00:58:26.568 --> 00:58:29.107 what we know that that grim age is

NOTE Confidence: 0.9011665275

00:58:29.107 --> 00:58:30.853 correlated with advanced health in

NOTE Confidence: 0.9011665275

00:58:30.853 --> 00:58:32.668 both black and white populations.

NOTE Confidence: 0.9011665275

00:58:32.670 --> 00:58:34.758 But when we are actually doing

NOTE Confidence: 0.9011665275

00:58:34.758 --> 00:58:36.530 the linear correlation of this,

NOTE Confidence: 0.9011665275

00:58:36.530 --> 00:58:38.895 we find that actually race

NOTE Confidence: 0.9011665275

00:58:38.895 --> 00:58:41.920 accounts for about a one point.

NOTE Confidence: 0.9011665275

00:58:41.920 --> 00:58:44.056 UH-75 year different or one point

NOTE Confidence: 0.9011665275

00:58:44.060 --> 00:58:48.002 scuse me my side is acting up about

NOTE Confidence: 0.9011665275

00:58:48.002 --> 00:58:49.788 a 1.73 year difference between

NOTE Confidence: 0.9011665275

00:58:49.788 --> 00:58:51.096 black and white participants.  
NOTE Confidence: 0.9011665275

00:58:51.100 --> 00:58:53.020 Again echoing Zach's point of  
NOTE Confidence: 0.9011665275

00:58:53.020 --> 00:58:55.787 this being a pretty much like a  
NOTE Confidence: 0.9011665275

00:58:55.787 --> 00:58:57.717 30 year old healthy population.  
NOTE Confidence: 0.9011665275

00:58:57.720 --> 00:58:59.440 This is a significant difference  
NOTE Confidence: 0.9011665275

00:58:59.440 --> 00:59:00.816 between the two groups.  
NOTE Confidence: 0.9011665275

00:59:00.820 --> 00:59:01.912 Next slide please.  
NOTE Confidence: 0.9011665275

00:59:01.912 --> 00:59:05.040 And so similarly when we look at trauma,  
NOTE Confidence: 0.9011665275

00:59:05.040 --> 00:59:07.479 what we find is a similar thing of that.  
NOTE Confidence: 0.9011665275

00:59:07.480 --> 00:59:09.070 Essentially black Americans  
NOTE Confidence: 0.9011665275

00:59:09.070 --> 00:59:11.190 also report more trauma.  
NOTE Confidence: 0.9011665275

00:59:11.190 --> 00:59:12.620 And when we subcategorize the  
NOTE Confidence: 0.9011665275

00:59:12.620 --> 00:59:15.070 trauma by type next slide, please.  
NOTE Confidence: 0.9011665275

00:59:15.070 --> 00:59:17.790 What we find is that there is an increase on.  
NOTE Confidence: 0.9011665275

00:59:17.790 --> 00:59:19.338 There's an increase in all four  
NOTE Confidence: 0.9011665275

00:59:19.338 --> 00:59:20.370 of these different categories.



NOTE Confidence: 0.9011665275

00:59:20.370 --> 00:59:23.502 Assault of violence being 1D for

NOTE Confidence: 0.9011665275

00:59:23.502 --> 00:59:25.679 the second one being other injury or

NOTE Confidence: 0.9011665275

00:59:25.679 --> 00:59:27.549 shocking event warning of traumas,

NOTE Confidence: 0.9011665275

00:59:27.550 --> 00:59:29.870 or death of a relative or loved one.

NOTE Confidence: 0.9011665275

00:59:29.870 --> 00:59:31.586 We wanted to separate these by

NOTE Confidence: 0.9011665275

00:59:31.586 --> 00:59:33.805 subtype only just to get a nature of

NOTE Confidence: 0.9011665275

00:59:33.805 --> 00:59:35.941 the trauma and to see whether or not

NOTE Confidence: 0.9011665275

00:59:35.941 --> 00:59:37.627 there are any differences in regards

NOTE Confidence: 0.9011665275

00:59:37.627 --> 00:59:40.350 to the nature of the trauma and how

NOTE Confidence: 0.9011665275

00:59:40.350 --> 00:59:42.519 it informed this type of aging.

NOTE Confidence: 0.9011665275

00:59:42.520 --> 00:59:43.132 Next slide,

NOTE Confidence: 0.9011665275

00:59:43.132 --> 00:59:43.438 please.

NOTE Confidence: 0.77780102

00:59:46.850 --> 00:59:48.854 And since we're seeing these differences

NOTE Confidence: 0.77780102

00:59:48.854 --> 00:59:50.849 in lifetime stress and and trauma

NOTE Confidence: 0.77780102

00:59:50.849 --> 00:59:52.359 and epigenetic aging between our

NOTE Confidence: 0.77780102

00:59:52.359 --> 00:59:54.330 our black and white participants,  
NOTE Confidence: 0.77780102

00:59:54.330 --> 00:59:56.437 we we next wanted to ask whether  
NOTE Confidence: 0.77780102

00:59:56.437 --> 00:59:58.423 stress overall on the left and  
NOTE Confidence: 0.77780102

00:59:58.423 --> 01:00:00.113 traumatic events in particular on  
NOTE Confidence: 0.77780102

01:00:00.113 --> 01:00:02.680 the right predicted a grim image in  
NOTE Confidence: 0.77780102

01:00:02.680 --> 01:00:04.570 both black and white participants.  
NOTE Confidence: 0.77780102

01:00:04.570 --> 01:00:06.160 And the answer is is yes,  
NOTE Confidence: 0.77780102

01:00:06.160 --> 01:00:09.016 we see that a higher stress and  
NOTE Confidence: 0.77780102

01:00:09.016 --> 01:00:11.629 and trauma predict higher grim age.  
NOTE Confidence: 0.77780102

01:00:11.630 --> 01:00:13.150 But as these plots emphasize,  
NOTE Confidence: 0.77780102

01:00:13.150 --> 01:00:15.370 the black participants had higher stress,  
NOTE Confidence: 0.77780102

01:00:15.370 --> 01:00:16.472 higher trauma.  
NOTE Confidence: 0.77780102

01:00:16.472 --> 01:00:19.778 And grim age when compared to  
NOTE Confidence: 0.77780102

01:00:19.778 --> 01:00:21.930 white participants next slide.  
NOTE Confidence: 0.77780102

01:00:21.930 --> 01:00:23.892 So next we used mediation analysis  
NOTE Confidence: 0.77780102

01:00:23.892 --> 01:00:26.465 to ask whether the higher levels of

NOTE Confidence: 0.77780102

01:00:26.465 --> 01:00:28.470 stress and trauma were responsible,

NOTE Confidence: 0.77780102

01:00:28.470 --> 01:00:30.374 at least in part for the differences

NOTE Confidence: 0.77780102

01:00:30.374 --> 01:00:32.510 in grim age between black and

NOTE Confidence: 0.77780102

01:00:32.510 --> 01:00:33.350 white participants.

NOTE Confidence: 0.77780102

01:00:33.350 --> 01:00:34.970 And to give a brief

NOTE Confidence: 0.77780102

01:00:34.970 --> 01:00:36.266 orientation to these diagrams,

NOTE Confidence: 0.77780102

01:00:36.270 --> 01:00:37.854 the indirect effect explains

NOTE Confidence: 0.77780102

01:00:37.854 --> 01:00:39.834 how much of the relationship,

NOTE Confidence: 0.77780102

01:00:39.840 --> 01:00:41.898 basically how many of those years

NOTE Confidence: 0.77780102

01:00:41.898 --> 01:00:43.773 are explained of the relationship

NOTE Confidence: 0.77780102

01:00:43.773 --> 01:00:45.933 between race and grammage is

NOTE Confidence: 0.77780102

01:00:45.933 --> 01:00:47.661 explained by the mediator.

NOTE Confidence: 0.77780102

01:00:47.670 --> 01:00:49.567 The numbers by the arrows are the

NOTE Confidence: 0.77780102

01:00:49.567 --> 01:00:51.138 coefficients in the model and the

NOTE Confidence: 0.77780102

01:00:51.138 --> 01:00:52.783 direct effect is how much of the

NOTE Confidence: 0.77780102

01:00:52.838 --> 01:00:55.088 relationship is unexplained by the mediator.

NOTE Confidence: 0.77780102

01:00:55.090 --> 01:00:55.404 Now,

NOTE Confidence: 0.77780102

01:00:55.404 --> 01:00:57.288 while both are are highly significant,

NOTE Confidence: 0.77780102

01:00:57.290 --> 01:00:59.360 you'll notice that when comparing

NOTE Confidence: 0.77780102

01:00:59.360 --> 01:01:01.960 the magnitude of the indirect effect,

NOTE Confidence: 0.77780102

01:01:01.960 --> 01:01:03.750 the trauma subscale is essentially.

NOTE Confidence: 0.77780102

01:01:03.750 --> 01:01:06.630 Equal to that of the total

NOTE Confidence: 0.77780102

01:01:06.630 --> 01:01:08.070 cumulative adversity inventory,

NOTE Confidence: 0.77780102

01:01:08.070 --> 01:01:10.075 and it's notable that these

NOTE Confidence: 0.77780102

01:01:10.075 --> 01:01:12.552 results hold hold true when after

NOTE Confidence: 0.77780102

01:01:12.552 --> 01:01:14.916 we account for differences in BMI

NOTE Confidence: 0.77780102

01:01:14.916 --> 01:01:17.559 alcohol use in years of education,

NOTE Confidence: 0.77780102

01:01:17.560 --> 01:01:19.536 we went on to do some further analysis

NOTE Confidence: 0.77780102

01:01:19.536 --> 01:01:21.917 that we don't have time to show you today,

NOTE Confidence: 0.77780102

01:01:21.920 --> 01:01:23.220 but those really demonstrate

NOTE Confidence: 0.77780102

01:01:23.220 --> 01:01:24.195 that assaultive trauma,

NOTE Confidence: 0.77780102

01:01:24.200 --> 01:01:26.144 in particular when when Terrell is

NOTE Confidence: 0.77780102

01:01:26.144 --> 01:01:27.440 breaking down those categories,

NOTE Confidence: 0.77780102

01:01:27.440 --> 01:01:29.864 was a particularly powerful mediator of

NOTE Confidence: 0.77780102

01:01:29.864 --> 01:01:32.000 this relationship between race and age.

NOTE Confidence: 0.77780102

01:01:32.000 --> 01:01:35.489 Acceleration next slide.

NOTE Confidence: 0.77780102

01:01:35.490 --> 01:01:37.337 So to to summarize our study,

NOTE Confidence: 0.77780102

01:01:37.337 --> 01:01:39.431 we've shown you today that black

NOTE Confidence: 0.77780102

01:01:39.431 --> 01:01:41.089 participants have higher grim age

NOTE Confidence: 0.77780102

01:01:41.089 --> 01:01:42.649 and face more cumulative stress,

NOTE Confidence: 0.77780102

01:01:42.650 --> 01:01:44.720 and in particular traumatic stress

NOTE Confidence: 0.77780102

01:01:44.720 --> 01:01:46.790 when compared to white participants.

NOTE Confidence: 0.77780102

01:01:46.790 --> 01:01:49.694 And these higher levels of trauma

NOTE Confidence: 0.77780102

01:01:49.694 --> 01:01:51.630 partially explained the increased

NOTE Confidence: 0.77780102

01:01:51.703 --> 01:01:54.805 scrimmage we observe in black participants.

NOTE Confidence: 0.77780102

01:01:54.810 --> 01:01:56.295 It's worth noting that these

NOTE Confidence: 0.77780102

01:01:56.295 --> 01:01:58.258 findings are in a relatively young  
NOTE Confidence: 0.77780102

01:01:58.258 --> 01:01:59.930 and remarkably healthy population,  
NOTE Confidence: 0.77780102

01:01:59.930 --> 01:02:01.182 suggesting that the biological  
NOTE Confidence: 0.77780102

01:02:01.182 --> 01:02:03.384 embedding of stress and trauma in the  
NOTE Confidence: 0.77780102

01:02:03.384 --> 01:02:05.840 epigenome is occurring prior to the onset of.  
NOTE Confidence: 0.77780102

01:02:05.840 --> 01:02:06.900 Of illness,  
NOTE Confidence: 0.77780102

01:02:06.900 --> 01:02:09.364 and it's also worth noting that there's  
NOTE Confidence: 0.77780102

01:02:09.364 --> 01:02:11.600 specificity of these findings to trauma.  
NOTE Confidence: 0.77780102

01:02:11.600 --> 01:02:13.294 We didn't see differences between  
NOTE Confidence: 0.77780102

01:02:13.294 --> 01:02:15.429 black and white participants in  
NOTE Confidence: 0.77780102

01:02:15.429 --> 01:02:17.735 recent life events or or sort  
NOTE Confidence: 0.77780102

01:02:17.735 --> 01:02:19.335 of the chronic daily stressors.  
NOTE Confidence: 0.77780102

01:02:19.340 --> 01:02:21.236 And while black participants had a  
NOTE Confidence: 0.77780102

01:02:21.236 --> 01:02:22.973 higher prevalence in all categories  
NOTE Confidence: 0.77780102

01:02:22.973 --> 01:02:24.218 of traumatic events,  
NOTE Confidence: 0.77780102

01:02:24.220 --> 01:02:26.260 assaultive trauma was a particularly

NOTE Confidence: 0.77780102

01:02:26.260 --> 01:02:28.835 potent mediator of the relationship between

NOTE Confidence: 0.77780102

01:02:28.835 --> 01:02:31.195 race and increased scrimmage acceleration.

NOTE Confidence: 0.77780102

01:02:31.200 --> 01:02:31.670 Next slide.

NOTE Confidence: 0.855317145

01:02:33.420 --> 01:02:35.004 And so the the implications of

NOTE Confidence: 0.855317145

01:02:35.004 --> 01:02:36.660 these findings are are very broad.

NOTE Confidence: 0.855317145

01:02:36.660 --> 01:02:38.196 And first of all,

NOTE Confidence: 0.855317145

01:02:38.196 --> 01:02:40.116 given our limited sample size,

NOTE Confidence: 0.855317145

01:02:40.120 --> 01:02:41.730 we're only able to compare

NOTE Confidence: 0.855317145

01:02:41.730 --> 01:02:43.018 black versus white Americans.

NOTE Confidence: 0.855317145

01:02:43.020 --> 01:02:44.892 And so and also as described

NOTE Confidence: 0.855317145

01:02:44.892 --> 01:02:45.516 previously mentioned,

NOTE Confidence: 0.855317145

01:02:45.520 --> 01:02:48.337 this is one of the first to actually compare

NOTE Confidence: 0.855317145

01:02:48.337 --> 01:02:51.250 this specific clock grim age in a young,

NOTE Confidence: 0.855317145

01:02:51.250 --> 01:02:52.744 healthy cohort sample.

NOTE Confidence: 0.855317145

01:02:52.744 --> 01:02:54.573 These health disparities, though,

NOTE Confidence: 0.855317145

01:02:54.573 --> 01:02:56.904 that they're so observed later in life  
NOTE Confidence: 0.855317145

01:02:56.904 --> 01:02:59.651 this this study has emphasized the fact  
NOTE Confidence: 0.855317145

01:02:59.651 --> 01:03:01.671 that essentially that these epigenetic  
NOTE Confidence: 0.855317145

01:03:01.737 --> 01:03:03.699 changes happen a lot sooner than.  
NOTE Confidence: 0.855317145

01:03:03.700 --> 01:03:05.644 When we start seeing these burdens  
NOTE Confidence: 0.855317145

01:03:05.644 --> 01:03:08.101 of disease start to take hold in  
NOTE Confidence: 0.855317145

01:03:08.101 --> 01:03:09.936 late adulthood and then furthermore,  
NOTE Confidence: 0.855317145

01:03:09.940 --> 01:03:13.820 I think kind of point to adolescence as a  
NOTE Confidence: 0.855317145

01:03:13.820 --> 01:03:17.680 means of an intervention point in trying to.  
NOTE Confidence: 0.855317145

01:03:17.680 --> 01:03:19.608 To try to like start to slow down  
NOTE Confidence: 0.855317145

01:03:19.608 --> 01:03:21.618 some of these insults from taking  
NOTE Confidence: 0.855317145

01:03:21.620 --> 01:03:23.488 hold in regards to epigenetic age,  
NOTE Confidence: 0.855317145

01:03:23.488 --> 01:03:26.800 in particular in regards to the second point,  
NOTE Confidence: 0.855317145

01:03:26.800 --> 01:03:28.456 these are particularly relevant  
NOTE Confidence: 0.855317145

01:03:28.456 --> 01:03:30.526 and amongst African Americans who  
NOTE Confidence: 0.855317145

01:03:30.526 --> 01:03:32.360 are 22% more likely experience of



NOTE Confidence: 0.855317145

01:03:32.360 --> 01:03:34.441 violent crime and more than twice the

NOTE Confidence: 0.855317145

01:03:34.441 --> 01:03:36.265 likely to experience a violent and

NOTE Confidence: 0.855317145

01:03:36.265 --> 01:03:37.748 lethal encounter with law enforcement

NOTE Confidence: 0.855317145

01:03:37.748 --> 01:03:39.666 and in particular to the events of

NOTE Confidence: 0.855317145

01:03:39.670 --> 01:03:42.196 the of what happened last weekend.

NOTE Confidence: 0.855317145

01:03:42.200 --> 01:03:43.688 Understanding how these affect

NOTE Confidence: 0.855317145

01:03:43.688 --> 01:03:45.920 personal health would be one of

NOTE Confidence: 0.855317145

01:03:45.980 --> 01:03:47.720 the things that is paramount.

NOTE Confidence: 0.855317145

01:03:47.720 --> 01:03:50.180 Understanding how this life expectancy gap

NOTE Confidence: 0.855317145

01:03:50.180 --> 01:03:53.188 persists over such a long period of time.

NOTE Confidence: 0.855317145

01:03:53.190 --> 01:03:53.554 Furthermore,

NOTE Confidence: 0.855317145

01:03:53.554 --> 01:03:56.466 as as we have kind of alluded to,

NOTE Confidence: 0.855317145

01:03:56.470 --> 01:03:58.756 given the fact that these there's

NOTE Confidence: 0.855317145

01:03:58.756 --> 01:04:00.639 still a persistent direct effect

NOTE Confidence: 0.855317145

01:04:00.639 --> 01:04:03.910 of of race on accelerated aging,

NOTE Confidence: 0.855317145

01:04:03.910 --> 01:04:05.779 it opens the door for us understanding  
NOTE Confidence: 0.855317145

01:04:05.779 --> 01:04:08.452 and house how some of these more complex  
NOTE Confidence: 0.855317145

01:04:08.452 --> 01:04:09.908 sociological interactions like racial  
NOTE Confidence: 0.855317145

01:04:09.908 --> 01:04:11.868 trauma and experience discrimination,  
NOTE Confidence: 0.855317145

01:04:11.870 --> 01:04:12.944 also impact health.  
NOTE Confidence: 0.855317145

01:04:12.944 --> 01:04:15.450 And since in this study we weren't  
NOTE Confidence: 0.855317145

01:04:15.523 --> 01:04:17.980 able to actually assess or ask about.  
NOTE Confidence: 0.855317145

01:04:17.980 --> 01:04:19.730 People's experiences as a turn  
NOTE Confidence: 0.855317145

01:04:19.730 --> 01:04:21.480 as it related to discrimination.  
NOTE Confidence: 0.855317145

01:04:21.480 --> 01:04:23.424 I think one of the things of which  
NOTE Confidence: 0.855317145

01:04:23.424 --> 01:04:25.020 that would be really interesting to  
NOTE Confidence: 0.855317145

01:04:25.020 --> 01:04:27.402 look at is how bees unique experiences  
NOTE Confidence: 0.855317145

01:04:27.402 --> 01:04:31.119 also affect the genetic age and age.  
NOTE Confidence: 0.855317145

01:04:31.120 --> 01:04:32.700 Next slide, please.  
NOTE Confidence: 0.855317145

01:04:32.700 --> 01:04:34.456 And so with that.  
NOTE Confidence: 0.855317145

01:04:34.456 --> 01:04:36.212 As we've rushed through

NOTE Confidence: 0.855317145

01:04:36.212 --> 01:04:38.638 this this very dense paper,

NOTE Confidence: 0.855317145

01:04:38.640 --> 01:04:40.754 we would like to thank our mentors,

NOTE Confidence: 0.855317145

01:04:40.760 --> 01:04:42.815 Derek Gordon, Michael Black also

NOTE Confidence: 0.855317145

01:04:42.815 --> 01:04:45.519 helped support us in the in this.

NOTE Confidence: 0.855317145

01:04:45.520 --> 01:04:47.760 In this sax mentors.

NOTE Confidence: 0.855317145

01:04:47.760 --> 01:04:48.640 If you.

NOTE Confidence: 0.734449927272727

01:04:50.740 --> 01:04:53.248 And also Chris said and young

NOTE Confidence: 0.734449927272727

01:04:53.248 --> 01:04:55.450 son also have have been.

NOTE Confidence: 0.734449927272727

01:04:55.450 --> 01:04:56.825 Instrumental in regards to helping

NOTE Confidence: 0.734449927272727

01:04:56.825 --> 01:04:58.768 guide us in regards to kind of

NOTE Confidence: 0.734449927272727

01:04:58.768 --> 01:05:00.304 developing this project and and what

NOTE Confidence: 0.734449927272727

01:05:00.304 --> 01:05:02.173 steps to do after this project is

NOTE Confidence: 0.734449927272727

01:05:02.173 --> 01:05:03.847 complete and finally we would like

NOTE Confidence: 0.734449927272727

01:05:03.847 --> 01:05:06.416 to thank the the lesson family and

NOTE Confidence: 0.734449927272727

01:05:06.416 --> 01:05:08.074 foundation for this opportunity and

NOTE Confidence: 0.734449927272727

01:05:08.074 --> 01:05:09.922 both of our financial grants in  
NOTE Confidence: 0.734449927272727

01:05:09.922 --> 01:05:11.518 regards to supporting this work.  
NOTE Confidence: 0.895311447142857

01:05:16.760 --> 01:05:18.846 Thank you both for a great presentation.  
NOTE Confidence: 0.895311447142857

01:05:18.850 --> 01:05:20.551 And again, I applaud not only the  
NOTE Confidence: 0.895311447142857

01:05:20.551 --> 01:05:23.299 the science, but the collaboration.  
NOTE Confidence: 0.895311447142857

01:05:23.300 --> 01:05:26.344 Well done, we are in the interest of  
NOTE Confidence: 0.895311447142857

01:05:26.344 --> 01:05:28.700 time going to go straight on to our  
NOTE Confidence: 0.895311447142857

01:05:28.700 --> 01:05:30.400 last presentation on our honorable  
NOTE Confidence: 0.895311447142857

01:05:30.400 --> 01:05:32.138 mention to the loss of an award.  
NOTE Confidence: 0.895311447142857

01:05:32.140 --> 01:05:34.790 And I want to invite broad right  
NOTE Confidence: 0.895311447142857

01:05:34.790 --> 01:05:37.240 to introduce the entire Anderson.  
NOTE Confidence: 0.8227803975

01:05:39.900 --> 01:05:41.168 Thank you so much  
NOTE Confidence: 0.724592948571429

01:05:41.400 --> 01:05:41.886 and good morning.  
NOTE Confidence: 0.724592948571429

01:05:41.886 --> 01:05:43.540 My name is Darwin Boatwright and  
NOTE Confidence: 0.724592948571429

01:05:43.540 --> 01:05:45.530 I and assistant professor in the  
NOTE Confidence: 0.724592948571429

01:05:45.530 --> 01:05:46.722 Department of Emergency Medicine,

NOTE Confidence: 0.724592948571429

01:05:46.730 --> 01:05:48.410 and I've studied bias and

NOTE Confidence: 0.724592948571429

01:05:48.410 --> 01:05:49.754 discrimination and medical education.

NOTE Confidence: 0.724592948571429

01:05:49.760 --> 01:05:51.685 Today I have the distinct honor of

NOTE Confidence: 0.724592948571429

01:05:51.685 --> 01:05:53.219 introducing doctrine and Tara Anderson,

NOTE Confidence: 0.724592948571429

01:05:53.220 --> 01:05:54.480 who will present some of our work

NOTE Confidence: 0.724592948571429

01:05:54.480 --> 01:05:56.460 on the prevalence and influence of

NOTE Confidence: 0.724592948571429

01:05:56.460 --> 01:05:58.480 microaggressions in medical school.

NOTE Confidence: 0.724592948571429

01:05:58.480 --> 01:05:59.962 Doctor Anderson has been a long

NOTE Confidence: 0.724592948571429

01:05:59.962 --> 01:06:01.564 standing member of the old community,

NOTE Confidence: 0.724592948571429

01:06:01.564 --> 01:06:03.288 having graduated from Yale University,

NOTE Confidence: 0.724592948571429

01:06:03.288 --> 01:06:04.736 Yale School of Medicine,

NOTE Confidence: 0.724592948571429

01:06:04.740 --> 01:06:06.748 and is now a member of the illustrious

NOTE Confidence: 0.724592948571429

01:06:06.748 --> 01:06:08.220 Department of Psychiatry at Yale.

NOTE Confidence: 0.724592948571429

01:06:08.220 --> 01:06:09.708 I thought the honor to collaborate.

NOTE Confidence: 0.724592948571429

01:06:09.710 --> 01:06:10.840 And learn from Doctor Anderson.

NOTE Confidence: 0.724592948571429

01:06:10.840 --> 01:06:13.423 Since we first met in 2015 and we  
NOTE Confidence: 0.724592948571429

01:06:13.423 --> 01:06:15.128 began discussing the possibility of  
NOTE Confidence: 0.724592948571429

01:06:15.128 --> 01:06:17.130 science and medical literature examining  
NOTE Confidence: 0.872177263333333

01:06:17.140 --> 01:06:18.190 racism and medicine  
NOTE Confidence: 0.848007124

01:06:18.360 --> 01:06:19.870 and brainstorming ways we could  
NOTE Confidence: 0.848007124

01:06:19.870 --> 01:06:21.380 address this gap in knowledge.  
NOTE Confidence: 0.848007124

01:06:21.380 --> 01:06:22.320 These discussions produce some  
NOTE Confidence: 0.848007124

01:06:22.320 --> 01:06:23.495 of the work Doctor Anderson  
NOTE Confidence: 0.848007124

01:06:23.495 --> 01:06:25.018 will share with you today.  
NOTE Confidence: 0.848007124

01:06:25.018 --> 01:06:26.573 Examining the prevalence of  
NOTE Confidence: 0.848007124

01:06:26.573 --> 01:06:27.806 microaggressions and their  
NOTE Confidence: 0.848007124

01:06:27.806 --> 01:06:29.039 association with medical  
NOTE Confidence: 0.848007124

01:06:29.039 --> 01:06:31.088 student mental health and also  
NOTE Confidence: 0.848007124

01:06:31.088 --> 01:06:32.276 medical student satisfaction.  
NOTE Confidence: 0.848007124

01:06:32.280 --> 01:06:33.020 Doctor Anderson.  
NOTE Confidence: 0.917832251428572

01:06:36.480 --> 01:06:38.472 Hello everyone, we're happy to be here and

NOTE Confidence: 0.917832251428572  
01:06:38.472 --> 01:06:40.359 we'll get started on the presentation.  
NOTE Confidence: 0.917832251428572  
01:06:40.360 --> 01:06:41.998 It's going to be a quick one  
NOTE Confidence: 0.917832251428572  
01:06:42.000 --> 01:06:44.940 so next slide please Chris.  
NOTE Confidence: 0.917832251428572  
01:06:44.940 --> 01:06:46.680 So I want to start with  
NOTE Confidence: 0.917832251428572  
01:06:46.680 --> 01:06:48.015 psychiatrist Chester Pierce,  
NOTE Confidence: 0.917832251428572  
01:06:48.015 --> 01:06:49.795 who originally defined microaggressions  
NOTE Confidence: 0.917832251428572  
01:06:49.795 --> 01:06:51.380 directly quoting from him.  
NOTE Confidence: 0.917832251428572  
01:06:51.380 --> 01:06:53.737 He defined them as the subtle, stunning,  
NOTE Confidence: 0.917832251428572  
01:06:53.737 --> 01:06:56.022 often automatic and nonverbal exchanges  
NOTE Confidence: 0.917832251428572  
01:06:56.022 --> 01:06:59.437 which are put downs of blacks by offenders.  
NOTE Confidence: 0.917832251428572  
01:06:59.440 --> 01:07:01.028 The offensive mechanisms used  
NOTE Confidence: 0.917832251428572  
01:07:01.028 --> 01:07:03.013 against blacks are often innocuous.  
NOTE Confidence: 0.917832251428572  
01:07:03.020 --> 01:07:04.530 The cumulative weight of their  
NOTE Confidence: 0.917832251428572  
01:07:04.530 --> 01:07:06.492 never ending burden is the major  
NOTE Confidence: 0.917832251428572  
01:07:06.492 --> 01:07:08.477 ingredient in black white interactions.  
NOTE Confidence: 0.917832251428572

01:07:08.480 --> 01:07:10.916 Today migrations are regarded as casual,  
NOTE Confidence: 0.917832251428572

01:07:10.920 --> 01:07:12.668 verbal or nonverbal slides,  
NOTE Confidence: 0.917832251428572

01:07:12.668 --> 01:07:14.416 whether intentional or unintentional,  
NOTE Confidence: 0.917832251428572

01:07:14.420 --> 01:07:15.364 which communicate.  
NOTE Confidence: 0.917832251428572

01:07:15.364 --> 01:07:17.785 Rogatory messages based on the targets  
NOTE Confidence: 0.917832251428572

01:07:17.785 --> 01:07:19.392 modules, marginalized group membership,  
NOTE Confidence: 0.917832251428572

01:07:19.392 --> 01:07:21.936 and here are some examples of  
NOTE Confidence: 0.917832251428572

01:07:21.936 --> 01:07:23.999 different types of microaggressions,  
NOTE Confidence: 0.917832251428572

01:07:24.000 --> 01:07:27.000 illustrated from the I2 hashtag  
NOTE Confidence: 0.917832251428572

01:07:27.000 --> 01:07:28.239 I2M Harvard campaign.  
NOTE Confidence: 0.917832251428572

01:07:28.239 --> 01:07:30.717 So you can see them here.  
NOTE Confidence: 0.917832251428572

01:07:30.720 --> 01:07:33.244 So our study objectives.  
NOTE Confidence: 0.917832251428572

01:07:33.244 --> 01:07:35.137 Next slide please.  
NOTE Confidence: 0.917832251428572

01:07:35.140 --> 01:07:37.415 We sought to characterize the experiences of  
NOTE Confidence: 0.917832251428572

01:07:37.415 --> 01:07:39.260 microaggressions for US medical students.  
NOTE Confidence: 0.917832251428572

01:07:39.260 --> 01:07:41.160 How frequently did they occur,



NOTE Confidence: 0.917832251428572  
01:07:41.160 --> 01:07:43.279 and who was most likely to experience them?  
NOTE Confidence: 0.917832251428572  
01:07:43.280 --> 01:07:45.800 Next slide.  
NOTE Confidence: 0.917832251428572  
01:07:45.800 --> 01:07:47.498 We wanted to know if microaggressions  
NOTE Confidence: 0.917832251428572  
01:07:47.498 --> 01:07:49.509 we want to test the association  
NOTE Confidence: 0.917832251428572  
01:07:49.509 --> 01:07:51.145 between microaggressions and medical  
NOTE Confidence: 0.917832251428572  
01:07:51.145 --> 01:07:53.600 student well being and mental health.  
NOTE Confidence: 0.917832251428572  
01:07:53.600 --> 01:07:55.380 Next slide.  
NOTE Confidence: 0.917832251428572  
01:07:55.380 --> 01:07:57.726 We also wanted to assess the  
NOTE Confidence: 0.917832251428572  
01:07:57.726 --> 01:07:58.899 association between microaggressions  
NOTE Confidence: 0.917832251428572  
01:07:58.899 --> 01:08:00.938 and medical school satisfaction.  
NOTE Confidence: 0.917832251428572  
01:08:00.940 --> 01:08:01.842 Next slide,  
NOTE Confidence: 0.917832251428572  
01:08:01.842 --> 01:08:04.097 we distributed a cross sectional  
NOTE Confidence: 0.917832251428572  
01:08:04.097 --> 01:08:05.866 Internet based anonymous survey  
NOTE Confidence: 0.917832251428572  
01:08:05.866 --> 01:08:07.942 to medical students in the US  
NOTE Confidence: 0.917832251428572  
01:08:07.942 --> 01:08:09.380 between 2016 and 2017.  
NOTE Confidence: 0.917832251428572

01:08:09.380 --> 01:08:10.968 Questions on microaggressions were  
NOTE Confidence: 0.917832251428572

01:08:10.968 --> 01:08:12.953 adapted from the racial ethnic  
NOTE Confidence: 0.917832251428572

01:08:12.953 --> 01:08:14.632 microaggression scale and we asked  
NOTE Confidence: 0.917832251428572

01:08:14.632 --> 01:08:15.864 if respondents had experienced  
NOTE Confidence: 0.917832251428572

01:08:15.864 --> 01:08:17.213 various types of microaggressions  
NOTE Confidence: 0.917832251428572

01:08:17.213 --> 01:08:19.241 how frequently they occurred and the  
NOTE Confidence: 0.917832251428572

01:08:19.241 --> 01:08:21.298 reasons they believe they were targeted.  
NOTE Confidence: 0.917832251428572

01:08:21.300 --> 01:08:23.904 These questions did not directly mention  
NOTE Confidence: 0.917832251428572

01:08:23.904 --> 01:08:25.741 racism, prejudice, or demographics.  
NOTE Confidence: 0.917832251428572

01:08:25.741 --> 01:08:28.076 And participants were instructed to  
NOTE Confidence: 0.917832251428572

01:08:28.076 --> 01:08:29.839 include microaggressions committed by  
NOTE Confidence: 0.917832251428572

01:08:29.839 --> 01:08:31.456 fellow students, residents and faculty,  
NOTE Confidence: 0.917832251428572

01:08:31.456 --> 01:08:33.690 and so here's an example of one of  
NOTE Confidence: 0.917832251428572

01:08:33.690 --> 01:08:35.079 those questions. Next slide, please.  
NOTE Confidence: 0.91788366

01:08:37.580 --> 01:08:39.860 Questions on medical school satisfaction,  
NOTE Confidence: 0.91788366

01:08:39.860 --> 01:08:42.807 like this one, were adapted from the

NOTE Confidence: 0.91788366  
01:08:42.807 --> 01:08:44.070 Institutional Betrayal Questionnaire  
NOTE Confidence: 0.91788366  
01:08:44.133 --> 01:08:45.748 and then afterwards respondents filled  
NOTE Confidence: 0.91788366  
01:08:45.748 --> 01:08:48.580 out the PHQ 2 PHQ 2 depression screen,  
NOTE Confidence: 0.91788366  
01:08:48.580 --> 01:08:51.112 which is 2 item depression screen  
NOTE Confidence: 0.91788366  
01:08:51.112 --> 01:08:52.800 and their demographic information.  
NOTE Confidence: 0.91788366  
01:08:52.800 --> 01:08:55.146 Next slide. Here are the demographics  
NOTE Confidence: 0.91788366  
01:08:55.146 --> 01:08:56.710 of our final sample.  
NOTE Confidence: 0.91788366  
01:08:56.710 --> 01:08:59.010 We had 759 respondents from  
NOTE Confidence: 0.91788366  
01:08:59.010 --> 01:09:00.850 over 100 medical schools,  
NOTE Confidence: 0.91788366  
01:09:00.850 --> 01:09:03.448 so it was a substantial sample.  
NOTE Confidence: 0.91788366  
01:09:03.450 --> 01:09:04.524 Next slide.  
NOTE Confidence: 0.91788366  
01:09:04.524 --> 01:09:07.746 What we found the experience of  
NOTE Confidence: 0.91788366  
01:09:07.746 --> 01:09:10.420 microaggressions was incredibly common.  
NOTE Confidence: 0.91788366  
01:09:10.420 --> 01:09:11.512 98.7 participants reported  
NOTE Confidence: 0.91788366  
01:09:11.512 --> 01:09:13.332 having experienced at least one  
NOTE Confidence: 0.91788366

01:09:13.332 --> 01:09:16.570 microaggression in medical school,  
NOTE Confidence: 0.91788366

01:09:16.570 --> 01:09:18.362 33.9% reported having experienced  
NOTE Confidence: 0.91788366

01:09:18.362 --> 01:09:20.154 a microaggression almost daily  
NOTE Confidence: 0.91788366

01:09:20.154 --> 01:09:21.860 in medical school.  
NOTE Confidence: 0.91788366

01:09:21.860 --> 01:09:23.950 Next slide.  
NOTE Confidence: 0.91788366

01:09:23.950 --> 01:09:25.405 The most common attributions of  
NOTE Confidence: 0.91788366

01:09:25.405 --> 01:09:27.366 the reasons people felt they were  
NOTE Confidence: 0.91788366

01:09:27.366 --> 01:09:29.190 experiencing microaggressions were gender,  
NOTE Confidence: 0.91788366

01:09:29.190 --> 01:09:31.086 race, ethnicity, and age.  
NOTE Confidence: 0.91788366

01:09:31.086 --> 01:09:34.600 As you can see here next slide.  
NOTE Confidence: 0.91788366

01:09:34.600 --> 01:09:36.685 So respondents also described the  
NOTE Confidence: 0.91788366

01:09:36.685 --> 01:09:38.353 microaggressions they had experienced,  
NOTE Confidence: 0.91788366

01:09:38.360 --> 01:09:40.124 so here's 1 the respondents said  
NOTE Confidence: 0.91788366

01:09:40.124 --> 01:09:42.041 I had an older male physician  
NOTE Confidence: 0.91788366

01:09:42.041 --> 01:09:43.736 as a first year mentor.  
NOTE Confidence: 0.91788366

01:09:43.740 --> 01:09:45.356 I shattered him every other week in his

NOTE Confidence: 0.91788366

01:09:45.356 --> 01:09:47.020 clinic for my intro to clinical medicine.

NOTE Confidence: 0.91788366

01:09:47.020 --> 01:09:48.855 Required course he would regularly

NOTE Confidence: 0.91788366

01:09:48.855 --> 01:09:51.277 introduce me to patients as a pretty

NOTE Confidence: 0.91788366

01:09:51.277 --> 01:09:53.118 face to talk to while you wait.

NOTE Confidence: 0.91788366

01:09:53.120 --> 01:09:53.614 Next slide,

NOTE Confidence: 0.91788366

01:09:53.614 --> 01:09:55.590 I choose to wear my hair and it's

NOTE Confidence: 0.91788366

01:09:55.646 --> 01:09:57.156 natural state sometimes and one

NOTE Confidence: 0.91788366

01:09:57.156 --> 01:09:59.160 of my professors made a comment.

NOTE Confidence: 0.91788366

01:09:59.160 --> 01:10:00.840 Did you get electrocuted after that

NOTE Confidence: 0.91788366

01:10:00.840 --> 01:10:02.710 comment was made him and another

NOTE Confidence: 0.91788366

01:10:02.710 --> 01:10:04.340 professor preceded to laugh.

NOTE Confidence: 0.91788366

01:10:04.340 --> 01:10:05.460 Next slide.

NOTE Confidence: 0.8830690333333333

01:10:08.680 --> 01:10:09.448 Next slide, please.

NOTE Confidence: 0.7897979566666667

01:10:11.980 --> 01:10:14.804 So here are the result and more on

NOTE Confidence: 0.7897979566666667

01:10:14.804 --> 01:10:17.000 the experiences of microaggressions.

NOTE Confidence: 0.7897979566666667

01:10:17.000 --> 01:10:18.800 About half the respondents experienced  
NOTE Confidence: 0.789797956666667

01:10:18.800 --> 01:10:20.920 at least one microaggression a week.  
NOTE Confidence: 0.789797956666667

01:10:20.920 --> 01:10:23.096 So we divided the cohort into two groups,  
NOTE Confidence: 0.789797956666667

01:10:23.100 --> 01:10:25.224 a higher exposure group which experienced  
NOTE Confidence: 0.789797956666667

01:10:25.224 --> 01:10:27.534 microaggressions at least once a week and  
NOTE Confidence: 0.789797956666667

01:10:27.534 --> 01:10:29.208 a lower exposure group which experienced  
NOTE Confidence: 0.789797956666667

01:10:29.210 --> 01:10:30.878 microaggressions less frequently.  
NOTE Confidence: 0.789797956666667

01:10:30.880 --> 01:10:32.060 As you can see,  
NOTE Confidence: 0.789797956666667

01:10:32.060 --> 01:10:33.535 students who identified as black,  
NOTE Confidence: 0.789797956666667

01:10:33.540 --> 01:10:34.885 Asian, multiracial and being a  
NOTE Confidence: 0.789797956666667

01:10:34.885 --> 01:10:36.660 female sex were the most likely to  
NOTE Confidence: 0.789797956666667

01:10:36.660 --> 01:10:38.519 be in the higher exposure group.  
NOTE Confidence: 0.789797956666667

01:10:38.520 --> 01:10:40.270 We also performed an intersectional.  
NOTE Confidence: 0.789797956666667

01:10:40.270 --> 01:10:42.028 Analysis of race and sex assigned  
NOTE Confidence: 0.789797956666667

01:10:42.028 --> 01:10:44.058 at birth which showed that white  
NOTE Confidence: 0.789797956666667

01:10:44.058 --> 01:10:46.058 males reported the lowest average

NOTE Confidence: 0.789797956666667

01:10:46.058 --> 01:10:47.760 microaggression frequency scores and

NOTE Confidence: 0.789797956666667

01:10:47.760 --> 01:10:49.760 black females reported the highest

NOTE Confidence: 0.789797956666667

01:10:49.760 --> 01:10:51.850 mean microaggression frequency scores

NOTE Confidence: 0.789797956666667

01:10:51.850 --> 01:10:55.516 within all racial or ethnic groups.

NOTE Confidence: 0.789797956666667

01:10:55.520 --> 01:10:57.136 Mean microaggression scores were

NOTE Confidence: 0.789797956666667

01:10:57.136 --> 01:10:59.560 lower for males than for females.

NOTE Confidence: 0.789797956666667

01:10:59.560 --> 01:11:02.080 Next slide please.

NOTE Confidence: 0.789797956666667

01:11:02.080 --> 01:11:04.250 So here also this is the correlation

NOTE Confidence: 0.789797956666667

01:11:04.250 --> 01:11:06.857 between the the PHQ 2 depression screen

NOTE Confidence: 0.789797956666667

01:11:06.857 --> 01:11:08.877 and the frequency of microaggression.

NOTE Confidence: 0.789797956666667

01:11:08.880 --> 01:11:10.610 So we divided the microaggression

NOTE Confidence: 0.789797956666667

01:11:10.610 --> 01:11:12.340 frequency score into 4 quartiles,

NOTE Confidence: 0.789797956666667

01:11:12.340 --> 01:11:15.652 and we found that as the frequency of

NOTE Confidence: 0.789797956666667

01:11:15.652 --> 01:11:17.160 experiencing microaggressions increased,

NOTE Confidence: 0.789797956666667

01:11:17.160 --> 01:11:19.476 the likelihood of respondent having a

NOTE Confidence: 0.789797956666667

01:11:19.476 --> 01:11:21.020 positive depression screen increased  
NOTE Confidence: 0.789797956666667

01:11:21.076 --> 01:11:23.332 quite substantially in a dose response  
NOTE Confidence: 0.789797956666667

01:11:23.332 --> 01:11:24.836 relationship even after adjusting  
NOTE Confidence: 0.789797956666667

01:11:24.888 --> 01:11:26.820 for demographic factors such as race,  
NOTE Confidence: 0.789797956666667

01:11:26.820 --> 01:11:28.539 ethnicity, sex, SES,  
NOTE Confidence: 0.789797956666667

01:11:28.539 --> 01:11:30.258 urine, medical school,  
NOTE Confidence: 0.789797956666667

01:11:30.260 --> 01:11:31.946 clinical experience, etcetera.  
NOTE Confidence: 0.789797956666667

01:11:31.946 --> 01:11:33.070 Next slide,  
NOTE Confidence: 0.789797956666667

01:11:33.070 --> 01:11:34.930 please.  
NOTE Confidence: 0.789797956666667

01:11:34.930 --> 01:11:36.810 Compared to the lower exposure group,  
NOTE Confidence: 0.789797956666667

01:11:36.810 --> 01:11:38.294 respondents with higher microaggression  
NOTE Confidence: 0.789797956666667

01:11:38.294 --> 01:11:40.520 exposure were less likely to recommend  
NOTE Confidence: 0.789797956666667

01:11:40.569 --> 01:11:41.899 their medical school to friends  
NOTE Confidence: 0.789797956666667

01:11:41.899 --> 01:11:43.643 less likely to donate to their  
NOTE Confidence: 0.789797956666667

01:11:43.643 --> 01:11:45.087 medical school after graduation,  
NOTE Confidence: 0.789797956666667

01:11:45.090 --> 01:11:46.794 and less likely to consider staying



NOTE Confidence: 0.789797956666667  
01:11:46.794 --> 01:11:48.670 at their institution for residency.  
NOTE Confidence: 0.789797956666667  
01:11:48.670 --> 01:11:50.809 Next slide, please.  
NOTE Confidence: 0.789797956666667  
01:11:50.810 --> 01:11:51.568 In addition,  
NOTE Confidence: 0.789797956666667  
01:11:51.568 --> 01:11:53.463 higher exposure respondents were over  
NOTE Confidence: 0.789797956666667  
01:11:53.463 --> 01:11:55.790 three times more likely to have this.  
NOTE Confidence: 0.789797956666667  
01:11:55.790 --> 01:11:58.065 This is past behavior three times more  
NOTE Confidence: 0.789797956666667  
01:11:58.065 --> 01:12:00.506 likely to have missed class because  
NOTE Confidence: 0.789797956666667  
01:12:00.506 --> 01:12:02.366 the environment was unwelcoming.  
NOTE Confidence: 0.789797956666667  
01:12:02.370 --> 01:12:03.810 They were also four times,  
NOTE Confidence: 0.789797956666667  
01:12:03.810 --> 01:12:04.926 nearly four times.  
NOTE Confidence: 0.789797956666667  
01:12:04.926 --> 01:12:07.158 More likely to consider medical school  
NOTE Confidence: 0.789797956666667  
01:12:07.158 --> 01:12:09.028 transfer and medical school withdrawal  
NOTE Confidence: 0.789797956666667  
01:12:09.028 --> 01:12:12.260 compared to the lower exposure residents.  
NOTE Confidence: 0.789797956666667  
01:12:12.260 --> 01:12:14.372 Next slide please.  
NOTE Confidence: 0.789797956666667  
01:12:14.372 --> 01:12:17.188 So implications increase frequency  
NOTE Confidence: 0.789797956666667

01:12:17.188 --> 01:12:19.300 of experiencing microaggressions

NOTE Confidence: 0.789797956666667

01:12:19.300 --> 01:12:20.968 may impact medical students

NOTE Confidence: 0.789797956666667

01:12:20.968 --> 01:12:22.636 health mental health negatively.

NOTE Confidence: 0.789797956666667

01:12:22.640 --> 01:12:24.430 They are common experience and

NOTE Confidence: 0.789797956666667

01:12:24.430 --> 01:12:26.220 bipac and female medical students

NOTE Confidence: 0.789797956666667

01:12:26.276 --> 01:12:28.566 experience them more frequently and

NOTE Confidence: 0.789797956666667

01:12:28.566 --> 01:12:30.398 students with multiple marginalized

NOTE Confidence: 0.789797956666667

01:12:30.398 --> 01:12:32.112 identities such as black women

NOTE Confidence: 0.789797956666667

01:12:32.112 --> 01:12:35.750 are impacted the most next slide.

NOTE Confidence: 0.789797956666667

01:12:35.750 --> 01:12:37.619 As our data on avoiding class or

NOTE Confidence: 0.789797956666667

01:12:37.619 --> 01:12:38.798 considering withdrawal from medical

NOTE Confidence: 0.789797956666667

01:12:38.798 --> 01:12:40.463 school suggests the experience of

NOTE Confidence: 0.789797956666667

01:12:40.463 --> 01:12:41.795 microaggressions may increase the

NOTE Confidence: 0.789797956666667

01:12:41.848 --> 01:12:43.538 attrition of diverse medical trainees,

NOTE Confidence: 0.789797956666667

01:12:43.540 --> 01:12:45.345 which would imperil efforts to

NOTE Confidence: 0.789797956666667

01:12:45.345 --> 01:12:46.789 diversify the physician workforce,

NOTE Confidence: 0.789797956666667  
01:12:46.790 --> 01:12:49.190 possible interventions to decrease  
NOTE Confidence: 0.789797956666667  
01:12:49.190 --> 01:12:50.990 microaggressions include education,  
NOTE Confidence: 0.789797956666667  
01:12:50.990 --> 01:12:53.122 improved reporting and remediation,  
NOTE Confidence: 0.789797956666667  
01:12:53.122 --> 01:12:55.254 and incorporating racial attitudes  
NOTE Confidence: 0.789797956666667  
01:12:55.254 --> 01:12:57.729 assessments into admissions and hiring.  
NOTE Confidence: 0.789797956666667  
01:12:57.730 --> 01:12:58.402 And finally,  
NOTE Confidence: 0.789797956666667  
01:12:58.402 --> 01:13:00.082 we want to propose reevaluating  
NOTE Confidence: 0.789797956666667  
01:13:00.082 --> 01:13:02.366 the use of the word microaggression  
NOTE Confidence: 0.789797956666667  
01:13:02.366 --> 01:13:04.381 and replacing it with specific  
NOTE Confidence: 0.789797956666667  
01:13:04.381 --> 01:13:06.480 terms such as racism or sexism.  
NOTE Confidence: 0.789797956666667  
01:13:06.480 --> 01:13:08.516 Our findings show serious associations  
NOTE Confidence: 0.789797956666667  
01:13:08.516 --> 01:13:09.848 between microaggressions and  
NOTE Confidence: 0.789797956666667  
01:13:09.848 --> 01:13:11.660 outcomes for medical student,  
NOTE Confidence: 0.789797956666667  
01:13:11.660 --> 01:13:13.448 and we hope our research helps  
NOTE Confidence: 0.789797956666667  
01:13:13.448 --> 01:13:15.093 dispel the ideas that these  
NOTE Confidence: 0.789797956666667

01:13:15.093 --> 01:13:17.043 microaggressions are a lower priority  
NOTE Confidence: 0.789797956666667

01:13:17.043 --> 01:13:19.428 or or an inconsequential issue in  
NOTE Confidence: 0.789797956666667

01:13:19.428 --> 01:13:20.956 medical education and training.  
NOTE Confidence: 0.789797956666667

01:13:20.960 --> 01:13:23.210 Next slide you can click  
NOTE Confidence: 0.789797956666667

01:13:23.210 --> 01:13:24.560 through the references.  
NOTE Confidence: 0.789797956666667

01:13:24.560 --> 01:13:25.784 There's about 3-4 pages,  
NOTE Confidence: 0.789797956666667

01:13:25.784 --> 01:13:28.379 so I want to thank thank my mentors,  
NOTE Confidence: 0.789797956666667

01:13:28.380 --> 01:13:30.320 down Boatwright and Anna Reisman,  
NOTE Confidence: 0.764648854285714

01:13:30.320 --> 01:13:32.360 the Lussman Family Foundation  
NOTE Confidence: 0.764648854285714

01:13:32.360 --> 01:13:33.890 and award committee.  
NOTE Confidence: 0.764648854285714

01:13:33.890 --> 01:13:36.880 Of course, our illustrious coauthors.  
NOTE Confidence: 0.764648854285714

01:13:36.880 --> 01:13:38.925 Especially the brilliant doctor let  
NOTE Confidence: 0.764648854285714

01:13:38.925 --> 01:13:42.209 and you can go to the last slide.  
NOTE Confidence: 0.764648854285714

01:13:42.210 --> 01:13:42.982 And also of course,  
NOTE Confidence: 0.764648854285714

01:13:42.982 --> 01:13:44.470 thank you to my friends and family,  
NOTE Confidence: 0.764648854285714

01:13:44.470 --> 01:13:46.108 especially my mom and dad who

NOTE Confidence: 0.764648854285714

01:13:46.108 --> 01:13:47.793 are actually tuning in from Sri

NOTE Confidence: 0.764648854285714

01:13:47.793 --> 01:13:49.407 Lanka and who are pictured here.

NOTE Confidence: 0.764648854285714

01:13:49.410 --> 01:13:52.137 So and thank you to you all for listening.

NOTE Confidence: 0.770036248

01:14:01.460 --> 01:14:04.967 Thank you so much the Antara rounding

NOTE Confidence: 0.770036248

01:14:04.967 --> 01:14:07.882 out our presentations. And I see your.

NOTE Confidence: 0.770036248

01:14:07.882 --> 01:14:10.000 I see your parents there welcome.