

WEBVTT

NOTE duration:"00:55:24.6530000"

NOTE language:en-us

NOTE Confidence: 0.883279979228973

00:00:00.170 --> 00:00:19.280 Before we get started I would just want to tell you the next weeks. Grand rounds is hosted by Michael Stern yak in the division of public psychiatry and the speaker is going to be Gary Belk Belk in from the billion Minds Institute at Harvard and he's going to be talking bout thrive NYC an community mental health.

NOTE Confidence: 0.819469213485718

00:00:20.030 --> 00:00:25.310 And uh with that I hope you all will be, he ran the.

NOTE Confidence: 0.794559419155121

00:00:25.810 --> 00:00:31.700 Following week, we will just announced that next week. It's on the flip side OK.

NOTE Confidence: 0.499010264873505

00:00:32.360 --> 00:00:33.340 OK.

NOTE Confidence: 0.904859662055969

00:00:34.050 --> 00:00:48.610 Oh, in the next one is going to be at the Cohen Auditorium. So keep that in mind, so you don't show up at the wrong place, and that's going to be A to Gregory and it's going to be bystander intervention addressing harassment and bias at work.

NOTE Confidence: 0.889099895954132

00:00:49.250 --> 00:00:51.210 She's from Duke University.

NOTE Confidence: 0.898208379745483

00:00:51.960 --> 00:01:23.620 So with this, I'd like to introduce Doctor Genk Tech, who probably needs no introduction's. But he trained in Turkey before coming to the USS and he's been at Yale for quite a while. He's an associate professor in the Department of psychiatry. He's an expert in the management of treatment refractory schizophrenia with a specific special expertise in the issue of weight management. And here he's also directing the psychosis program of clinical research at CHC.

NOTE Confidence: 0.924554347991943

00:01:24.230 --> 00:01:30.550 We're looking forward to his talk today, which is a simple guide to counteracting antipsychotic induced weight gain. Thank you.

NOTE Confidence: 0.82409280538559

00:01:34.470 --> 00:01:39.160 Alright thank you for all coming in in the.

NOTE Confidence: 0.815893292427063

00:01:39.740 --> 00:01:40.830 And then

NOTE Confidence: 0.904935002326965

00:01:41.490 --> 00:01:46.020 I'm going to start with a confession that I deceived all of you with this title.

NOTE Confidence: 0.838865578174591

00:01:46.980 --> 00:01:55.110 It's clickbait as the young ones would say these days because there is.

NOTE Confidence: 0.899277031421661

00:01:57.050 --> 00:02:05.210 Nothing simple about weight management. It's it's not simple I used to think that when I first started.

NOTE Confidence: 0.902396440505981

00:02:05.930 --> 00:02:21.520 I used to think that, like those pool problems that we had in high school right there is a container and then you know, Cal is coming in that you're eating from this tab and this is the work calories. You spend whatever doesn't flow out.

NOTE Confidence: 0.79199355840683

00:02:22.290 --> 00:02:24.680 Uh is stored as energy.

NOTE Confidence: 0.541631102561951

00:02:25.860 --> 00:02:26.550 Fat.

NOTE Confidence: 0.86916446685791

00:02:27.490 --> 00:02:36.690 And but you know if you ever tried to lose a pound or 2 and maintain it off, you know that it can be further than truth.

NOTE Confidence: 0.920763432979584

00:02:37.300 --> 00:02:43.360 Uh the human body had several 100,000 years to prepare for the.

NOTE Confidence: 0.861769556999207

00:02:43.920 --> 00:02:47.250 A possibility that you have the silly notion of.

NOTE Confidence: 0.912623226642609

00:02:47.750 --> 00:02:53.770 Giving away those precious enerji stores, so there are multiple mechanisms in the body.

NOTE Confidence: 0.767106592655182

00:02:54.330 --> 00:02:57.090 That keeps the step.

NOTE Confidence: 0.868381500244141

00:02:58.210 --> 00:03:10.890 On and there's almost nothing that keeps this off so the second thing in the title is it's not a guide. I got nothing for you.

NOTE Confidence: 0.907499313354492

00:03:12.330 --> 00:03:32.100 I'll give you tips and tricks that I use in my clinical work, but I don't have any magical solutions. However, I am going to tell a story of trials and tribulations for the last closing 2, decades now in this very building.

NOTE Confidence: 0.902257204055786

00:03:32.690 --> 00:03:50.960 Uh with our patience an I'm sort of I wanted to tell a story because I expected. This to be a family affair and it is so far that you know how I did. And why I did what I did, and there must be some lessons there for for younger generations.

NOTE Confidence: 0.912730872631073

00:03:51.670 --> 00:03:55.320 And the finally when I think about.

NOTE Confidence: 0.883197665214539

00:03:55.850 --> 00:04:01.140 Antipsychotic induced weight gain, counteracting it is this.

NOTE Confidence: 0.215369552373886

00:04:01.930 --> 00:04:02.660 Uh.

NOTE Confidence: 0.883798956871033

00:04:05.250 --> 00:04:06.510 It this possible.

NOTE Confidence: 0.909868597984314

00:04:08.150 --> 00:04:35.050 However, it would be so much better if those things never got out of their basis. I want to. I want to Disabuse. You too, after notion that there are weight. Neutral Anti Psychotics. There are not an anti psychotics are prescribed but 10 times more than what would be justified with the incidence of psychosis, so these medications are being overused.

NOTE Confidence: 0.899012088775635

00:04:35.800 --> 00:04:46.530 Uh so the main message of this whole talk is that if you can get away with not prescribing an antipsychotic do not and.

NOTE Confidence: 0.904430747032166

00:04:47.050 --> 00:04:52.870 Uh if you'd have to prescribe an antipsychotic choose wisely.

NOTE Confidence: 0.836386263370514

00:04:53.940 --> 00:04:59.330 And also try to use lower doses.

NOTE Confidence: 0.842943489551544

00:04:59.900 --> 00:05:08.590 Uh because it deviates effect is quite those related now how it all started is this.

NOTE Confidence: 0.915060341358185

00:05:09.330 --> 00:05:25.790 Our patients die about 2530 years earlier and they die mostly of cardiovascular disease right. This is 86,000 deaths in that period. This is a relatively new study, but this was our clinical reality. We were losing a patient.

NOTE Confidence: 0.910755276679993

00:05:26.290 --> 00:05:42.720 Every other month to cardiovascular disease in this very building. I had a clinic about a little less than 500 patients 480 or so 420 of them were confirmed schizophrenia schizoaffective disorder.

NOTE Confidence: 0.865726888179779

00:05:43.390 --> 00:06:02.480 An hour patients were actually dying and more has been done in this very building by its CMHC by well partly myself by other colleagues. Some people in this very room to combat against this.

NOTE Confidence: 0.904375195503235

00:06:03.810 --> 00:06:27.720 And I can assure you that we were also very active in the changing state and federal policies and guidelines that many things that are standard. Now, Indiana care of psychosis. We were very early. Or maybe we started some of them, but as I was dealing with this.

NOTE Confidence: 0.914682865142822

00:06:28.760 --> 00:06:34.270 I found out what every physician dealing with chronic diseases do learn.

NOTE Confidence: 0.929308652877808

00:06:34.900 --> 00:06:40.830 And that was it so much more difficult to treat a disease once it occur.

NOTE Confidence: 0.84917163848877

00:06:41.440 --> 00:06:50.490 Uh then preventing it and most of these deaths are risk factors that are very modifiable.

NOTE Confidence: 0.901020586490631

00:06:51.000 --> 00:07:03.280 And so I start thinking about like? How do I prevent this thing and I remember this is not my specialty area? I came to Yale is a schizophrenia expert cognition.

NOTE Confidence: 0.878089368343353

00:07:03.810 --> 00:07:12.960 Uh so it was obvious that the first things that needs to be done and to decrease.

NOTE Confidence: 0.88088059425354

00:07:13.720 --> 00:07:18.130 These diseases is actually smoking cessation.

NOTE Confidence: 0.687610983848572

00:07:18.650 --> 00:07:19.780 And.

NOTE Confidence: 0.892411589622498

00:07:21.740 --> 00:07:42.530 We I was lucky enough we were lucky enough to have Tony George working in the building at the time he was running schizophrenia. An address my smoking cessation studies. So I started meeting with him and we we, we had a nice arrangement that he had a very good clinical team.

NOTE Confidence: 0.902312874794006

00:07:44.000 --> 00:08:14.110 Who was doing the research so we had an arrangement that we would send our patients to him and he would treat them his team would treat them regardless if they were eligible for his studies or not, that worked out fine and like you know, I said Oh I can outsource this stuff my first biggest headache is gone. Then I moved on to the second biggest risk factor. I started playing with cardiovascular risk calculators, etc and it was obvious that.

NOTE Confidence: 0.8858802318573

00:08:14.110 --> 00:08:30.170 The problem the second biggest risk factor for preventing you know for cardiovascular disease is an also diabetes and some cancers here is was excess weight right so I wanted to see you know what's going on in my clinic.

NOTE Confidence: 0.860525012016296

00:08:30.920 --> 00:08:33.760 And at the time.

NOTE Confidence: 0.882442235946655

00:08:35.000 --> 00:08:49.220 This is about. I think 400 schizophrenia patients. We don't have a first step shot connect and so there must be about 7 or 8 first episode patients an the graphic showed us that.

NOTE Confidence: 0.852502107620239

00:08:49.750 --> 00:08:57.980 Uh that we were seeing with our eyes were not meraj. We had about 3 times the.

NOTE Confidence: 0.885131239891052

00:08:58.660 --> 00:09:05.060 Oh, basically incidents compared to the New Haven population. We had about 5 times severe obesity.

NOTE Confidence: 0.780875861644745

00:09:05.600 --> 00:09:09.050 Uh you know incidence in our clinic.

NOTE Confidence: 0.92621123790741

00:09:09.590 --> 00:09:16.170 And the diabetes rates were about 3 times, which is a good bellwether for cardiovascular disease coming in.

NOTE Confidence: 0.897019028663635

00:09:17.290 --> 00:09:30.520 So the of course, the question is, I'm still pretty sure that it's smoking. That's causing it because our patients smoke so much more than everybody else, we looked at cardiovascular risk.

NOTE Confidence: 0.910475850105286

00:09:31.050 --> 00:09:39.830 And it's fairly easy to do, if you obtain the necessary components an well it turned out that.

NOTE Confidence: 0.889530777931213

00:09:40.360 --> 00:09:52.630 Uh our particular patience had higher cardiovascular risk than the rest of the population, but not only from the rest of the population from rest of the obese population.

NOTE Confidence: 0.883042991161346

00:09:53.760 --> 00:10:12.100 So we got to address this issue an at the time they all the rage was Atkins diet. So I was £40 less. I didn't know anything about weight and but the Denver suggestion that Oh they're eating more carbohydrates maybe.

NOTE Confidence: 0.891050517559052

00:10:12.760 --> 00:10:16.260 And so we looked at what they what people are eating.

NOTE Confidence: 0.91404002904892

00:10:17.110 --> 00:10:29.150 We did the nutrition analysis and they were eating about like exactly the same things that everybody else was eating. They were just eating more of it. About 500 calories per day more of it.

NOTE Confidence: 0.892161667346954

00:10:30.150 --> 00:10:38.880 So then there was a suggestion that well our patients. Maybe don't move as much. We looked at it an there was nothing there.

NOTE Confidence: 0.915120661258698

00:10:39.910 --> 00:10:54.750 That was like you know they didn't think that they were moving a little bit more than others. So there was an insight problem or self assessment problem there. But they were pretty much the same as as their peers and this particular.

NOTE Confidence: 0.865598618984222

00:10:55.390 --> 00:11:01.810 City all the healthy numbers are actually drawn from New Haven City of New Haven.

NOTE Confidence: 0.846532821655273

00:11:02.390 --> 00:11:09.510 So I started looking for I know basically person just like Tony George so I can.

NOTE Confidence: 0.214977636933327

00:11:10.050 --> 00:11:10.690 Uh.

NOTE Confidence: 0.849716782569885

00:11:11.300 --> 00:11:12.940 Outsource that issue too.

NOTE Confidence: 0.805995523929596

00:11:13.500 --> 00:11:16.720 Uh and so that I can you know, do what I'm?

NOTE Confidence: 0.697758793830872

00:11:17.610 --> 00:11:19.280 Trained to do.

NOTE Confidence: 0.844250559806824

00:11:19.780 --> 00:11:35.370 Uh an at the time we had a big obesity expert in at Yale. His name is was Kelly Brownell. He's at Duke. Now Kelly Brownell was a very important obesity researcher and he had moved onto.

NOTE Confidence: 0.801454067230225

00:11:36.100 --> 00:11:38.440 A population studies then.

NOTE Confidence: 0.17749959230423

00:11:39.400 --> 00:11:40.110 Uh.

NOTE Confidence: 0.922564208507538

00:11:41.530 --> 00:11:50.510 But in his earlier years, he had developed is a very successful commercialized weight management program.

NOTE Confidence: 0.875226438045502

00:11:51.280 --> 00:11:58.910 He was very busy it was extremely difficult to get an appointment from him, I think we

NOTE Confidence: 0.835502326488495

00:11:59.480 --> 00:12:02.590 Put some people you know.

NOTE Confidence: 0.875860095024109

00:12:03.160 --> 00:12:12.420 And either Bruce fixture or the other professor vexed and helped us to get an appointment. We went to downtown campus to his building. He had a building at Yale.

NOTE Confidence: 0.849470019340515

00:12:12.930 --> 00:12:43.180 And I can still remember the long walk from its office door to his desk little bit down thing. He was a larger than life figure. He is still is, and so that was a very defining meeting. I went there with my accomplice. Michelle John Baptist for those of you who don't remember him. He was the medical director of the 4th floor and Michelle having worked as a hat administrator.

NOTE Confidence: 0.907889723777771

00:12:43.180 --> 00:12:50.060 And surgeon in Haiti for many years before he became a psychiatrist had a really great sense of preventive Madison.

NOTE Confidence: 0.861250936985016

00:12:50.670 --> 00:12:53.920 So Michelle and I went there and uh.

NOTE Confidence: 0.90952605009079

00:12:54.430 --> 00:13:09.870 There are a couple of things that Kelly Kelly did for us or told us the First things first. He told us that well. There is obesity epidemic going on in the country and there are not enough. Obesity researchers so if you don't do it yourselves. Nobody else will do it for you.

NOTE Confidence: 0.230444565415382

00:13:10.930 --> 00:13:11.620 Uh.

NOTE Confidence: 0.728489220142365

00:13:12.400 --> 00:13:16.200 Crushed my dreams.

NOTE Confidence: 0.924396216869354

00:13:16.710 --> 00:13:28.210 Then he should some emails to the company that was managing his weight management program and gave us permission to use his weight management program.

NOTE Confidence: 0.922911882400513

00:13:28.870 --> 00:13:44.080 But the other thing he did is that he introduced us to the concept of foot deserts and food deserts. If you're not familiar with the concept is the areas of the country where even if you have the means you don't have.

NOTE Confidence: 0.926535427570343

00:13:44.580 --> 00:13:46.900 Places to buy healthier food stuff.

NOTE Confidence: 0.90046763420105

00:13:47.750 --> 00:14:06.690 OK, most of the countries served by non Super-center Walmarts or Family Dollar type of stores which focus on non perishable food stuff, which is usually chock full of calories and salt and all those kind of stuff.

NOTE Confidence: 0.893337666988373

00:14:07.240 --> 00:14:15.000 And this is our fair state and we are living right in the middle of a photo that turns out OK.

NOTE Confidence: 0.884816586971283

00:14:15.680 --> 00:14:21.780 And this is not of course for denizens of E Rock, who can drive to Costco and get their stuff.

NOTE Confidence: 0.91302353143692

00:14:22.320 --> 00:14:25.670 But most of the people in our town.

NOTE Confidence: 0.863918602466583

00:14:26.290 --> 00:14:34.860 Are you sure this is a map of poverty in Connecticut? So so people did not do not have money?

NOTE Confidence: 0.911968111991882

00:14:35.360 --> 00:14:40.000 And do not have the means to go buy the stuff that they need to buy.

NOTE Confidence: 0.897647678852081

00:14:41.390 --> 00:14:46.270 So Kelly said if you don't address this issue your patients are poor. They're they're living in the middle of.

NOTE Confidence: 0.87967848777771

00:14:46.850 --> 00:14:56.020 Foot desert there are no supermarkets in such that they can go buy their stuff if you don't address this issue.

NOTE Confidence: 0.920881330966949

00:14:57.160 --> 00:15:00.940 You're not going to be able to get any results.

NOTE Confidence: 0.521539032459259

00:15:01.440 --> 00:15:02.290 So.

NOTE Confidence: 0.890050828456879

00:15:03.180 --> 00:15:33.410 We started talking about you know about this and Michelle and I decided to give people healthy foods. That doesn't work. That's not such an easy thing because there's a lot of logistical problems with it. Healthy foods are very perishable and I think we got an astounding now from the people who would facilitate that we had a cook named Mark.

NOTE Confidence: 0.890026569366455

00:15:33.410 --> 00:16:01.510 I think if we didn't let us use his phrases, etc. So that that was not going to fly at the time I engaged clinical nutritionist in the Yale New Haven Hospital Nutrition Clinic. Her name is Alan Lisco, who told us there is no point in giving people the foot. They're just going to eat it and they go back to to do whatever they do. She had extensive experience with another special population developmentally disabled adults.

NOTE Confidence: 0.687197744846344

00:16:02.620 --> 00:16:03.980 And.

NOTE Confidence: 0.914365530014038

00:16:04.520 --> 00:16:22.660 So she said that we need to do teach them half to show how are we going to do it so we came up with the idea of guided supermarket tours this is like museum tours. You take people to the supermarket you go around because Ellen assured us that it is possible to eat healthy with a limited budget.

NOTE Confidence: 0.188733622431755

00:16:23.260 --> 00:16:23.920 Uh.

NOTE Confidence: 0.903881251811981

00:16:24.440 --> 00:16:30.880 Then we change the idea of giving people foot we need to address the poverty problem.

NOTE Confidence: 0.914993166923523

00:16:31.840 --> 00:16:59.820 Because you know, I'm very also I'm reading the literature in other fields and contingency management was all the rage at the time so I like you know, we came up with the idea that will actually do a contingency management for behavior change. So we were going to reimburse people first teach them how to shop. Because supermarkets are very cluttered environments and they're highly curated by marketing gurus. You're not going to go in a supermarket.

NOTE Confidence: 0.880931794643402

00:17:00.410 --> 00:17:15.290 An see frozen green beans when you get in what you're going to see is like you know, mostly junk because there is more profits in there for about the companies and the supermarkets, so.

NOTE Confidence: 0.909747183322906

00:17:15.900 --> 00:17:20.740 We thought we were going to teach people have to shop and then reimburse them.

NOTE Confidence: 0.818223059177399

00:17:21.600 --> 00:17:24.820 Uh when they buy the good stuff.

NOTE Confidence: 0.870445907115936

00:17:25.360 --> 00:17:36.840 OK, we identified some good stuff, so Michelle wet and got up service grant from CMHC Foundation. Thank you for that I think it was \$1000.

NOTE Confidence: 0.888068377971649

00:17:37.370 --> 00:17:54.070 Uh I don't remember well and so we did the first program 24. I engaged 24 of my patients 18 of them, actually out of the 24 who signed up did it for \$1000. We did the first pilot study.

NOTE Confidence: 0.851850152015686

00:17:54.660 --> 00:18:05.380 I think the most simplest foundation gives away these days is \$50.00, so that was good money and so we did the first study.

NOTE Confidence: 0.865663647651672

00:18:06.110 --> 00:18:14.080 Which worked is like I chose particularly heavy patients the average BMI was 37?

NOTE Confidence: 0.507764279842377

00:18:14.740 --> 00:18:16.940 And.

NOTE Confidence: 0.906029462814331

00:18:17.750 --> 00:18:31.140 So almost everybody in that group was eligible for bariatric surgery right and it worked. But you know to our surprise. It didn't only work but it continued working 6 months after.

NOTE Confidence: 0.920238196849823

00:18:32.940 --> 00:18:49.890 So at this point we have something that works, but I wasn't really happy with the learn program because it was you know it really belonged to a company at that time you had like I felt like we had to pay for this each time or ask permission for it.

NOTE Confidence: 0.900443553924561

00:18:50.420 --> 00:19:02.750 Uh so I decided to do something better for my patients are patients have subtle cognitive impairment and.

NOTE Confidence: 0.137225314974785

00:19:03.680 --> 00:19:04.390 Uh.

NOTE Confidence: 0.886761724948883

00:19:05.060 --> 00:19:30.690 I also wanted the words were too big you know, I I had little kids I was watching a lot of Mister Rogers. I thought that you know well the I. It was boring. But I was enamored with the guys style, the words were simple concepts first simple message was clear that's what I wanted. I wanted to intervention that Mister Rogers would be proud of.

NOTE Confidence: 0.172114297747612

00:19:31.660 --> 00:19:32.840 Uh.

NOTE Confidence: 0.344224095344543

00:19:33.360 --> 00:19:34.900 So.

NOTE Confidence: 0.187375992536545

00:19:35.910 --> 00:19:36.820 Uh.

NOTE Confidence: 0.895287454128265

00:19:37.970 --> 00:19:51.520 That was one thing the other thing is that well. Morris is here. I was helping them out with their cognitive rehabilitation studies and I learned something there that you know you have to start very simple.

NOTE Confidence: 0.894438445568085

00:19:52.140 --> 00:19:54.520 And then increase difficulty slowly.

NOTE Confidence: 0.939045190811157

00:19:55.130 --> 00:20:03.830 And then repeat repeat repeat repeat repeat repeat repeat repeat as much as possible to go beyond the cognitive impairment.

NOTE Confidence: 0.507014155387878

00:20:05.470 --> 00:20:06.280 So.

NOTE Confidence: 0.877637565135956

00:20:07.460 --> 00:20:38.530 We already got down the supermarket with it. I I really like that. That was very popular. We usually started those visits with 8 people and it with 20 and then you know, people from the community joined and they applaud that was fun. So I was already familiar with diabetes prevention program. And if you don't know what time it is prevention program? Is I think this is this is the one of the best studies and I HM refunded.

NOTE Confidence: 0.899671077728271

00:20:38.560 --> 00:20:42.890 Thousands of people got randomized to lifestyle intervention.

NOTE Confidence: 0.865175664424896

00:20:43.550 --> 00:20:53.040 Uh to metformin and placebo and there is quite a bit of weight loss and the.

NOTE Confidence: 0.863813817501068

00:20:53.650 --> 00:20:55.880 And that weight loss remains.

NOTE Confidence: 0.885202586650848

00:20:56.390 --> 00:21:14.880 Uh and this is metformin remember that I'll come back to that. It's about 4 pounds and then it Peters off towards the end, so the

this study had to be stopped midway because it would be unethical to continue the difference between lifestyle and placebo was so big.

NOTE Confidence: 0.878721177577972

00:21:16.080 --> 00:21:47.500 OK, they had the different sensors use different modules of the life of a lifestyle information or their own lifestyle intervention. I think but they put all of those behavioral interventions into a zip file that I downloaded from from NIH after asking permissions. It was free to use free to download in public domain. It was a little chaotic, but we went into it and we chose what we wanted.

NOTE Confidence: 0.88300883769989

00:21:48.090 --> 00:21:54.270 And we created our own program, with you know with followed.

NOTE Confidence: 0.928444981575012

00:21:55.180 --> 00:21:59.490 Which followed you know all the principles that I mentioned to you with my colleagues?

NOTE Confidence: 0.755833148956299

00:22:00.170 --> 00:22:02.730 And it is.

NOTE Confidence: 0.884643018245697

00:22:03.250 --> 00:22:34.660 This one and the deception continues. I always warn people that it's not simple it's simplified towards are simple and I don't know if the Spanish version is if the words are simple, too because that's a courtesy of Upper Manhattan. Mental Health Center. If you know, New York City. They have a large Spanish speaking population. This is not translated to. I don't know 67 languages used.

NOTE Confidence: 0.891873419284821

00:22:34.660 --> 00:22:39.930 Around the world, I'm most proud of Icelandic because Icelandic.

NOTE Confidence: 0.844471871852875

00:22:40.450 --> 00:22:50.990 So and the funniest email, I got was from colleagues from UK. They translated to English.

NOTE Confidence: 0.858984649181366

00:22:53.040 --> 00:23:04.730 Well, they didn't really translate it. That's not what they said. But they had to adapt it to British eating patterns like so we had to.

NOTE Confidence: 0.859017729759216

00:23:05.250 --> 00:23:08.700 Obviously test this and.

NOTE Confidence: 0.223838090896606

00:23:09.200 --> 00:23:11.470 So.

NOTE Confidence: 0.896628320217133

00:23:12.280 --> 00:23:23.880 I found out that clinical trials, especially behavior that can cut trails are super expensive the largest grant, I over garden with my cognitive studies was below \$100,000.

NOTE Confidence: 0.942951858043671

00:23:24.410 --> 00:23:27.130 And this thing was going to cost millions of dollars.

NOTE Confidence: 0.529062747955322

00:23:27.670 --> 00:23:29.650 Uh so.

NOTE Confidence: 0.873986601829529

00:23:30.540 --> 00:23:39.140 I called the program officer and I said, Don't worry people know if you write another one, and like you know, I never written that NIH grant, let alone another one.

NOTE Confidence: 0.848004341125488

00:23:40.150 --> 00:23:42.160 So I collected.

NOTE Confidence: 0.878146231174469

00:23:42.890 --> 00:24:08.950 Our own applications from friends and family and if you're in the audience and gave me your aldera. One applications now. I know that people don't give away their old our own applications and I didn't know that, but some of you in the audience. did I had. I had a sense of structure of habanera. One is written an you know it didn't have nice page limits that we have now if they were long things to read.

NOTE Confidence: 0.75555557012558

00:24:09.500 --> 00:24:11.270 So I wrote another one.

NOTE Confidence: 0.915253639221191

00:24:12.510 --> 00:24:23.170 And like you know, I have to give a shout out to I made everybody who would be willing to read it read it and edit it.

NOTE Confidence: 0.840529143810272

00:24:23.710 --> 00:24:50.170 And I'm going to give a shout out to many of those people here. I mean, like the Co investigators. Of course, did read it and edited like Bruce Vextor Carlos Grillo, who graciously decided to join Lydia Swastik, Florida. Pietro was at exercise physiologist at pier slap who designed the lifestyle activity program for that study.

NOTE Confidence: 0.903222560882568

00:24:50.670 --> 00:24:53.710 And people who are not Co investigators.

NOTE Confidence: 0.573231041431427

00:24:54.530 --> 00:24:56.240 Who?

NOTE Confidence: 0.866289079189301

00:24:57.010 --> 00:25:06.930 Did review it and critiqued it out of either out of the goodness of their hearts out of their kindness or maybe to get me off their back.

NOTE Confidence: 0.830096781253815

00:25:07.450 --> 00:25:33.080 Oh, God, so many people Bruce Rounsaville May, he rest in peace spend a lot of time on that I presented it to Psychotherapy Development Center, Katy Carol was there, she made helpful commands. Sushi track Krishna insulin. Stephanie O'Malley because I buy it in her office and asked her to please help and people.

NOTE Confidence: 0.79958701133728

00:25:33.740 --> 00:25:44.140 Outside the Department cereal, D'souza introduced me to wrong, Ganguli that spit who had a competing study at the time.

NOTE Confidence: 0.822306275367737

00:25:44.740 --> 00:26:08.450 Uh but you know, he liked the grant, so he decided to join in as a Co. Investigators this one. Two John newcomer at wash U kid, not to line at UCLA. Several other names. This this grant has been critiqued much more than any NIH review committee could do so by the time it went to it went to review it got.

NOTE Confidence: 0.666596293449402

00:26:09.430 --> 00:26:10.350 Find it.

NOTE Confidence: 0.857502996921539

00:26:11.040 --> 00:26:20.110 OK, there were 2 critics there, I mean, there are 2 lessons. If anyone of you are junior investigators. There are 2 lessons here, one get help.

NOTE Confidence: 0.87541139125824

00:26:20.780 --> 00:26:35.850 2 don't overdo it because several people who would be friendly. Rivers told me that they had to recuse themselves from the Review Committee. So we got the grant, there were 2 critic Swan recruitment goals were too ambitious.

NOTE Confidence: 0.869873344898224

00:26:36.770 --> 00:27:06.960 Which I knew was not true because I know my clinical population the second critique was that I wasn't asking for enough money, which turned out to be true, although the money. We got was more

than my lifetime income. So so we went ahead and did this study. It took what 6 years. We randomized 190 patients and it did work it did work wonderfully.

NOTE Confidence: 0.891523718833923

00:27:06.960 --> 00:27:38.430 The the if you notice the control group stop gaining weight too. And that's the common finding actually in weight management. Studies in the general population. The nice thing is that the actually the number of people who lost clinically significant weight increased after the intervention ended and the treatment as usual group remained the same and I wanted. I wanted to know if really like you know, signing up for a weight loss study is doing anything because all they get is.

NOTE Confidence: 0.875393986701965

00:27:38.430 --> 00:27:54.310 Getting weight measurements every other month right so I looked at you know randomly chosen selected group among my patients. An I found out that they are actually gaining weight in that form Mount period of time.

NOTE Confidence: 0.88893449306488

00:27:56.030 --> 00:28:26.520 So this is the story of the behavioral intervention development. I also was curious about if this contingency thing is working for behavior change. So we did. Another pilot study for one thing. Let me tell you this intervention has been used in this building by our behavioral health home team directed by Nancy Watsky without the contingency part and they got the same results.

NOTE Confidence: 0.875295221805573

00:28:27.440 --> 00:28:42.300 You know, people stop gaining Wayne half of them lost weight, which looks great. But I was still curious about the contingency part so I did another study where we paid people just to attend.

NOTE Confidence: 0.86212021112442

00:28:43.050 --> 00:28:45.320 We paid people per pounds, they lost.

NOTE Confidence: 0.895313322544098

00:28:46.440 --> 00:29:10.200 And we paid you know, we did our contingency behavior and it seems like contingency for behavior change is work, a little bit better. This is a short term version of the same program because I did it with bipolar so now. I'm moving away from schizophrenia little bit. I'm going to tell you why in a moment but before I move onto I'm going to move on to the pharmacological part of this story.

NOTE Confidence: 0.920823574066162

00:29:11.190 --> 00:29:18.170 But before I move on to that. Let me share you some tips and tricks that I have learned along the way.

NOTE Confidence: 0.887464880943298

00:29:18.710 --> 00:29:23.930 Very quickly so that you know you can use your in your clinical practice.

NOTE Confidence: 0.704318523406982

00:29:24.780 --> 00:29:27.090 And the

NOTE Confidence: 0.949616372585297

00:29:27.640 --> 00:29:30.020 First thing is there is nothing special.

NOTE Confidence: 0.905856132507324

00:29:30.810 --> 00:29:41.620 And right management with any serious mental illness. They gain the weight for the same reasons. Everybody else gains weight OK with a little help from the medications.

NOTE Confidence: 0.927056014537811

00:29:42.170 --> 00:29:46.070 And they lose the weight, the exact same way that everybody else loses weight.

NOTE Confidence: 0.902234196662903

00:29:46.890 --> 00:29:50.820 OK, it's extremely important to be non judgmental.

NOTE Confidence: 0.915477275848389

00:29:52.260 --> 00:30:03.800 Our patients complain a lot about weight stigma. They complain about weight stigma actually more than mental illness stigma. How do I know we actually did the research is in the literature you can go take a look?

NOTE Confidence: 0.90290504693985

00:30:04.500 --> 00:30:25.650 Always way people don't take their word to how much they weigh people underestimate their weight. Part 10 to 20% and the general population and so is our patients. We did the research. We showed that as correct. There is no reason to do any waist measurement or nothing like that. BMI is a perfectly good.

NOTE Confidence: 0.902359306812286

00:30:26.180 --> 00:30:35.630 A proxy for Adapa City and the body. We did research that actually because I wanted to have practical ways of following people.

NOTE Confidence: 0.577718257904053

00:30:36.910 --> 00:30:39.230 And.

NOTE Confidence: 0.93009626865387

00:30:40.160 --> 00:30:42.730 It's always good to have a scale in the office.

NOTE Confidence: 0.903928279876709

00:30:44.360 --> 00:30:58.930 Because it's a prompt for this discussion. I mean, remember that, you know the reason for that visit is not right management. The patients are there for their mental health problems your primary job is to do with mental health.

NOTE Confidence: 0.933928668498993

00:30:59.900 --> 00:31:02.360 And maybe you have 2 three minutes.

NOTE Confidence: 0.906405687332153

00:31:03.070 --> 00:31:04.660 To address the weight issue.

NOTE Confidence: 0.934147298336029

00:31:05.770 --> 00:31:12.980 So don't try to change people's lifestyle in those 23 minutes choose one thing that they can give away.

NOTE Confidence: 0.870046734809875

00:31:14.230 --> 00:31:22.260 It's usually a bag of chips or a full calorie soda and that strategy worked very well for us.

NOTE Confidence: 0.775771200656891

00:31:22.920 --> 00:31:29.010 An we advocate frequent self monitoring I have bought.

NOTE Confidence: 0.945768713951111

00:31:29.740 --> 00:31:33.560 With my own money and distributed 400 scales in this building.

NOTE Confidence: 0.812575280666351

00:31:34.060 --> 00:31:52.020 Uh a patient called me Johnny Appleseed of scales and I did not know who Johnny Apple speak to her so I went home. Ask my kids sounds like a stand up guy, so.

NOTE Confidence: 0.220085769891739

00:31:52.680 --> 00:31:53.420 Uh.

NOTE Confidence: 0.900449454784393

00:31:54.170 --> 00:32:07.660 I I have one actually I lied I distributed 399 scales. I still have one in my office. So if you don't have one. I give it away to any resident stuff for patients who want one.

NOTE Confidence: 0.898789942264557

00:32:08.560 --> 00:32:25.110 So the last thing is like you know refer to weight management programs if they're available. Obesity is now a disease. Some

insurances do pay lifestyle programs work in our patients can do anything that other people do.

NOTE Confidence: 0.895417153835297

00:32:25.630 --> 00:32:43.570 Uh you use different types of programs over the years and it works, so coming down to the pharmacological part. This is a story that you know now. The new medications came on this is stolen slight must have stolen it from either microcell.

NOTE Confidence: 0.866913795471191

00:32:44.090 --> 00:32:54.130 Uh and this meta analysis started all and prove to us that what we were seeing in the clinic is happening to everybody else.

NOTE Confidence: 0.885065078735352

00:32:54.840 --> 00:33:13.790 OK, this is the initial meta analysis, but of course, like I have an updated one for you and you can clearly see the anti psychotics right here work pretty much the same with the exception of close Appin. Of course, all right, but their weight gain liability is different greatly.

NOTE Confidence: 0.666309654712677

00:33:15.230 --> 00:33:16.230 And.

NOTE Confidence: 0.841521263122559

00:33:17.650 --> 00:33:33.720 But how I'm looking at this as a well. You know researcher clinical. Researchers is that these medications on this ad are mostly anti histamine can anti cholinergic.

NOTE Confidence: 0.878454864025116

00:33:34.470 --> 00:33:49.720 All right and these ones in the middle are not really anti Semitic, but they do. Black 552 C Receptor. Certain 2C Receptor, which is probably not needed for antipsychotic action, but comes in the package with 5H T 2A.

NOTE Confidence: 0.856883525848389

00:33:50.260 --> 00:33:55.230 And Well, you know they all black the D2 receptors.

NOTE Confidence: 0.821865737438202

00:33:56.390 --> 00:34:02.540 And but the Pure D2 receptors look, you know coming out of Roses.

NOTE Confidence: 0.821657121181488

00:34:03.770 --> 00:34:10.010 The my problem with this was when I started Hello Paradol, too.

NOTE Confidence: 0.90520578622818

00:34:10.530 --> 00:34:14.390 Patients who did not use anti psychotics before they gained a lot of weight.

NOTE Confidence: 0.864288330078125

00:34:14.890 --> 00:34:25.060 So I I thought that well these are studies that are actually done with chronic patients they must have been on Anti Psychotics before.

NOTE Confidence: 0.694185316562653

00:34:26.620 --> 00:34:28.380 And it

NOTE Confidence: 0.866613745689392

00:34:29.910 --> 00:34:39.610 Maybe the the two effect is dopamine 2 receptor effect as mask, so we went ahead and did our own meta analysis.

NOTE Confidence: 0.89602255821228

00:34:40.140 --> 00:34:47.510 And as you can see, there in the long run haloperidol in medication, naive patients.

NOTE Confidence: 0.887165427207947

00:34:48.100 --> 00:34:52.480 Actually goes 20 pounds of weight on average.

NOTE Confidence: 0.204977199435234

00:34:52.990 --> 00:34:53.720 Uh.

NOTE Confidence: 0.870967566967011

00:34:54.220 --> 00:35:05.520 And the first year so obviously I have 3 receptors. Now the actually 4. If you count the Anti Cholinergic Anti Semitic Anti cholinergic concept.

NOTE Confidence: 0.810715913772583

00:35:06.280 --> 00:35:10.800 The complex and 552 C.

NOTE Confidence: 0.886994540691376

00:35:11.310 --> 00:35:17.980 Which is an appetite related receptor and probably depression antidepressant activities there?

NOTE Confidence: 0.810328304767609

00:35:18.840 --> 00:35:26.040 And the D2 Receptor all our medications, Black T2. We don't have an antipsychotic which doesn't blocked it.

NOTE Confidence: 0.867734134197235

00:35:26.550 --> 00:35:33.470 And if you can cause people. It's more, with a chemical maybe you can call them. It less with another one.

NOTE Confidence: 0.8882976770401

00:35:35.230 --> 00:35:39.500 And the 2nd question was that is this is kind of linear problem then.

NOTE Confidence: 0.900424122810364

00:35:40.320 --> 00:35:58.870 Uh because people cited blur and crap linen that they talked about weight fluctuations. They would talk about weight fluctuations. They paid a lot of attention to body shape head shape all kinds of things and however they never talked about obesity.

NOTE Confidence: 0.920253753662109

00:35:59.800 --> 00:36:07.120 So we hit the historical literature and found out actually studies that were done before anti psychotics.

NOTE Confidence: 0.613046050071716

00:36:07.990 --> 00:36:09.060 And.

NOTE Confidence: 0.946842730045319

00:36:09.680 --> 00:36:15.260 This was presented in 1942, the second one, the first one was presented 8 years before that.

NOTE Confidence: 0.822485506534576

00:36:15.870 --> 00:36:19.060 And the patients with schizophrenia.

NOTE Confidence: 0.808425724506378

00:36:20.250 --> 00:36:21.750 Uh we're actually.

NOTE Confidence: 0.86983448266983

00:36:22.420 --> 00:36:23.500 Undernourished.

NOTE Confidence: 0.916087210178375

00:36:24.250 --> 00:36:33.120 And the second slide is after 8 years of specialized nutrition programs. They fail to gain weight so obesity is not a feature of schizophrenia.

NOTE Confidence: 0.511603891849518

00:36:35.020 --> 00:36:35.820 So.

NOTE Confidence: 0.892120659351349

00:36:36.440 --> 00:37:00.840 Other evidence comes from group of patients that were tracked in India. There were 6 for about 30 years. Never received the medication. They did not have an obesity problem and then of course, the antipsychotic native people who don't have psychosis who have things like borderline personality disorder. PTSD the anti psychotics cause similar weight gain OK.

NOTE Confidence: 0.858893990516663

00:37:01.560 --> 00:37:11.760 So now how I try to so now I'm moving beyond schizophrenia. We are in the anti firmly in the antipsychotic induced weight gain territory.

NOTE Confidence: 0.0460254028439522

00:37:12.700 --> 00:37:13.350 Um.

NOTE Confidence: 0.872381150722504

00:37:14.310 --> 00:37:25.260 I had to start with histamine because he study more receptor blockade. Obviously was the biggest problem but I'm I also have.

NOTE Confidence: 0.741074860095978

00:37:25.980 --> 00:37:27.250 Other than

NOTE Confidence: 0.836922466754913

00:37:27.910 --> 00:37:30.400 Other than 30 or so patients on closer pin.

NOTE Confidence: 0.817910492420197

00:37:31.380 --> 00:37:50.210 OK remember that I specialize in treating refractors 'cause of rain, yeah, I'm obviously the biggest prescriber of close up in between. New York and Boston. I've been told so actually. I know the guy who prescribe most in Boston, too. It's all over.

NOTE Confidence: 0.626374423503876

00:37:50.760 --> 00:37:51.970 So uh.

NOTE Confidence: 0.810383915901184

00:37:52.830 --> 00:37:55.210 Now we are uh.

NOTE Confidence: 0.897425413131714

00:37:57.070 --> 00:38:23.400 I have to do something about this, though I mean, I don't know anything about this to me and I had to hit the pre clinical literature again, and see what worked what didn't work for you know what? What's active. The histamine receptors. There were there was a study at least that showed that the histamine receptor induced weight is due to the to the action in a specific area of the brain on a specific enzyme system. I'm not going to go into details there.

NOTE Confidence: 0.898087918758392

00:38:23.930 --> 00:38:34.950 And and the anti cholinergic activity comes with it an it is meaningful. But I'm not going to talk about that I can answer your questions after.

NOTE Confidence: 0.873777091503143

00:38:35.500 --> 00:38:46.440 Uh at this point of course, the question is a lot of people use anti histamine X for their allergies in this country and around the world right. It's allergy medication. Anti is Dominick's.

NOTE Confidence: 0.913420677185059

00:38:47.040 --> 00:38:53.250 And so the idea was like let's take a look at the population numbers.

NOTE Confidence: 0.658230364322662

00:38:53.950 --> 00:38:57.200 To see if

NOTE Confidence: 0.852669775485992

00:38:58.170 --> 00:39:24.080 People who use allergy medications gain weight. Two we did that my claim to fame. I got on a local TV station in Cleveland and blurbs in New York Times in Boston Globe and yes, people who were an antihistamine ICS after the allergies are controlled not everybody with allergies.

NOTE Confidence: 0.193932488560677

00:39:24.700 --> 00:39:25.250 Uh.

NOTE Confidence: 0.531815826892853

00:39:26.110 --> 00:39:27.800 I use anti Semitic's.

NOTE Confidence: 0.906227171421051

00:39:28.400 --> 00:39:32.330 And are heavier than the rest of the population.

NOTE Confidence: 0.907372713088989

00:39:32.860 --> 00:39:50.250 And there is an obligatory slide after this, because there's always people in the audience. We use anti histamines and that question is going to come. So I learned to put that slide in the most commonly used allergy medications and they are the.

NOTE Confidence: 0.856558501720428

00:39:50.820 --> 00:39:53.000 Green one purple one and the blue one.

NOTE Confidence: 0.910358428955078

00:39:54.070 --> 00:39:59.830 Do not cross blood brain barrier for most people, most of the time OK, the pink one.

NOTE Confidence: 0.896764695644379

00:40:00.480 --> 00:40:12.330 Play my drill does and I'm telling you the colors because obviously they come with different names. But those colors are pretty standard in on the shelves.

NOTE Confidence: 0.916266024112701

00:40:13.090 --> 00:40:20.900 And you know you don't have to stop your anti histamine. There is a simple trick to figure out if it's crossing to your brain.

NOTE Confidence: 0.877478003501892

00:40:22.080 --> 00:40:36.220 If it makes you sleepy it's in your brain. It makes you eat OK if it doesn't make you sleepy and then switch to switch your anti histamine to another one if it doesn't make you sleepy it's you eating and not your anti histamine.

NOTE Confidence: 0.879421174526215

00:40:36.720 --> 00:40:59.140 So so let's move on. I looked at the of course, like in after examining the pre clinical literature. There are several medications that are available for humans that can work on this particular system. The first one came out to be met foreman, but I was using metformin already because of the diabetes prevention program city.

NOTE Confidence: 0.854990124702454

00:40:59.970 --> 00:41:22.420 An I wasn't that impressed with it and Tryna Baptist from Venezuela was doing early studies than he published maybe 10 of them. I hope he's doing all right there that place really went down to chaos. So he wasn't very impressed with it, either, so I didn't pursue met foreman.

NOTE Confidence: 0.604030191898346

00:41:22.970 --> 00:41:26.100 Others did.

NOTE Confidence: 0.902296662330627

00:41:26.970 --> 00:41:43.840 And what they found is like this is with the lifestyle program what they got is about 4 pounds in 1216 weeks write an if you look at the diabetes prevention program.

NOTE Confidence: 0.89904910326004

00:41:44.490 --> 00:41:58.290 At 4 that's what you get with people who are not on Anti Psychotics. So metformin gives you an obligatory 4 pounds of weight loss. It is definitely not a medication that will work against.

NOTE Confidence: 0.888122260570526

00:41:59.270 --> 00:42:01.660 Antipsychotic induced weight gain.

NOTE Confidence: 0.894603729248047

00:42:02.260 --> 00:42:11.700 Uh I always get consultations that you know, I started olanzapine with Metformin. Why did my patient gain weight when they probably gained 4 pounds less?

NOTE Confidence: 0.861042261123657

00:42:12.330 --> 00:42:14.990 But you know whoever is teaching that.

NOTE Confidence: 0.846324861049652

00:42:15.540 --> 00:42:24.250 As is doing a disservice. It is not a medication for weight loss, preventing antipsychotic in this way can at least.

NOTE Confidence: 0.809736967086792

00:42:25.070 --> 00:42:32.030 It's a good Medison I use it still to prevent or pre treat diabetes, I would say.

NOTE Confidence: 0.841178059577942

00:42:32.990 --> 00:42:53.520 So the next group of medications that might have worked on the system where carbonic anhydrase inhibitors and asceticism might as well? Is Semite and Top pyramid to pyramids of medication. We know very well, we use. It sometimes and it's well studied in.

NOTE Confidence: 0.863269746303558

00:42:54.460 --> 00:43:13.670 And none smi obese populations. It does cause significant weight loss. I was of course, aware of that and I was using it with close up in patients and this, this slide is from 2008 and.

NOTE Confidence: 0.880377650260925

00:43:14.370 --> 00:43:30.410 Or, 9, so I had a group of patients that I was following with this medication that extremely difficult to use medication because so frania. Of course causes a little cognitive impairment that usually patients are not aware of it set up.

NOTE Confidence: 0.902917742729187

00:43:31.120 --> 00:43:44.480 To pyramid causes the cognitive impairment that people are acutely aware of painfully aware of and when you stop the medication. It goes away. So it's very difficult to keep the patience on this and.

NOTE Confidence: 0.880305051803589

00:43:45.530 --> 00:43:49.390 Also, it has other problems.

NOTE Confidence: 0.933956921100616

00:43:49.970 --> 00:44:02.870 Kidney stones gallstones increased risk of pancreatitis, and we use it with medications that have increased risk of pancreatitis, so it's difficult to keep patients on this, but I still wanted to try it.

NOTE Confidence: 0.883211731910706

00:44:03.400 --> 00:44:13.750 OK, so I wrote the grant, and now at this point my all my grants are automatically reviewed by obesity committee. I'm aware of and I image.

NOTE Confidence: 0.191873922944069

00:44:14.310 --> 00:44:15.110 Uh.

NOTE Confidence: 0.800315320491791

00:44:15.930 --> 00:44:18.430 And you know they?

NOTE Confidence: 0.885668277740479

00:44:19.310 --> 00:44:24.150 They accused me for trying to prove the obvious.

NOTE Confidence: 0.858109951019287

00:44:25.410 --> 00:44:40.830 And they gave me an excellent score, but excellent scores don't pay salaries. So I we didn't get that grant funded. But other people did that study. This is with olanzapine and this is from Korea.

NOTE Confidence: 0.934126377105713

00:44:41.790 --> 00:44:56.100 And 100 milligram actually is the sweet spot between 75 and 125 that patients can tolerate and after 200. Usually, it doesn't have any effect, so it still can be used as a medication.

NOTE Confidence: 0.86121940612793

00:44:56.920 --> 00:45:02.530 Is only Samantha has been tried to it's a migraine medison? Which was approved and that works as well?

NOTE Confidence: 0.878929257392883

00:45:03.930 --> 00:45:07.240 Uh so the last one was Alpha lipoic acid.

NOTE Confidence: 0.890614688396454

00:45:07.970 --> 00:45:36.570 It went from the pre clinical literature and so I went ahead and did a meta analysis with like smoke from small studies that are used in general population for weight at times and I wasn't very impressed with it look exactly like metformin, but after the per cassette was an anti oxidant an anybody who knows how I think about you know research. I do a lot of anti oxidants studies to improve cognition, etc.

NOTE Confidence: 0.89308100938797

00:45:37.120 --> 00:45:49.660 So it has this really nice double suffer bound, which scavenges free radicals. So I wanted to try that I thought like you know two birds with one stone.

NOTE Confidence: 0.899361491203308

00:45:51.130 --> 00:45:54.350 I did what any reasonable.

NOTE Confidence: 0.903733909130096

00:45:55.330 --> 00:46:19.650 Expert clinical scientist would do I went to Amazon and read the customer reviews. and I bought a bunch of bottles of it from a brand that had five stars and was cheapest because I have a family budget. Thank you very much just like the rest of you and it was \$4.35 a bottle.

NOTE Confidence: 0.785888433456421

00:46:20.210 --> 00:46:21.860 We did this study.

NOTE Confidence: 0.815010249614716

00:46:23.000 --> 00:46:25.670 And very cheap study.

NOTE Confidence: 0.875505805015564

00:46:26.280 --> 00:46:33.120 And it didn't do anything for cognition or symptoms, but Jack pot.

NOTE Confidence: 0.85538524389267

00:46:34.150 --> 00:46:38.980 It didn't work only on people who are enclosed opinion olanzapine.

NOTE Confidence: 0.892945051193237

00:46:39.550 --> 00:46:46.620 OK, it's very nice now we are on track the problem was the supplement.

NOTE Confidence: 0.880716860294342

00:46:47.510 --> 00:46:59.040 It was impossible to blind because part of it is thrown away with from the kidneys. It gives the urine specific smell and color.

NOTE Confidence: 0.901955664157867

00:46:59.750 --> 00:47:04.190 Good for monitoring compliance, but it's not that good for.

NOTE Confidence: 0.296767860651016

00:47:04.960 --> 00:47:06.610 Blended.

NOTE Confidence: 0.886841595172882

00:47:07.660 --> 00:47:21.400 And this is this was another grant, which was received an excellent score, but did not get funded. So I'm going to pursue this probably as a combination with something else, OK, so this, this part is the H1.

NOTE Confidence: 0.864085972309113

00:47:21.970 --> 00:47:52.630 Part of the of the story theater to see receptors to make a very Long story short. I had to deal with a company that was developing a serotonin to see agonist as an obesity medication. They said they were going to give the medicines after it got FDA approval. They got FDA approval and they got sold immediately so I didn't get my medicines, but that same group that studied the.

NOTE Confidence: 0.800291955471039

00:47:52.630 --> 00:47:55.630 Metformin are now studying doing a study with.

NOTE Confidence: 0.824949324131012

00:47:56.130 --> 00:48:03.410 Combination of metformin and Locus Air and it is a medication, which actually.

NOTE Confidence: 0.889416933059692

00:48:04.140 --> 00:48:34.150 Was associated with a little bit more depression than placebo in the registration trials and of course, the best study is that study. Other people do with their own patients with new stuff. So I'm waiting for the results of that. Now let's get to the D2 receptors. I'm not going to like you know, even talk about why they do receptors would cause weight. There are 2 world class experts in this very Department rough deleon studies in animals.

NOTE Confidence: 0.821282625198364

00:48:34.150 --> 00:48:49.060 Dana small studies in humans, we listen to both of them here. This is from a review that Dana recently published which shows what obesity does 2D2 system.

NOTE Confidence: 0.902551412582397

00:48:49.720 --> 00:48:52.420 Anne what I'm thinking is that?

NOTE Confidence: 0.925402104854584

00:48:52.980 --> 00:48:55.140 This arrows go both ways.

NOTE Confidence: 0.887707650661469

00:48:56.430 --> 00:48:59.720 Because when you increase dopamine here.

NOTE Confidence: 0.851545929908752

00:49:00.270 --> 00:49:03.860 Which I'm going to show in a moment people eat less?

NOTE Confidence: 0.878452301025391

00:49:04.960 --> 00:49:10.830 And actually if you follow this authored reward the food reward is.

NOTE Confidence: 0.832387328147888

00:49:11.340 --> 00:49:23.770 Uh it is true partly through endorphin system. If you saturate that system and downstream with let's say medications like methadone.

NOTE Confidence: 0.870407700538635

00:49:24.590 --> 00:49:25.710 People eat more?

NOTE Confidence: 0.186729222536087

00:49:27.350 --> 00:49:28.130 Uh.

NOTE Confidence: 0.908006012439728

00:49:29.000 --> 00:49:32.580 So, but of course, the obvious thing is to increase the.

NOTE Confidence: 0.832687437534332

00:49:33.180 --> 00:49:35.900 Dopamine here and it's been done.

NOTE Confidence: 0.323660552501678

00:49:36.810 --> 00:49:37.740 Uh.

NOTE Confidence: 0.920009732246399

00:49:38.580 --> 00:49:43.030 For decades in this country amphetamines have been used.

NOTE Confidence: 0.855361044406891

00:49:43.620 --> 00:49:49.570 As weight loss medications this is methamphetamine.

NOTE Confidence: 0.9107426404953

00:49:50.550 --> 00:50:05.790 Which I as far as I know The New Yorker ads by the way which as far as I know still in the books for obesity medication. But I'm not aware of any drug company that produces it is still being produced in small labs.

NOTE Confidence: 0.842685520648956

00:50:06.430 --> 00:50:20.240 Uh the back alleys. This is Bronx, so obviously people stopped using it because it causes psychosis and highly addictive.

NOTE Confidence: 0.887378573417664

00:50:22.220 --> 00:50:25.680 So I put that aside I didn't discard it.

NOTE Confidence: 0.844493389129639

00:50:26.250 --> 00:50:56.400 You know, I didn't discard it, but I put it aside because there are other things that we could try to do that. But what happened is that I was introduced to a group of scientists who formed the company and they were they were developing a combination of not Rick Stone and book prion as a as a obesity medication. I don't know if Carlos you didn't introduce me or.

NOTE Confidence: 0.857694923877716

00:50:56.560 --> 00:51:09.310 Uh and Dale data looked really great at the time, but you know. Just you know, said. Let's wait for them to get approval and see like you know, do the bigger studies.

NOTE Confidence: 0.881185114383698

00:51:09.890 --> 00:51:12.660 And but what happened is that?

NOTE Confidence: 0.238636434078217

00:51:13.640 --> 00:51:14.250 Uh.

NOTE Confidence: 0.910742819309235

00:51:15.380 --> 00:51:20.820 One of the times, I crashed into Stephanie O'malley's office again and this distract her from her work.

NOTE Confidence: 0.856374621391296

00:51:21.470 --> 00:51:35.060 Uh she showed me some at that time, unpublished data that when people received not friction during stop smoking trials and stop smoking they gained less weight.

NOTE Confidence: 0.887230634689331

00:51:35.950 --> 00:51:59.600 And there is a relationship you have to take my work. I'm not going to go into details why but essentially you're blocking the food reward downstream and I had some food reward studies with so failure patients showed that actually food reward is blunted, so that was a good thing so in collaboration with Stephanie. We did a pilot. We got my I got money from.

NOTE Confidence: 0.837179660797119

00:52:00.100 --> 00:52:15.910 Vielles woman research you know, I'm really grateful to Carolyn measure. Our faculty member who created that center and give away those pilot fonts it was a pretty dramatic study.

NOTE Confidence: 0.876967489719391

00:52:16.440 --> 00:52:42.180 People lost weight, there was only one person jinx of randomization in the in the diabetes group, so that was not significant for non diabetics. We had a pretty significant result just medications. There is no other intervention here and as a proof of concept if we were really blocking the full reward the This is.

NOTE Confidence: 0.842018306255341

00:52:42.840 --> 00:53:14.570 Measure of food reward. And yes, we were black in the food reward compared to placebo. So we did sit down and write. This study, the collaborators were the usual suspects. Carrasquillo Stephanie O'Malley and Carol Napoleon, who is a fairly important obesity researcher up in BU and we did a one year long placebo controlled randomized double blind.

NOTE Confidence: 0.833726704120636

00:53:14.570 --> 00:53:22.870 Trial as an add on medication. That's a very difficult study to do with serious mental ill patients.

NOTE Confidence: 0.903861820697784

00:53:23.850 --> 00:53:26.660 And the result was.

NOTE Confidence: 0.852210342884064

00:53:27.870 --> 00:53:28.500 Negative.

NOTE Confidence: 0.834692776203156

00:53:29.460 --> 00:53:37.440 Such is the fate of critical research 6 year long and.

NOTE Confidence: 0.918051064014435

00:53:39.010 --> 00:53:44.680 There is nothing demoralizing as your to find out that you're working hypothesis doesn't really work.

NOTE Confidence: 0.225276857614517

00:53:45.260 --> 00:53:47.920 So.

NOTE Confidence: 0.887741923332214

00:53:48.980 --> 00:53:54.950 I have of course, some future directions. There are a lot of threads to follow as.

NOTE Confidence: 0.87718665599823

00:53:55.520 --> 00:54:01.940 Some of you may know I'm a full-time condition and spare time researcher so.

NOTE Confidence: 0.734315931797028

00:54:02.790 --> 00:54:06.510 Tieman resources, allowing

NOTE Confidence: 0.815434813499451

00:54:07.080 --> 00:54:11.870 Uh I'm going to continue chugging on on that railroad.

NOTE Confidence: 0.94473135471344

00:54:12.390 --> 00:54:15.700 And see if we can find a solution to this problem.

NOTE Confidence: 0.889968693256378

00:54:16.260 --> 00:54:20.440 And if I'm lucky someone else will so I can declare victory and go home.

NOTE Confidence: 0.860598027706146

00:54:21.000 --> 00:54:41.770 At now at the risk of being cheesy. I'm going to. I'm going to remind you that the best things in life are not things. This lady is now medical school. This is a year after I came to Yale. This guy is about to go to college time flies and.

NOTE Confidence: 0.863178908824921

00:54:42.700 --> 00:54:55.690 Uh I am truly grateful. This has been a wonderful home for me for 17 years. The I'm I'm really grateful to all the CMHC patients.

NOTE Confidence: 0.885258078575134

00:54:56.190 --> 00:55:09.280 CMH stuff some of them departed, but not forgotten. So all the L faculty L trainees. Everybody who helped me along the way I learned a thing or 2 from everyone of you.

NOTE Confidence: 0.563900589942932

00:55:09.790 --> 00:55:10.760 And.

NOTE Confidence: 0.888951241970062

00:55:11.430 --> 00:55:20.020 I hope it all ends. I live a good echo around here, so that is my presentation, I can take some questions.