

WEBVTT

NOTE duration:"00:58:02"

NOTE recognizability:0.968

NOTE language:en-us

NOTE Confidence: 0.948169806666667

00:00:00.000 --> 00:00:02.490 Hey everybody, I'm Kerry Gross

NOTE Confidence: 0.948169806666667

00:00:02.490 --> 00:00:04.482 director about cancer outcomes.

NOTE Confidence: 0.948169806666667

00:00:04.490 --> 00:00:08.298 Copper Center and also primary care doc.

NOTE Confidence: 0.948169806666667

00:00:08.300 --> 00:00:10.236 And with that background,

NOTE Confidence: 0.948169806666667

00:00:10.236 --> 00:00:13.140 it's a particular treat to welcome

NOTE Confidence: 0.948169806666667

00:00:13.229 --> 00:00:16.295 Doctor Philip Castle to join us today.

NOTE Confidence: 0.948169806666667

00:00:16.300 --> 00:00:18.520 Doctor Cassell's work has been

NOTE Confidence: 0.948169806666667

00:00:18.520 --> 00:00:20.855 foundational in our understanding of

NOTE Confidence: 0.948169806666667

00:00:20.855 --> 00:00:23.540 the etiology and prevention of HPV,

NOTE Confidence: 0.948169806666667

00:00:23.540 --> 00:00:26.340 associated cancers and cancer prevention

NOTE Confidence: 0.948169806666667

00:00:26.340 --> 00:00:28.765 with General Electric Castle received

NOTE Confidence: 0.948169806666667

00:00:28.765 --> 00:00:30.996 his PhD in Biophysics, actually.

NOTE Confidence: 0.948169806666667

00:00:30.996 --> 00:00:33.426 A masters in public health

NOTE Confidence: 0.948169806666667

00:00:33.426 --> 00:00:34.884 from Johns Hopkins,  
NOTE Confidence: 0.948169806666667

00:00:34.890 --> 00:00:37.175 who was previously the Chief  
NOTE Confidence: 0.948169806666667

00:00:37.175 --> 00:00:39.460 scientific officer at the American  
NOTE Confidence: 0.948169806666667

00:00:39.538 --> 00:00:41.790 Society for Clinical Pathology.  
NOTE Confidence: 0.948169806666667

00:00:41.790 --> 00:00:43.878 There's been a principal investigator for  
NOTE Confidence: 0.948169806666667

00:00:43.878 --> 00:00:46.311 more than 15 years of self initiating,  
NOTE Confidence: 0.948169806666667

00:00:46.311 --> 00:00:49.166 conducting and reading by several  
NOTE Confidence: 0.948169806666667

00:00:49.166 --> 00:00:51.450 large NCI sponsored electoral  
NOTE Confidence: 0.948169806666667

00:00:51.526 --> 00:00:53.810 and clinical research studies,  
NOTE Confidence: 0.948169806666667

00:00:53.810 --> 00:00:56.378 both in the US and abroad.  
NOTE Confidence: 0.948169806666667

00:00:56.380 --> 00:00:58.599 Is that the party is widely appreciated.  
NOTE Confidence: 0.948169806666667

00:00:58.600 --> 00:01:01.045 It's contributed to virtually every  
NOTE Confidence: 0.948169806666667

00:01:01.045 --> 00:01:03.490 major guidelines regarding regarding at  
NOTE Confidence: 0.948169806666667

00:01:03.563 --> 00:01:06.238 cervical cancer screening and prevention,  
NOTE Confidence: 0.948169806666667

00:01:06.240 --> 00:01:08.767 and his work really has extended globally.  
NOTE Confidence: 0.948169806666667

00:01:08.770 --> 00:01:10.696 His papers have been cited more

NOTE Confidence: 0.948169806666667

00:01:10.696 --> 00:01:12.756 than 40,000 times in aggregate.

NOTE Confidence: 0.948169806666667

00:01:12.756 --> 00:01:15.872 Currently Dot the castle serves as the

NOTE Confidence: 0.948169806666667

00:01:15.872 --> 00:01:18.476 director of the Division of Cancer

NOTE Confidence: 0.948169806666667

00:01:18.476 --> 00:01:20.639 Prevention and Control at the NCI.

NOTE Confidence: 0.948169806666667

00:01:20.640 --> 00:01:21.348 Working overseas.

NOTE Confidence: 0.948169806666667

00:01:21.348 --> 00:01:23.118 The conduct and support our

NOTE Confidence: 0.948169806666667

00:01:23.118 --> 00:01:24.850 research in cancer prevention,

NOTE Confidence: 0.948169806666667

00:01:24.850 --> 00:01:28.078 early detection and screening.

NOTE Confidence: 0.948169806666667

00:01:28.080 --> 00:01:30.805 And now is a particularly

NOTE Confidence: 0.948169806666667

00:01:30.805 --> 00:01:33.052 relevant and timely setting for

NOTE Confidence: 0.948169806666667

00:01:33.052 --> 00:01:34.888 Doctor Castle to present to us.

NOTE Confidence: 0.948169806666667

00:01:34.890 --> 00:01:36.995 This is the 50th anniversary

NOTE Confidence: 0.948169806666667

00:01:36.995 --> 00:01:39.100 of the National Cancer Act,

NOTE Confidence: 0.948169806666667

00:01:39.100 --> 00:01:42.220 and as we reflect on the role of

NOTE Confidence: 0.948169806666667

00:01:42.220 --> 00:01:44.300 science in public health and society

NOTE Confidence: 0.948169806666667

00:01:44.300 --> 00:01:46.565 in general and in the efforts  
NOTE Confidence: 0.948169806666667

00:01:46.565 --> 00:01:48.569 against cancer in particular,  
NOTE Confidence: 0.948169806666667

00:01:48.570 --> 00:01:50.761 the role of prevention is a means  
NOTE Confidence: 0.948169806666667

00:01:50.761 --> 00:01:52.860 to decrease the burden of cancer.  
NOTE Confidence: 0.948169806666667

00:01:52.860 --> 00:01:54.950 This clearly is central work,  
NOTE Confidence: 0.948169806666667

00:01:54.950 --> 00:01:56.847 so thank you for joining us today.  
NOTE Confidence: 0.948169806666667

00:01:56.850 --> 00:01:57.706 Doctor castle.  
NOTE Confidence: 0.948169806666667

00:01:57.706 --> 00:02:00.702 And we look forward to your comments.  
NOTE Confidence: 0.948169806666667

00:02:00.710 --> 00:02:01.750 Thank you so very much.  
NOTE Confidence: 0.948169806666667

00:02:01.750 --> 00:02:03.790 It's a real honor to be here and  
NOTE Confidence: 0.948169806666667

00:02:03.790 --> 00:02:06.654 it's a real honor to lead the NCIS  
NOTE Confidence: 0.948169806666667

00:02:06.654 --> 00:02:08.174 division of cancer prevention.  
NOTE Confidence: 0.948169806666667

00:02:08.180 --> 00:02:10.119 Today I'm going to give you sort  
NOTE Confidence: 0.948169806666667

00:02:10.119 --> 00:02:11.600 of a broad overview,  
NOTE Confidence: 0.948169806666667

00:02:11.600 --> 00:02:13.840 recognizing as I learned that many of  
NOTE Confidence: 0.948169806666667

00:02:13.840 --> 00:02:15.655 my colleagues don't actually understand

NOTE Confidence: 0.948169806666667  
00:02:15.655 --> 00:02:18.448 what the division of cancer prevention does,  
NOTE Confidence: 0.948169806666667  
00:02:18.450 --> 00:02:21.089 how it's different from the other divisions,  
NOTE Confidence: 0.948169806666667  
00:02:21.090 --> 00:02:23.400 but also to.  
NOTE Confidence: 0.948169806666667  
00:02:23.400 --> 00:02:24.965 Highlight the work that we  
NOTE Confidence: 0.948169806666667  
00:02:24.965 --> 00:02:26.530 support and to engage you,  
NOTE Confidence: 0.948169806666667  
00:02:26.530 --> 00:02:28.266 hopefully in the future.  
NOTE Confidence: 0.948169806666667  
00:02:28.266 --> 00:02:30.870 In in some of these cancer  
NOTE Confidence: 0.948169806666667  
00:02:30.957 --> 00:02:32.829 prevention activities.  
NOTE Confidence: 0.948169806666667  
00:02:32.830 --> 00:02:35.950 So just a few disclaimers that get started,  
NOTE Confidence: 0.948169806666667  
00:02:35.950 --> 00:02:37.950 opinions expressed or mine should  
NOTE Confidence: 0.948169806666667  
00:02:37.950 --> 00:02:39.950 not be interpreted as representing  
NOTE Confidence: 0.948169806666667  
00:02:40.017 --> 00:02:41.549 official viewpoints of EU.  
NOTE Confidence: 0.948169806666667  
00:02:41.550 --> 00:02:41.901 S.  
NOTE Confidence: 0.948169806666667  
00:02:41.901 --> 00:02:44.007 Department of Health and Human Services,  
NOTE Confidence: 0.948169806666667  
00:02:44.010 --> 00:02:45.410 the National Institutes of Health,  
NOTE Confidence: 0.948169806666667

00:02:45.410 --> 00:02:47.202 the National Cancer Institute,  
NOTE Confidence: 0.948169806666667

00:02:47.202 --> 00:02:49.890 or the Division of Cancer Prevention.  
NOTE Confidence: 0.948169806666667

00:02:49.890 --> 00:02:51.914 My comments are informal and should not be  
NOTE Confidence: 0.948169806666667

00:02:51.914 --> 00:02:54.068 taken as a signal for funding priorities.  
NOTE Confidence: 0.948169806666667

00:02:54.070 --> 00:02:55.372 I will speak in broad terms  
NOTE Confidence: 0.948169806666667

00:02:55.372 --> 00:02:56.949 of what I think is important,  
NOTE Confidence: 0.948169806666667

00:02:56.950 --> 00:02:58.862 where I would like to see the science  
NOTE Confidence: 0.948169806666667

00:02:58.862 --> 00:03:00.357 of cancer prevention head towards  
NOTE Confidence: 0.948169806666667

00:03:00.357 --> 00:03:02.289 in the future and my aspirations,  
NOTE Confidence: 0.948169806666667

00:03:02.290 --> 00:03:04.803 whether and when I or we can  
NOTE Confidence: 0.948169806666667

00:03:04.803 --> 00:03:06.338 implement those priorities depends  
NOTE Confidence: 0.948169806666667

00:03:06.338 --> 00:03:08.684 on many factors beyond my control.  
NOTE Confidence: 0.948169806666667

00:03:08.690 --> 00:03:09.830 I wish that weren't the case,  
NOTE Confidence: 0.948169806666667

00:03:09.830 --> 00:03:12.532 but it is in fact the case I wanted  
NOTE Confidence: 0.948169806666667

00:03:12.532 --> 00:03:14.098 to highlight the burden of cancer  
NOTE Confidence: 0.948169806666667

00:03:14.098 --> 00:03:15.928 and I know you all know this,

NOTE Confidence: 0.948169806666667  
00:03:15.930 --> 00:03:17.211 but it's it's.  
NOTE Confidence: 0.948169806666667  
00:03:17.211 --> 00:03:20.200 It's the starting point for this discussion  
NOTE Confidence: 0.9897589  
00:03:20.273 --> 00:03:22.848 or any discussion about prevention.  
NOTE Confidence: 0.9897589  
00:03:22.850 --> 00:03:25.854 Which sometimes I think UM, sort of  
NOTE Confidence: 0.9897589  
00:03:25.854 --> 00:03:30.340 gets put into the second row here, but.  
NOTE Confidence: 0.9897589  
00:03:30.340 --> 00:03:33.190 As you can see in the slide here on the  
NOTE Confidence: 0.9897589  
00:03:33.190 --> 00:03:35.962 in the left panel is the expenditures  
NOTE Confidence: 0.9897589  
00:03:35.962 --> 00:03:39.109 per billions of dollars annually for not  
NOTE Confidence: 0.9897589  
00:03:39.109 --> 00:03:43.040 seeing your slides, we need to share.  
NOTE Confidence: 0.9897589  
00:03:43.040 --> 00:03:45.130 See what's going on here, sorry.  
NOTE Confidence: 0.988642944285714  
00:03:58.510 --> 00:04:00.757 My apologies, can you see that now?  
NOTE Confidence: 0.982430409444445  
00:04:02.890 --> 00:04:04.024 Perfect thank you.  
NOTE Confidence: 0.982430409444445  
00:04:04.024 --> 00:04:06.670 OK so in the left panel is  
NOTE Confidence: 0.982430409444445  
00:04:06.755 --> 00:04:09.107 by cancer expenditures and  
NOTE Confidence: 0.982430409444445  
00:04:09.107 --> 00:04:11.459 billions of dollars annually.  
NOTE Confidence: 0.982430409444445

00:04:11.460 --> 00:04:13.175 And then for the most common cancers  
NOTE Confidence: 0.982430409444445

00:04:13.175 --> 00:04:14.791 are the most lethal cancers you  
NOTE Confidence: 0.982430409444445

00:04:14.791 --> 00:04:16.453 can see that it's not billions,  
NOTE Confidence: 0.982430409444445

00:04:16.460 --> 00:04:18.497 but it's tens of billions of dollars,  
NOTE Confidence: 0.982430409444445

00:04:18.500 --> 00:04:20.656 and in fact the national costs of  
NOTE Confidence: 0.982430409444445

00:04:20.656 --> 00:04:23.030 cancer were estimated to be 190 billion  
NOTE Confidence: 0.982430409444445

00:04:23.030 --> 00:04:26.734 in 2015 and now 209 billion in 2020,  
NOTE Confidence: 0.982430409444445

00:04:26.734 --> 00:04:29.620 an increase of 10% over that period of time.  
NOTE Confidence: 0.982430409444445

00:04:29.620 --> 00:04:31.630 And that doesn't really even account  
NOTE Confidence: 0.982430409444445

00:04:31.630 --> 00:04:33.620 for the hidden costs of cancer,  
NOTE Confidence: 0.982430409444445

00:04:33.620 --> 00:04:35.520 which is a product approximated  
NOTE Confidence: 0.982430409444445

00:04:35.520 --> 00:04:36.996 to be 100 billion.  
NOTE Confidence: 0.982430409444445

00:04:36.996 --> 00:04:39.860 And as I'll show you the next slide,  
NOTE Confidence: 0.982430409444445

00:04:39.860 --> 00:04:41.240 we've made a lot of advances.  
NOTE Confidence: 0.982430409444445

00:04:41.240 --> 00:04:42.596 Certainly in the treatment of cancer.  
NOTE Confidence: 0.982430409444445

00:04:42.600 --> 00:04:45.701 But we still have 1.5 million cancers



NOTE Confidence: 0.982430409444445

00:04:45.701 --> 00:04:49.338 and .6 million related deaths every year.

NOTE Confidence: 0.982430409444445

00:04:49.340 --> 00:04:52.172 And just to give you a perspective and

NOTE Confidence: 0.982430409444445

00:04:52.172 --> 00:04:56.896 on that as bad as COVID was and is a

NOTE Confidence: 0.982430409444445

00:04:56.900 --> 00:05:01.894 point 6 million deaths is almost two full.

NOTE Confidence: 0.982430409444445

00:05:01.894 --> 00:05:02.550 Not quite,

NOTE Confidence: 0.982430409444445

00:05:02.550 --> 00:05:05.334 but almost twofold more deaths than

NOTE Confidence: 0.982430409444445

00:05:05.334 --> 00:05:08.118 those than that caused by COVID.

NOTE Confidence: 0.982430409444445

00:05:08.120 --> 00:05:08.960 So, uh,

NOTE Confidence: 0.982430409444445

00:05:08.960 --> 00:05:12.702 what what's happened over the last 45 years?

NOTE Confidence: 0.982430409444445

00:05:12.702 --> 00:05:15.757 You can see that arguably,

NOTE Confidence: 0.982430409444445

00:05:15.760 --> 00:05:18.112 I'm here are there's a CDC data

NOTE Confidence: 0.982430409444445

00:05:18.112 --> 00:05:20.460 rate per 100,000 of the population.

NOTE Confidence: 0.982430409444445

00:05:20.460 --> 00:05:23.372 We've really not made any significant

NOTE Confidence: 0.982430409444445

00:05:23.372 --> 00:05:25.532 headway in the incidence of

NOTE Confidence: 0.982430409444445

00:05:25.532 --> 00:05:27.920 cancer in males and females.

NOTE Confidence: 0.982430409444445

00:05:27.920 --> 00:05:29.534 There's a sort of a peak  
NOTE Confidence: 0.982430409444445

00:05:29.534 --> 00:05:31.359 in males in the early 90s,  
NOTE Confidence: 0.982430409444445

00:05:31.360 --> 00:05:32.380 and that's come back down,  
NOTE Confidence: 0.982430409444445

00:05:32.380 --> 00:05:35.620 but it's about the same level as it was in  
NOTE Confidence: 0.982430409444445

00:05:35.620 --> 00:05:39.534 1975 and in females it's gone up slightly.  
NOTE Confidence: 0.982430409444445

00:05:39.540 --> 00:05:41.580 I mean partly in dude and  
NOTE Confidence: 0.982430409444445

00:05:41.580 --> 00:05:43.370 aging population to be sure.  
NOTE Confidence: 0.982430409444445

00:05:43.370 --> 00:05:45.330 But you know, these are not the  
NOTE Confidence: 0.982430409444445

00:05:45.330 --> 00:05:47.220 kinds of numbers we'd like to see.  
NOTE Confidence: 0.982430409444445

00:05:47.220 --> 00:05:49.585 Certainly we've made some advances  
NOTE Confidence: 0.982430409444445

00:05:49.585 --> 00:05:51.950 in the management of cancer.  
NOTE Confidence: 0.982430409444445

00:05:51.950 --> 00:05:53.078 In survival,  
NOTE Confidence: 0.982430409444445

00:05:53.078 --> 00:05:57.026 particularly well in both in both sexes,  
NOTE Confidence: 0.982430409444445

00:05:57.030 --> 00:06:00.026 maybe perhaps more in males than females,  
NOTE Confidence: 0.982430409444445

00:06:00.030 --> 00:06:03.644 but I would say also here that even  
NOTE Confidence: 0.982430409444445

00:06:03.644 --> 00:06:06.420 preventing cancer related death.

NOTE Confidence: 0.982430409444445

00:06:06.420 --> 00:06:10.716 It's a long life or longer life of

NOTE Confidence: 0.982430409444445

00:06:10.720 --> 00:06:12.872 significant morbidity and lower

NOTE Confidence: 0.982430409444445

00:06:12.872 --> 00:06:16.820 quality of life to live with cancer,

NOTE Confidence: 0.982430409444445

00:06:16.820 --> 00:06:19.996 as I know from my own family members.

NOTE Confidence: 0.982430409444445

00:06:20.000 --> 00:06:22.772 So the mission of the division of

NOTE Confidence: 0.982430409444445

00:06:22.772 --> 00:06:24.839 Cancer prevention is as follows.

NOTE Confidence: 0.982430409444445

00:06:24.840 --> 00:06:28.230 The NCI Division of Cancer Prevention.

NOTE Confidence: 0.982430409444445

00:06:28.230 --> 00:06:29.918 Lead supports and promotes

NOTE Confidence: 0.982430409444445

00:06:29.918 --> 00:06:31.606 rigorous innovative research and

NOTE Confidence: 0.982430409444445

00:06:31.606 --> 00:06:33.699 training to reduce risk burdens.

NOTE Confidence: 0.982430409444445

00:06:33.700 --> 00:06:35.590 Consequences of cancer to improve

NOTE Confidence: 0.982430409444445

00:06:35.590 --> 00:06:37.480 the health of all people,

NOTE Confidence: 0.982430409444445

00:06:37.480 --> 00:06:39.214 and you'll understand this a little

NOTE Confidence: 0.982430409444445

00:06:39.214 --> 00:06:41.164 better as I go through and give

NOTE Confidence: 0.982430409444445

00:06:41.164 --> 00:06:43.620 you a this at a glance of view of

NOTE Confidence: 0.982430409444445

00:06:43.620 --> 00:06:45.355 the division of cancer prevention.  
NOTE Confidence: 0.982430409444445

00:06:45.360 --> 00:06:45.698 Uh,  
NOTE Confidence: 0.982430409444445

00:06:45.698 --> 00:06:48.402 just to highlight that I almost do nothing,  
NOTE Confidence: 0.982430409444445

00:06:48.410 --> 00:06:49.970 this everything that you're going  
NOTE Confidence: 0.982430409444445

00:06:49.970 --> 00:06:52.407 to hear about it has to do with  
NOTE Confidence: 0.982430409444445

00:06:52.407 --> 00:06:53.217 an amazing staff.  
NOTE Confidence: 0.982430409444445

00:06:53.220 --> 00:06:53.810 Uhm,  
NOTE Confidence: 0.982430409444445

00:06:53.810 --> 00:06:57.898 shown here we have groups focused on  
NOTE Confidence: 0.982430409444445

00:06:57.898 --> 00:07:00.202 method more methodologic approaches  
NOTE Confidence: 0.982430409444445

00:07:00.202 --> 00:07:03.793 or exposures and we also have organ  
NOTE Confidence: 0.982430409444445

00:07:03.793 --> 00:07:06.150 specific areas of research as well.  
NOTE Confidence: 0.982430409444445

00:07:06.150 --> 00:07:07.578 I will highlight some of these,  
NOTE Confidence: 0.982430409444445

00:07:07.580 --> 00:07:09.284 but that is not to say that there  
NOTE Confidence: 0.982430409444445

00:07:09.284 --> 00:07:11.208 I mean we could talk for hours  
NOTE Confidence: 0.982430409444445

00:07:11.208 --> 00:07:12.648 about what everybody is doing.  
NOTE Confidence: 0.928211687142857

00:07:14.800 --> 00:07:17.376 Uh, I put up this translational continuum,

NOTE Confidence: 0.928211687142857

00:07:17.380 --> 00:07:19.484 and again, you'll see why here in a

NOTE Confidence: 0.928211687142857

00:07:19.484 --> 00:07:21.828 moment to really sort of highlight this,

NOTE Confidence: 0.928211687142857

00:07:21.830 --> 00:07:24.640 the stepwise development of interventions

NOTE Confidence: 0.928211687142857

00:07:24.640 --> 00:07:27.852 and and, and therefore where we fit into

NOTE Confidence: 0.928211687142857

00:07:27.852 --> 00:07:30.190 that from basic science to translation

NOTE Confidence: 0.928211687142857

00:07:30.190 --> 00:07:32.400 to humans translation to patients,

NOTE Confidence: 0.928211687142857

00:07:32.400 --> 00:07:34.925 translation to practice and translation

NOTE Confidence: 0.928211687142857

00:07:34.925 --> 00:07:37.116 in their community. Showing up.

NOTE Confidence: 0.928211687142857

00:07:37.116 --> 00:07:39.144 This in terms of the divisions

NOTE Confidence: 0.928211687142857

00:07:39.144 --> 00:07:41.119 and these are approximations.

NOTE Confidence: 0.928211687142857

00:07:41.120 --> 00:07:43.825 I wouldn't say that any one of of

NOTE Confidence: 0.928211687142857

00:07:43.825 --> 00:07:46.350 these you know nobody's limited

NOTE Confidence: 0.928211687142857

00:07:46.350 --> 00:07:48.850 perception completely to this area,

NOTE Confidence: 0.928211687142857

00:07:48.850 --> 00:07:51.680 but I would say 90 to 95% of the work.

NOTE Confidence: 0.928211687142857

00:07:51.680 --> 00:07:54.050 Each of the division is sort of

NOTE Confidence: 0.928211687142857

00:07:54.050 --> 00:07:57.304 represented here and in over with an  
NOTE Confidence: 0.928211687142857

00:07:57.304 --> 00:07:59.859 overlay of the translational continuum.  
NOTE Confidence: 0.928211687142857

00:07:59.860 --> 00:08:03.330 We really focus on the.  
NOTE Confidence: 0.928211687142857

00:08:03.330 --> 00:08:05.820 An innovation to prevent cancer  
NOTE Confidence: 0.928211687142857

00:08:05.820 --> 00:08:07.812 and to manage symptoms.  
NOTE Confidence: 0.928211687142857

00:08:07.820 --> 00:08:10.016 As I would talk about later  
NOTE Confidence: 0.928211687142857

00:08:10.020 --> 00:08:11.240 and try to you know.  
NOTE Confidence: 0.928211687142857

00:08:11.240 --> 00:08:13.403 So we identify and we do early  
NOTE Confidence: 0.928211687142857

00:08:13.403 --> 00:08:15.444 validation work with the hopes that  
NOTE Confidence: 0.928211687142857

00:08:15.444 --> 00:08:17.199 successful strategies then get more  
NOTE Confidence: 0.928211687142857

00:08:17.199 --> 00:08:20.107 or less handed off to the division of  
NOTE Confidence: 0.928211687142857

00:08:20.107 --> 00:08:21.993 Cancer Control and Population Sciences.  
NOTE Confidence: 0.928211687142857

00:08:21.993 --> 00:08:25.164 So we really there really are two.  
NOTE Confidence: 0.928211687142857

00:08:25.170 --> 00:08:27.310 Population science groups at the  
NOTE Confidence: 0.928211687142857

00:08:27.310 --> 00:08:30.169 NCI were a little bit sort of.  
NOTE Confidence: 0.928211687142857

00:08:30.170 --> 00:08:32.914 I would say the forgotten group or the

NOTE Confidence: 0.928211687142857  
00:08:32.914 --> 00:08:35.989 the the other population science group.  
NOTE Confidence: 0.928211687142857  
00:08:35.990 --> 00:08:37.730 I think people are generally more  
NOTE Confidence: 0.928211687142857  
00:08:37.730 --> 00:08:38.890 familiar with cancer control  
NOTE Confidence: 0.928211687142857  
00:08:38.942 --> 00:08:40.150 and population sciences because  
NOTE Confidence: 0.928211687142857  
00:08:40.150 --> 00:08:41.660 it tends to dovetail more.  
NOTE Confidence: 0.986315853636364  
00:08:44.240 --> 00:08:45.890 More easily with the Cancer  
NOTE Confidence: 0.986315853636364  
00:08:45.890 --> 00:08:48.200 Center in the in those renewals,  
NOTE Confidence: 0.986315853636364  
00:08:48.200 --> 00:08:51.269 particularly related to.  
NOTE Confidence: 0.986315853636364  
00:08:51.270 --> 00:08:52.329 Uh, uh, outreach?  
NOTE Confidence: 0.986315853636364  
00:08:52.329 --> 00:08:54.094 Uh, we're actually probably more  
NOTE Confidence: 0.986315853636364  
00:08:54.094 --> 00:08:56.139 aligned in terms of the work we  
NOTE Confidence: 0.986315853636364  
00:08:56.139 --> 00:08:57.922 do with the division of cancer  
NOTE Confidence: 0.986315853636364  
00:08:57.922 --> 00:09:01.390 treatment and diagnosis, Albert.  
NOTE Confidence: 0.986315853636364  
00:09:01.390 --> 00:09:02.670 We spend a lot more.  
NOTE Confidence: 0.986315853636364  
00:09:02.670 --> 00:09:04.680 We invest a lot more in  
NOTE Confidence: 0.986315853636364

00:09:04.680 --> 00:09:05.685 treatment and diagnosis.  
NOTE Confidence: 0.986315853636364

00:09:05.690 --> 00:09:07.355 We work closely with the  
NOTE Confidence: 0.986315853636364

00:09:07.355 --> 00:09:08.687 division of Cancer Biology,  
NOTE Confidence: 0.986315853636364

00:09:08.690 --> 00:09:10.542 particularly on identifying pathways  
NOTE Confidence: 0.986315853636364

00:09:10.542 --> 00:09:12.394 for cancer or carcinogenesis  
NOTE Confidence: 0.986315853636364

00:09:12.394 --> 00:09:15.118 that can be then translated into  
NOTE Confidence: 0.986315853636364

00:09:15.118 --> 00:09:16.846 prevention strategies and then  
NOTE Confidence: 0.986315853636364

00:09:16.846 --> 00:09:18.865 the intramural program with the  
NOTE Confidence: 0.986315853636364

00:09:18.865 --> 00:09:20.680 center of Cancer Research and  
NOTE Confidence: 0.986315853636364

00:09:20.680 --> 00:09:22.548 division of cancer epigenetics,  
NOTE Confidence: 0.986315853636364

00:09:22.548 --> 00:09:24.824 which we're increasingly working  
NOTE Confidence: 0.986315853636364

00:09:24.824 --> 00:09:28.180 closely with to try to get  
NOTE Confidence: 0.986315853636364

00:09:28.180 --> 00:09:30.172 their innovations into clinical  
NOTE Confidence: 0.986315853636364

00:09:30.172 --> 00:09:32.800 practice and into public health.  
NOTE Confidence: 0.986315853636364

00:09:32.800 --> 00:09:34.816 So and you all know this,  
NOTE Confidence: 0.986315853636364

00:09:34.820 --> 00:09:37.270 but it's always useful to



NOTE Confidence: 0.986315853636364  
00:09:37.270 --> 00:09:39.720 sort of declare these things.  
NOTE Confidence: 0.986315853636364  
00:09:39.720 --> 00:09:43.326 Cancer prevention is really, really hard.  
NOTE Confidence: 0.986315853636364  
00:09:43.330 --> 00:09:44.414 There's certainly an event  
NOTE Confidence: 0.986315853636364  
00:09:44.414 --> 00:09:46.684 bias or what I call an event by  
NOTE Confidence: 0.986315853636364  
00:09:46.684 --> 00:09:48.430 success is the absence of events,  
NOTE Confidence: 0.986315853636364  
00:09:48.430 --> 00:09:50.368 and therefore there are no champions.  
NOTE Confidence: 0.986315853636364  
00:09:50.370 --> 00:09:52.160 This is also referred to  
NOTE Confidence: 0.986315853636364  
00:09:52.160 --> 00:09:53.592 as the prevention paradox.  
NOTE Confidence: 0.986315853636364  
00:09:53.600 --> 00:09:55.508 Our first mission is to keep  
NOTE Confidence: 0.986315853636364  
00:09:55.508 --> 00:09:56.462 healthy people healthy.  
NOTE Confidence: 0.986315853636364  
00:09:56.470 --> 00:09:57.946 First do no harm,  
NOTE Confidence: 0.986315853636364  
00:09:57.946 --> 00:10:00.705 and I'd say this applies more to  
NOTE Confidence: 0.986315853636364  
00:10:00.705 --> 00:10:03.000 public health and even medicine,  
NOTE Confidence: 0.986315853636364  
00:10:03.000 --> 00:10:04.680 and I point out that you know when  
NOTE Confidence: 0.986315853636364  
00:10:04.680 --> 00:10:06.370 we do screening people think of  
NOTE Confidence: 0.986315853636364

00:10:06.370 --> 00:10:08.194 screening as a one step process,  
NOTE Confidence: 0.986315853636364

00:10:08.200 --> 00:10:10.398 but it's really a two step process.  
NOTE Confidence: 0.986315853636364

00:10:10.400 --> 00:10:11.936 The first step in screening is  
NOTE Confidence: 0.986315853636364

00:10:11.936 --> 00:10:13.300 to tell healthy people there.  
NOTE Confidence: 0.986315853636364

00:10:13.300 --> 00:10:14.908 Healthy and they don't need to  
NOTE Confidence: 0.986315853636364

00:10:14.908 --> 00:10:16.402 be screened again for whatever  
NOTE Confidence: 0.986315853636364

00:10:16.402 --> 00:10:17.850 is an acceptable interval.  
NOTE Confidence: 0.986315853636364

00:10:17.850 --> 00:10:19.270 And then among the positives  
NOTE Confidence: 0.986315853636364

00:10:19.270 --> 00:10:20.940 we we try to rule in.  
NOTE Confidence: 0.986315853636364

00:10:20.940 --> 00:10:22.596 Who needs immediate care.  
NOTE Confidence: 0.986315853636364

00:10:22.596 --> 00:10:24.666 But it's also important to  
NOTE Confidence: 0.986315853636364

00:10:24.666 --> 00:10:26.780 remember in the general population,  
NOTE Confidence: 0.986315853636364

00:10:26.780 --> 00:10:30.359 most people at any one time will not be.  
NOTE Confidence: 0.986315853636364

00:10:30.360 --> 00:10:31.269 Uh, you know,  
NOTE Confidence: 0.986315853636364

00:10:31.269 --> 00:10:33.087 will not get cancer or particular  
NOTE Confidence: 0.986315853636364

00:10:33.087 --> 00:10:35.519 cancer so 49 out of 50 women would never

NOTE Confidence: 0.986315853636364  
00:10:35.519 --> 00:10:37.898 get cervical cancer if we did nothing of all.  
NOTE Confidence: 0.986315853636364  
00:10:37.900 --> 00:10:39.304 We didn't screen them.  
NOTE Confidence: 0.986315853636364  
00:10:39.304 --> 00:10:40.708 We didn't vaccinate them,  
NOTE Confidence: 0.986315853636364  
00:10:40.710 --> 00:10:41.332 etc etc.  
NOTE Confidence: 0.986315853636364  
00:10:41.332 --> 00:10:43.820 It's a high bar because of the rare  
NOTE Confidence: 0.986315853636364  
00:10:43.897 --> 00:10:46.795 events and the relatively small benefits,  
NOTE Confidence: 0.986315853636364  
00:10:46.800 --> 00:10:49.085 and there's very little tolerance  
NOTE Confidence: 0.986315853636364  
00:10:49.085 --> 00:10:51.570 for toxicity and and then the final  
NOTE Confidence: 0.986315853636364  
00:10:51.570 --> 00:10:53.436 barrier if you will, is there.  
NOTE Confidence: 0.986315853636364  
00:10:53.436 --> 00:10:55.254 I think there's a perception that  
NOTE Confidence: 0.986315853636364  
00:10:55.254 --> 00:10:57.401 there's no money in prevention and I  
NOTE Confidence: 0.986315853636364  
00:10:57.401 --> 00:10:59.619 I would challenge that only to say that.  
NOTE Confidence: 0.986315853636364  
00:10:59.620 --> 00:11:01.130 Nobody wants to get cancer,  
NOTE Confidence: 0.986315853636364  
00:11:01.130 --> 00:11:02.594 and so there's a lot of people out  
NOTE Confidence: 0.986315853636364  
00:11:02.594 --> 00:11:04.017 there that don't want to get cancer.  
NOTE Confidence: 0.986315853636364

00:11:04.020 --> 00:11:06.200 I mean, uh, you know,  
NOTE Confidence: 0.986315853636364

00:11:06.200 --> 00:11:07.936 so that I think that there's actually,  
NOTE Confidence: 0.986315853636364

00:11:07.940 --> 00:11:09.428 you know, given the big denominator,  
NOTE Confidence: 0.986315853636364

00:11:09.430 --> 00:11:11.530 there's a big opportunity for industry  
NOTE Confidence: 0.986315853636364

00:11:11.530 --> 00:11:13.919 to get involved in and prevention.  
NOTE Confidence: 0.986315853636364

00:11:13.920 --> 00:11:17.262 I think that what scares them off is  
NOTE Confidence: 0.986315853636364

00:11:17.262 --> 00:11:20.514 the the the expense and difficulties  
NOTE Confidence: 0.986315853636364

00:11:20.514 --> 00:11:24.449 of doing large trials to demonstrate.  
NOTE Confidence: 0.986315853636364

00:11:24.450 --> 00:11:28.182 Efficacy and effectiveness and the very  
NOTE Confidence: 0.986315853636364

00:11:28.182 --> 00:11:32.459 low tolerance for toxicity or adverse events.  
NOTE Confidence: 0.986315853636364

00:11:32.460 --> 00:11:34.104 This is highlights sort of the  
NOTE Confidence: 0.986315853636364

00:11:34.104 --> 00:11:36.058 causes of cancer and where they are.  
NOTE Confidence: 0.986315853636364

00:11:36.060 --> 00:11:37.380 Some of the opportunities are.  
NOTE Confidence: 0.986315853636364

00:11:37.380 --> 00:11:40.208 I wouldn't say that there it's comprehensive.  
NOTE Confidence: 0.986315853636364

00:11:40.210 --> 00:11:43.477 This is from Scott Lippman in it at all.  
NOTE Confidence: 0.986315853636364

00:11:43.480 --> 00:11:47.026 Obviously obesity is and tobacco or

NOTE Confidence: 0.986315853636364  
00:11:47.026 --> 00:11:52.790 the main causes of cancer tobacco,  
NOTE Confidence: 0.986315853636364  
00:11:52.790 --> 00:11:53.336 you know,  
NOTE Confidence: 0.986315853636364  
00:11:53.336 --> 00:11:55.520 we we even do some work in this  
NOTE Confidence: 0.984883006363636  
00:11:55.587 --> 00:11:57.180 area, particularly for  
NOTE Confidence: 0.984883006363636  
00:11:57.180 --> 00:11:59.070 anti nicotine approaches.  
NOTE Confidence: 0.984883006363636  
00:11:59.070 --> 00:12:02.166 Obesity I think hangs over all of us in  
NOTE Confidence: 0.984883006363636  
00:12:02.166 --> 00:12:05.120 terms of how do we tackle this problem?  
NOTE Confidence: 0.984883006363636  
00:12:05.120 --> 00:12:07.016 How do we mitigate the effects of BC?  
NOTE Confidence: 0.984883006363636  
00:12:07.020 --> 00:12:08.700 What is the you know?  
NOTE Confidence: 0.984883006363636  
00:12:08.700 --> 00:12:10.300 What is the causal relationship  
NOTE Confidence: 0.984883006363636  
00:12:10.300 --> 00:12:11.580 of obesity with cancer?  
NOTE Confidence: 0.984883006363636  
00:12:11.580 --> 00:12:12.690 Is it inflammation?  
NOTE Confidence: 0.984883006363636  
00:12:12.690 --> 00:12:15.132 What kind of inflammation? Etc etc.  
NOTE Confidence: 0.984883006363636  
00:12:15.132 --> 00:12:18.499 And then a variety of other causes.  
NOTE Confidence: 0.984883006363636  
00:12:18.500 --> 00:12:20.588 Viruses are near and dear to my heart  
NOTE Confidence: 0.984883006363636

00:12:20.588 --> 00:12:22.965 because of my work on human papilloma virus,  
NOTE Confidence: 0.984883006363636

00:12:22.970 --> 00:12:28.918 which causes 5% of of cancers globally,  
NOTE Confidence: 0.984883006363636

00:12:28.918 --> 00:12:34.124 so it's. And HPV been my training ground on.  
NOTE Confidence: 0.984883006363636

00:12:34.130 --> 00:12:36.754 I started off as a lab scientist but  
NOTE Confidence: 0.984883006363636

00:12:36.754 --> 00:12:38.349 moved into molecular epidemiology  
NOTE Confidence: 0.984883006363636

00:12:38.349 --> 00:12:41.380 20 years ago and continue to learn  
NOTE Confidence: 0.984883006363636

00:12:41.380 --> 00:12:43.977 from the study of HPV in many ways.  
NOTE Confidence: 0.9740819175

00:12:46.470 --> 00:12:49.838 So if we think about this causal model  
NOTE Confidence: 0.9740819175

00:12:49.840 --> 00:12:52.104 where we go from normal to initiate it  
NOTE Confidence: 0.9740819175

00:12:52.104 --> 00:12:54.230 to precursor States and invasive cancer,  
NOTE Confidence: 0.9740819175

00:12:54.230 --> 00:12:56.043 it really helps us sort of identify  
NOTE Confidence: 0.9740819175

00:12:56.043 --> 00:12:57.800 the roles of different groups.  
NOTE Confidence: 0.9740819175

00:12:57.800 --> 00:13:00.355 But also where we where the opportunities  
NOTE Confidence: 0.9740819175

00:13:00.355 --> 00:13:02.749 are for intervention now precursor states,  
NOTE Confidence: 0.9740819175

00:13:02.750 --> 00:13:04.880 I mean those are somewhat artificial  
NOTE Confidence: 0.9740819175

00:13:04.880 --> 00:13:07.179 slices of the of the pathway,

NOTE Confidence: 0.9740819175

00:13:07.180 --> 00:13:09.672 and in case of cervical cancer that

NOTE Confidence: 0.9740819175

00:13:09.672 --> 00:13:11.789 probably really aren't distinct states,

NOTE Confidence: 0.9740819175

00:13:11.790 --> 00:13:14.575 just clinical diagnosis that fall

NOTE Confidence: 0.9740819175

00:13:14.575 --> 00:13:17.360 within this area somewhere between.

NOTE Confidence: 0.9740819175

00:13:17.360 --> 00:13:19.688 Initiated and pre cancer.

NOTE Confidence: 0.987055714285714

00:13:22.410 --> 00:13:24.097 So what can we do right now?

NOTE Confidence: 0.987055714285714

00:13:24.100 --> 00:13:26.837 Obviously and and I will say highlight

NOTE Confidence: 0.987055714285714

00:13:26.837 --> 00:13:29.446 that I recently published an OP Ed

NOTE Confidence: 0.987055714285714

00:13:29.446 --> 00:13:31.962 in Stat to talk about really these

NOTE Confidence: 0.987055714285714

00:13:31.962 --> 00:13:34.350 same strategies that are being used

NOTE Confidence: 0.987055714285714

00:13:34.350 --> 00:13:36.894 for COVID can be used for cancer

NOTE Confidence: 0.987055714285714

00:13:36.894 --> 00:13:39.373 prevention and that we really need a

NOTE Confidence: 0.987055714285714

00:13:39.373 --> 00:13:41.368 pandemic response for cancer prevention

NOTE Confidence: 0.987055714285714

00:13:41.368 --> 00:13:44.109 because of the annual burden of cancer.

NOTE Confidence: 0.987055714285714

00:13:44.110 --> 00:13:47.356 So avoidance is one strategy or

NOTE Confidence: 0.987055714285714

00:13:47.356 --> 00:13:50.090 primary prevention if you will,  
NOTE Confidence: 0.987055714285714

00:13:50.090 --> 00:13:53.768 through tobacco prevention, HPV and HB.  
NOTE Confidence: 0.987055714285714

00:13:53.770 --> 00:13:56.762 HPV vaccination treatment of  
NOTE Confidence: 0.987055714285714

00:13:56.762 --> 00:13:59.006 H pylori potentially.  
NOTE Confidence: 0.987055714285714

00:13:59.010 --> 00:14:01.590 And then sex sort of secondary  
NOTE Confidence: 0.987055714285714

00:14:01.590 --> 00:14:03.310 prevention through tobacco cessation,  
NOTE Confidence: 0.987055714285714

00:14:03.310 --> 00:14:05.083 screening and diagnosis.  
NOTE Confidence: 0.987055714285714

00:14:05.083 --> 00:14:07.788 And those tools, avoidance vaccinations,  
NOTE Confidence: 0.987055714285714

00:14:07.788 --> 00:14:08.716 bringing treatment,  
NOTE Confidence: 0.987055714285714

00:14:08.716 --> 00:14:11.500 or the very things that we're  
NOTE Confidence: 0.987055714285714

00:14:11.566 --> 00:14:13.216 using now to battle COVID.  
NOTE Confidence: 0.987055714285714

00:14:13.220 --> 00:14:15.698 And really we need to highlight  
NOTE Confidence: 0.987055714285714

00:14:15.698 --> 00:14:18.574 those and bring them back into  
NOTE Confidence: 0.987055714285714

00:14:18.574 --> 00:14:20.290 the prevention discussion.  
NOTE Confidence: 0.987055714285714

00:14:20.290 --> 00:14:21.921 Uh, we're working more and more in  
NOTE Confidence: 0.987055714285714

00:14:21.921 --> 00:14:23.814 the area of interception of cancer and



NOTE Confidence: 0.987055714285714  
00:14:23.814 --> 00:14:25.930 we'll talk more about this in moment,  
NOTE Confidence: 0.987055714285714  
00:14:25.930 --> 00:14:26.223 right?  
NOTE Confidence: 0.987055714285714  
00:14:26.223 --> 00:14:28.274 And this is sort of moving us  
NOTE Confidence: 0.987055714285714  
00:14:28.274 --> 00:14:30.123 towards what people refer to  
NOTE Confidence: 0.987055714285714  
00:14:30.123 --> 00:14:31.727 as precision cancer prevention,  
NOTE Confidence: 0.987055714285714  
00:14:31.730 --> 00:14:34.187 and I'll talk about that a couple  
NOTE Confidence: 0.987055714285714  
00:14:34.187 --> 00:14:36.473 times through this and even propose  
NOTE Confidence: 0.987055714285714  
00:14:36.473 --> 00:14:38.534 a broader definition of precision  
NOTE Confidence: 0.987055714285714  
00:14:38.534 --> 00:14:39.562 cancer prevention.  
NOTE Confidence: 0.987055714285714  
00:14:39.562 --> 00:14:40.590 But obviously,  
NOTE Confidence: 0.987055714285714  
00:14:40.590 --> 00:14:42.318 tamoxifen and its derivatives  
NOTE Confidence: 0.987055714285714  
00:14:42.318 --> 00:14:44.910 for breast cancer for those who  
NOTE Confidence: 0.987055714285714  
00:14:44.985 --> 00:14:47.463 are at high risk and seats for  
NOTE Confidence: 0.987055714285714  
00:14:47.463 --> 00:14:49.380 colon cancer immune modulators.  
NOTE Confidence: 0.987055714285714  
00:14:49.380 --> 00:14:52.068 Drugs that target oncogenic drivers and  
NOTE Confidence: 0.987055714285714

00:14:52.068 --> 00:14:55.170 re activators of tumor suppressor genes,

NOTE Confidence: 0.987055714285714

00:14:55.170 --> 00:14:56.010 for example.

NOTE Confidence: 0.985103935

00:14:58.220 --> 00:15:01.196 So I'm going to present this

NOTE Confidence: 0.985103935

00:15:01.200 --> 00:15:03.612 this chart or this picture for

NOTE Confidence: 0.985103935

00:15:03.612 --> 00:15:05.670 our three main programs here.

NOTE Confidence: 0.985103935

00:15:05.670 --> 00:15:07.785 It's what I call our

NOTE Confidence: 0.985103935

00:15:07.785 --> 00:15:09.477 preventive agent R&D pipeline.

NOTE Confidence: 0.985103935

00:15:09.480 --> 00:15:10.985 And the thing that I want to

NOTE Confidence: 0.985103935

00:15:10.985 --> 00:15:12.810 point out is that people don't

NOTE Confidence: 0.985103935

00:15:12.810 --> 00:15:14.310 always recognize these programs,

NOTE Confidence: 0.985103935

00:15:14.310 --> 00:15:15.366 particularly in DCP.

NOTE Confidence: 0.985103935

00:15:15.366 --> 00:15:17.478 We gave a presentation for this

NOTE Confidence: 0.985103935

00:15:17.478 --> 00:15:19.340 new program called Capital,

NOTE Confidence: 0.985103935

00:15:19.340 --> 00:15:21.704 which I'll explain in a moment

NOTE Confidence: 0.985103935

00:15:21.704 --> 00:15:23.280 to the BSA members.

NOTE Confidence: 0.985103935

00:15:23.280 --> 00:15:26.766 The NCI Board of Scientific advisors.

NOTE Confidence: 0.985103935

00:15:26.770 --> 00:15:28.096 And one of the members didn't

NOTE Confidence: 0.985103935

00:15:28.096 --> 00:15:28.980 even know what prevented.

NOTE Confidence: 0.985103935

00:15:28.980 --> 00:15:31.020 So let me so I'm going to drag

NOTE Confidence: 0.985103935

00:15:31.020 --> 00:15:32.757 you through this because I want

NOTE Confidence: 0.985103935

00:15:32.757 --> 00:15:35.056 to engage you in the process of

NOTE Confidence: 0.985103935

00:15:35.056 --> 00:15:37.000 developing new prevention strategies.

NOTE Confidence: 0.985103935

00:15:37.000 --> 00:15:39.254 So cap it is a new program.

NOTE Confidence: 0.985103935

00:15:39.260 --> 00:15:42.550 It's a targeted agent identification

NOTE Confidence: 0.985103935

00:15:42.550 --> 00:15:45.182 program for preventive agents.

NOTE Confidence: 0.985103935

00:15:45.190 --> 00:15:48.105 Prevent is our preclinical development

NOTE Confidence: 0.985103935

00:15:48.105 --> 00:15:51.492 and validation program and even you know,

NOTE Confidence: 0.985103935

00:15:51.492 --> 00:15:54.456 to the extent of producing GMP grade

NOTE Confidence: 0.985103935

00:15:54.456 --> 00:15:57.856 drug for trials seek Tenet is our early

NOTE Confidence: 0.985103935

00:15:57.856 --> 00:16:01.538 stage clinical trials network and then core,

NOTE Confidence: 0.985103935

00:16:01.540 --> 00:16:04.306 which I'm sure everybody's heard of, is our.

NOTE Confidence: 0.985103935

00:16:04.306 --> 00:16:05.192 You know,  
NOTE Confidence: 0.985103935

00:16:05.192 --> 00:16:07.407 our big clinical trials network.  
NOTE Confidence: 0.985103935

00:16:07.410 --> 00:16:10.106 For primarily for phase three trials like T.  
NOTE Confidence: 0.985103935

00:16:10.110 --> 00:16:11.930 Mist.  
NOTE Confidence: 0.985103935

00:16:11.930 --> 00:16:14.198 We had a moon shot consortium  
NOTE Confidence: 0.985103935

00:16:14.198 --> 00:16:16.450 on come on novel advents.  
NOTE Confidence: 0.985103935

00:16:16.450 --> 00:16:20.184 You lack net is to look at prevention of  
NOTE Confidence: 0.985103935

00:16:20.184 --> 00:16:23.103 HPV related disease in HIV and people  
NOTE Confidence: 0.985103935

00:16:23.103 --> 00:16:25.468 living with HIV in Latin America.  
NOTE Confidence: 0.985103935

00:16:25.470 --> 00:16:28.140 We have funding opportunities for cancer  
NOTE Confidence: 0.985103935

00:16:28.140 --> 00:16:30.861 prevention and control trials and a new  
NOTE Confidence: 0.985103935

00:16:30.861 --> 00:16:32.905 one hitting the street on in yellow.  
NOTE Confidence: 0.985103935

00:16:32.910 --> 00:16:33.483 Here,  
NOTE Confidence: 0.985103935

00:16:33.483 --> 00:16:34.629 cancer trials,  
NOTE Confidence: 0.985103935

00:16:34.629 --> 00:16:36.348 planning and feasibility.  
NOTE Confidence: 0.985103935

00:16:36.350 --> 00:16:39.030 It's kind of like a P20 funding opportunity.

NOTE Confidence: 0.985103935

00:16:39.030 --> 00:16:42.059 I can't remember what the the mechanism is.

NOTE Confidence: 0.985103935

00:16:42.059 --> 00:16:45.219 But the the basic idea is that these trials

NOTE Confidence: 0.985103935

00:16:45.219 --> 00:16:48.280 are very hard to do and to do denovo,

NOTE Confidence: 0.985103935

00:16:48.280 --> 00:16:50.899 and that if we spent some money investing in,

NOTE Confidence: 0.985103935

00:16:50.900 --> 00:16:51.350 we would.

NOTE Confidence: 0.98641034

00:16:53.380 --> 00:16:56.508 You know, get the get the planning done

NOTE Confidence: 0.98641034

00:16:56.508 --> 00:16:59.551 in the and test the feasibility before

NOTE Confidence: 0.98641034

00:16:59.551 --> 00:17:03.000 they came for an R1 level funding.

NOTE Confidence: 0.98641034

00:17:03.000 --> 00:17:04.218 Precision Cancer Prevention

NOTE Confidence: 0.98641034

00:17:04.218 --> 00:17:06.654 centers is is is the future.

NOTE Confidence: 0.98641034

00:17:06.660 --> 00:17:08.641 I hope it's my dream and fantasy

NOTE Confidence: 0.98641034

00:17:08.641 --> 00:17:10.590 that it would and it would

NOTE Confidence: 0.98641034

00:17:10.590 --> 00:17:12.320 dovetail with this R&D pipeline.

NOTE Confidence: 0.98641034

00:17:12.320 --> 00:17:17.939 But basically two engaged centers to kind of

NOTE Confidence: 0.98641034

00:17:17.939 --> 00:17:23.280 create their own pipeline that would move.

NOTE Confidence: 0.98641034

00:17:23.280 --> 00:17:25.985 Move from discovery to early  
NOTE Confidence: 0.98641034

00:17:25.985 --> 00:17:29.078 translation to early human trials and.  
NOTE Confidence: 0.98641034

00:17:29.078 --> 00:17:32.690 I emphasize here as shown below that  
NOTE Confidence: 0.98641034

00:17:32.690 --> 00:17:36.204 although these programs sit at the NCI,  
NOTE Confidence: 0.98641034

00:17:36.210 --> 00:17:38.515 they're open for investigator initiated  
NOTE Confidence: 0.98641034

00:17:38.515 --> 00:17:41.558 research to take advantage of these programs,  
NOTE Confidence: 0.98641034

00:17:41.558 --> 00:17:42.870 and we encourage it.  
NOTE Confidence: 0.98641034

00:17:42.870 --> 00:17:45.108 We want you to come forward  
NOTE Confidence: 0.98641034

00:17:45.108 --> 00:17:46.600 with new prevention strategies,  
NOTE Confidence: 0.98641034

00:17:46.600 --> 00:17:49.099 and again I want to emphasize that  
NOTE Confidence: 0.98641034

00:17:49.099 --> 00:17:51.230 what DCP focuses on innovation,  
NOTE Confidence: 0.98641034

00:17:51.230 --> 00:17:53.345 new strategies that we haven't  
NOTE Confidence: 0.98641034

00:17:53.345 --> 00:17:55.460 that you know are not.  
NOTE Confidence: 0.98641034

00:17:55.460 --> 00:17:57.570 You know that need development  
NOTE Confidence: 0.98641034

00:17:57.570 --> 00:17:58.836 and early validation.  
NOTE Confidence: 0.9422056783333333

00:18:01.010 --> 00:18:04.118 This just shows the CPCT net,

NOTE Confidence: 0.9422056783333333

00:18:04.120 --> 00:18:07.879 which is really this early phase clinical

NOTE Confidence: 0.9422056783333333

00:18:07.879 --> 00:18:11.259 trials group that's across the country.

NOTE Confidence: 0.9422056783333333

00:18:11.260 --> 00:18:15.151 With data monitoring and uhm, uhm?

NOTE Confidence: 0.9422056783333333

00:18:15.151 --> 00:18:20.120 A board that's a data management and

NOTE Confidence: 0.9422056783333333

00:18:20.120 --> 00:18:22.920 that coordinates these activities,

NOTE Confidence: 0.9422056783333333

00:18:22.920 --> 00:18:24.984 optimizes clinical trial designs,

NOTE Confidence: 0.9422056783333333

00:18:24.984 --> 00:18:26.532 developed surrogate and

NOTE Confidence: 0.9422056783333333

00:18:26.532 --> 00:18:28.080 intermediate endpoint biomarkers,

NOTE Confidence: 0.9422056783333333

00:18:28.080 --> 00:18:30.264 test novel imaging technologies,

NOTE Confidence: 0.9422056783333333

00:18:30.264 --> 00:18:33.540 and develop further insights into the

NOTE Confidence: 0.9422056783333333

00:18:33.622 --> 00:18:36.898 mechanisms of cancer prevention by agents.

NOTE Confidence: 0.9422056783333333

00:18:36.900 --> 00:18:40.575 And this is led by even zabbo.

NOTE Confidence: 0.9422056783333333

00:18:40.580 --> 00:18:42.890 Here's a couple of the approved

NOTE Confidence: 0.9422056783333333

00:18:42.890 --> 00:18:45.130 trials that are already underway,

NOTE Confidence: 0.9422056783333333

00:18:45.130 --> 00:18:47.278 one on NAFLD,

NOTE Confidence: 0.9422056783333333

00:18:47.278 --> 00:18:51.574 a HPV vaccine delayed booster trial.  
NOTE Confidence: 0.9422056783333333

00:18:51.580 --> 00:18:54.116 Uhm and prostate uhm.  
NOTE Confidence: 0.9422056783333333

00:18:54.116 --> 00:18:57.286 A management trial as well.  
NOTE Confidence: 0.974324832

00:19:00.080 --> 00:19:02.780 These are some of the.  
NOTE Confidence: 0.974324832

00:19:02.780 --> 00:19:05.495 Protocols that are under development  
NOTE Confidence: 0.974324832

00:19:05.495 --> 00:19:09.099 a wide range from breast cancer to  
NOTE Confidence: 0.974324832

00:19:09.100 --> 00:19:11.245 FAPA metformin as a chemopreventive  
NOTE Confidence: 0.974324832

00:19:11.245 --> 00:19:13.390 agent for lung cancer and  
NOTE Confidence: 0.974324832

00:19:13.468 --> 00:19:15.438 high risk of these patients.  
NOTE Confidence: 0.974324832

00:19:15.440 --> 00:19:17.200 I'm not going to read through all these.  
NOTE Confidence: 0.974324832

00:19:17.200 --> 00:19:19.228 You can have these slides and  
NOTE Confidence: 0.974324832

00:19:19.228 --> 00:19:21.675 kind of see the the breadth and  
NOTE Confidence: 0.974324832

00:19:21.675 --> 00:19:24.230 depth of the trials at the NCI.  
NOTE Confidence: 0.948990096521739

00:19:26.460 --> 00:19:29.100 We're doing a number of studies  
NOTE Confidence: 0.948990096521739

00:19:29.100 --> 00:19:31.740 on topical tamoxifen to look at  
NOTE Confidence: 0.948990096521739

00:19:31.740 --> 00:19:34.140 whether we can sort of change



NOTE Confidence: 0.948990096521739  
00:19:34.140 --> 00:19:36.220 the benefits to harms ratio,  
NOTE Confidence: 0.948990096521739  
00:19:36.220 --> 00:19:38.948 and I'll I'll come back to that point.  
NOTE Confidence: 0.948990096521739  
00:19:38.950 --> 00:19:42.094 By delivering tamox into that issue at risk,  
NOTE Confidence: 0.948990096521739  
00:19:42.100 --> 00:19:44.248 and in this case breast cancer.  
NOTE Confidence: 0.948990096521739  
00:19:44.250 --> 00:19:46.854 Looking at some biomarkers  
NOTE Confidence: 0.948990096521739  
00:19:46.854 --> 00:19:49.458 in DCIS breast density.  
NOTE Confidence: 0.948990096521739  
00:19:49.460 --> 00:19:53.628 Measuring inter individual variation  
NOTE Confidence: 0.948990096521739  
00:19:53.628 --> 00:19:57.405 and looking at serum and tissue  
NOTE Confidence: 0.948990096521739  
00:19:57.405 --> 00:19:59.986 concentrations of of of the  
NOTE Confidence: 0.948990096521739  
00:19:59.986 --> 00:20:01.858 drug being delivered topically.  
NOTE Confidence: 0.951394622857143  
00:20:05.570 --> 00:20:07.768 Are you lacnet which I mentioned before?  
NOTE Confidence: 0.951394622857143  
00:20:07.770 --> 00:20:11.130 Is our HPV prevention clinical trials  
NOTE Confidence: 0.951394622857143  
00:20:11.130 --> 00:20:14.350 network in Latin American Caribbean,  
NOTE Confidence: 0.951394622857143  
00:20:14.350 --> 00:20:16.930 and there are three consortium members  
NOTE Confidence: 0.951394622857143  
00:20:16.930 --> 00:20:20.229 working on a variety wide variety of  
NOTE Confidence: 0.951394622857143

00:20:20.229 --> 00:20:22.237 interventions from some vaccination  
NOTE Confidence: 0.951394622857143

00:20:22.237 --> 00:20:25.135 work to screening to pre cancer  
NOTE Confidence: 0.951394622857143

00:20:25.135 --> 00:20:27.757 therapeutics and people living with HIV.  
NOTE Confidence: 0.990150842727273

00:20:31.010 --> 00:20:33.166 So then that leads us into discussions  
NOTE Confidence: 0.990150842727273

00:20:33.166 --> 00:20:34.690 of screening early detection,  
NOTE Confidence: 0.990150842727273

00:20:34.690 --> 00:20:36.400 which we've done a lot.  
NOTE Confidence: 0.990150842727273

00:20:36.400 --> 00:20:39.379 Obviously, Plco is one of the major U S  
NOTE Confidence: 0.990150842727273

00:20:39.379 --> 00:20:42.340 trials that was sponsored by the Division  
NOTE Confidence: 0.990150842727273

00:20:42.340 --> 00:20:44.909 of Cancer Prevention and here above,  
NOTE Confidence: 0.990150842727273

00:20:44.910 --> 00:20:45.970 here in the yellow.  
NOTE Confidence: 0.990150842727273

00:20:45.970 --> 00:20:48.156 I just wanted to state that we are  
NOTE Confidence: 0.990150842727273

00:20:48.156 --> 00:20:49.746 more and more thinking about what  
NOTE Confidence: 0.990150842727273

00:20:49.746 --> 00:20:51.698 I call risk informed screening,  
NOTE Confidence: 0.990150842727273

00:20:51.700 --> 00:20:54.428 so using risk to decide who and when  
NOTE Confidence: 0.990150842727273

00:20:54.428 --> 00:20:57.269 people need to be screened or to modify  
NOTE Confidence: 0.990150842727273

00:20:57.269 --> 00:20:59.940 the management of the screen positives.

NOTE Confidence: 0.990150842727273  
00:20:59.940 --> 00:21:02.370 And it also provides a possible  
NOTE Confidence: 0.990150842727273  
00:21:02.370 --> 00:21:04.443 or potential for intervention with  
NOTE Confidence: 0.990150842727273  
00:21:04.443 --> 00:21:06.717 targeted preventive agents if we know  
NOTE Confidence: 0.990150842727273  
00:21:06.717 --> 00:21:09.119 the biology of what that risk is,  
NOTE Confidence: 0.990150842727273  
00:21:09.120 --> 00:21:13.019 then we could then combine both screening  
NOTE Confidence: 0.990150842727273  
00:21:13.019 --> 00:21:17.340 strategy with a preventive agent strategy.  
NOTE Confidence: 0.990150842727273  
00:21:17.340 --> 00:21:20.280 So this is our screening early detection  
NOTE Confidence: 0.990150842727273  
00:21:20.280 --> 00:21:23.487 R&D pipeline at the core of this is Dern,  
NOTE Confidence: 0.990150842727273  
00:21:23.490 --> 00:21:26.647 which has been just renewed and is  
NOTE Confidence: 0.990150842727273  
00:21:26.647 --> 00:21:30.259 now 20 years in the making or in its  
NOTE Confidence: 0.990150842727273  
00:21:30.259 --> 00:21:33.596 in its in its life and it continues.  
NOTE Confidence: 0.990150842727273  
00:21:33.600 --> 00:21:35.520 I will present a few slides on that,  
NOTE Confidence: 0.990150842727273  
00:21:35.520 --> 00:21:38.998 but we have some related projects  
NOTE Confidence: 0.990150842727273  
00:21:38.998 --> 00:21:41.333 around pancreas cancer, PCDC,  
NOTE Confidence: 0.990150842727273  
00:21:41.333 --> 00:21:42.452 liver cancer, TLC,  
NOTE Confidence: 0.990150842727273

00:21:42.452 --> 00:21:45.184 L we have a liquid biopsy consortium  
NOTE Confidence: 0.990150842727273

00:21:45.184 --> 00:21:47.680 and we have an image ingane.  
NOTE Confidence: 0.990150842727273

00:21:47.680 --> 00:21:49.995 Biomarkers consortium T bells and  
NOTE Confidence: 0.990150842727273

00:21:49.995 --> 00:21:53.125 new program to help us differentiate  
NOTE Confidence: 0.990150842727273

00:21:53.125 --> 00:21:56.775 between indolent and aggressive cancer.  
NOTE Confidence: 0.990150842727273

00:21:56.780 --> 00:21:58.677 I'm sure many of you have heard  
NOTE Confidence: 0.990150842727273

00:21:58.677 --> 00:22:01.135 of H Tan which is the human tumor  
NOTE Confidence: 0.990150842727273

00:22:01.135 --> 00:22:03.456 Atlas network and we built off of  
NOTE Confidence: 0.990150842727273

00:22:03.456 --> 00:22:05.577 that a pilot study called the Pre  
NOTE Confidence: 0.990150842727273

00:22:05.577 --> 00:22:07.757 Cancer Atlas which we're hoping to  
NOTE Confidence: 0.990150842727273

00:22:07.757 --> 00:22:11.330 renew in the subsequent year or so.  
NOTE Confidence: 0.990150842727273

00:22:11.330 --> 00:22:11.594 Uh.  
NOTE Confidence: 0.990150842727273

00:22:11.594 --> 00:22:14.858 One of the big gaps that we need to fill is  
NOTE Confidence: 0.990150842727273

00:22:14.858 --> 00:22:17.300 a screening and early detection network.  
NOTE Confidence: 0.990150842727273

00:22:17.300 --> 00:22:19.524 Not that Encor doesn't do some of that,  
NOTE Confidence: 0.990150842727273

00:22:19.530 --> 00:22:19.961 but.

NOTE Confidence: 0.990150842727273  
00:22:19.961 --> 00:22:22.978 We really need to engage the primary  
NOTE Confidence: 0.990150842727273  
00:22:22.978 --> 00:22:25.417 care providers to recruit average  
NOTE Confidence: 0.990150842727273  
00:22:25.417 --> 00:22:27.917 risk populations into our trials,  
NOTE Confidence: 0.990150842727273  
00:22:27.920 --> 00:22:30.080 and so that's why I showed that in purple.  
NOTE Confidence: 0.990150842727273  
00:22:30.080 --> 00:22:33.510 We're developing a new lung  
NOTE Confidence: 0.990150842727273  
00:22:33.510 --> 00:22:36.805 cancer image library for improved  
NOTE Confidence: 0.990150842727273  
00:22:36.805 --> 00:22:39.530 interpretation of those images I  
NOTE Confidence: 0.990150842727273  
00:22:39.530 --> 00:22:42.182 mentioned you lacnet several times  
NOTE Confidence: 0.990150842727273  
00:22:42.182 --> 00:22:45.294 were now have on the street at Cascade,  
NOTE Confidence: 0.990150842727273  
00:22:45.300 --> 00:22:47.905 which is a another consortium  
NOTE Confidence: 0.990150842727273  
00:22:47.905 --> 00:22:50.990 to look at best practices for.  
NOTE Confidence: 0.990150842727273  
00:22:50.990 --> 00:22:53.378 Screening women living with  
NOTE Confidence: 0.990150842727273  
00:22:53.378 --> 00:22:55.766 HIV for cervical cancer.  
NOTE Confidence: 0.990150842727273  
00:22:55.770 --> 00:22:57.450 How best to screen them?  
NOTE Confidence: 0.990150842727273  
00:22:57.450 --> 00:22:59.560 Manage them and treat them.  
NOTE Confidence: 0.990150842727273

00:22:59.560 --> 00:23:02.320 Last Mile is a project that  
NOTE Confidence: 0.990150842727273

00:23:02.320 --> 00:23:05.380 I'm Co leading on getting self  
NOTE Confidence: 0.990150842727273

00:23:05.380 --> 00:23:07.980 collection and HPV testing approved.  
NOTE Confidence: 0.990150842727273

00:23:07.980 --> 00:23:09.930 For routine screening in the  
NOTE Confidence: 0.990150842727273

00:23:09.930 --> 00:23:13.539 United States and so forth.  
NOTE Confidence: 0.990150842727273

00:23:13.540 --> 00:23:13.915 Uh,  
NOTE Confidence: 0.990150842727273

00:23:13.915 --> 00:23:16.540 we're hoping to stand up some risk  
NOTE Confidence: 0.990150842727273

00:23:16.540 --> 00:23:18.548 informed screening for cancer trials,  
NOTE Confidence: 0.990150842727273

00:23:18.550 --> 00:23:20.656 or what I call risk trials,  
NOTE Confidence: 0.990150842727273

00:23:20.660 --> 00:23:25.394 and we have a large trans NCI liquid biopsy,  
NOTE Confidence: 0.990150842727273

00:23:25.400 --> 00:23:26.796 multi cancer early detection  
NOTE Confidence: 0.990150842727273

00:23:26.796 --> 00:23:28.541 program that I've initiated and  
NOTE Confidence: 0.990150842727273

00:23:28.541 --> 00:23:30.279 we will be working on that,  
NOTE Confidence: 0.990150842727273

00:23:30.280 --> 00:23:32.688 including what I hope is a large  
NOTE Confidence: 0.990150842727273

00:23:32.688 --> 00:23:35.473 platform trial to look at some of  
NOTE Confidence: 0.990150842727273

00:23:35.473 --> 00:23:37.157 these technologies going forward.

NOTE Confidence: 0.990150842727273

00:23:37.160 --> 00:23:39.568 This just gives you a sense of end

NOTE Confidence: 0.990150842727273

00:23:39.568 --> 00:23:42.253 core which is involved in all of

NOTE Confidence: 0.990150842727273

00:23:42.253 --> 00:23:43.861 those activities that preventive

NOTE Confidence: 0.990150842727273

00:23:43.861 --> 00:23:46.148 agent development program as well

NOTE Confidence: 0.990150842727273

00:23:46.148 --> 00:23:48.418 as the screening early detection.

NOTE Confidence: 0.990150842727273

00:23:48.420 --> 00:23:51.006 There are over 1000 clinical sites,

NOTE Confidence: 0.990150842727273

00:23:51.010 --> 00:23:53.350 46 centers and affiliates and

NOTE Confidence: 0.990150842727273

00:23:53.350 --> 00:23:55.222 more than 4000 investigators.

NOTE Confidence: 0.990150842727273

00:23:55.230 --> 00:23:57.618 This is led by Warden Mckaskle

NOTE Confidence: 0.990150842727273

00:23:57.618 --> 00:23:59.210 Stevenson who's doing an

NOTE Confidence: 0.970938630769231

00:23:59.286 --> 00:24:00.588 incredible job of.

NOTE Confidence: 0.970938630769231

00:24:00.590 --> 00:24:03.170 Herding the cats if you will.

NOTE Confidence: 0.970938630769231

00:24:03.170 --> 00:24:06.428 Uh, I'm sure you've heard of a team nest,

NOTE Confidence: 0.970938630769231

00:24:06.430 --> 00:24:08.986 which is a randomized clinical trial

NOTE Confidence: 0.970938630769231

00:24:08.986 --> 00:24:11.890 to compare 2D versus 3D mammography.

NOTE Confidence: 0.970938630769231

00:24:11.890 --> 00:24:14.866 I'll show you some of the not results,  
NOTE Confidence: 0.970938630769231

00:24:14.866 --> 00:24:17.554 but there are recruitment in our  
NOTE Confidence: 0.970938630769231

00:24:17.554 --> 00:24:19.390 recruitment struggles during COVID.  
NOTE Confidence: 0.970938630769231

00:24:19.390 --> 00:24:21.118 We've just launched Forte,  
NOTE Confidence: 0.970938630769231

00:24:21.118 --> 00:24:23.710 which is to look at best  
NOTE Confidence: 0.970938630769231

00:24:23.800 --> 00:24:25.748 rap best management of.  
NOTE Confidence: 0.970938630769231

00:24:25.750 --> 00:24:29.506 You know low, fairly low risk.  
NOTE Confidence: 0.970938630769231

00:24:29.510 --> 00:24:31.350 Populations who have wanted  
NOTE Confidence: 0.970938630769231

00:24:31.350 --> 00:24:33.367 two non advanced polyps.  
NOTE Confidence: 0.970938630769231

00:24:33.367 --> 00:24:36.552 And then a management trial  
NOTE Confidence: 0.970938630769231

00:24:36.552 --> 00:24:38.463 for pancreatic cysts.  
NOTE Confidence: 0.986896685

00:24:41.200 --> 00:24:43.960 You can see here the team missed was,  
NOTE Confidence: 0.986896685

00:24:43.960 --> 00:24:47.551 as was many of our activities adversely  
NOTE Confidence: 0.986896685

00:24:47.551 --> 00:24:50.589 affected by the COVID pandemic,  
NOTE Confidence: 0.986896685

00:24:50.590 --> 00:24:53.320 shown here highlighted down here,  
NOTE Confidence: 0.986896685

00:24:53.320 --> 00:24:56.448 you can see that the enrollment almost went



NOTE Confidence: 0.986896685

00:24:56.448 --> 00:24:59.915 to zero during the height of the pandemic.

NOTE Confidence: 0.986896685

00:24:59.920 --> 00:25:02.818 It's now come back and exceeded

NOTE Confidence: 0.986896685

00:25:02.820 --> 00:25:04.424 the monthly recruitment levels.

NOTE Confidence: 0.986896685

00:25:04.424 --> 00:25:07.245 So we're very excited about that and

NOTE Confidence: 0.986896685

00:25:07.245 --> 00:25:09.315 over time will start getting some

NOTE Confidence: 0.986896685

00:25:09.315 --> 00:25:11.418 readouts from the trial itself on.

NOTE Confidence: 0.986896685

00:25:11.420 --> 00:25:14.960 3D versus 2D mammography.

NOTE Confidence: 0.986896685

00:25:14.960 --> 00:25:18.020 Uhm, this just highlights the cascade,

NOTE Confidence: 0.986896685

00:25:18.020 --> 00:25:20.575 which is a global multicenter

NOTE Confidence: 0.986896685

00:25:20.575 --> 00:25:21.597 cooperative agreement.

NOTE Confidence: 0.986896685

00:25:21.600 --> 00:25:22.953 Clinical trials network.

NOTE Confidence: 0.986896685

00:25:22.953 --> 00:25:25.208 To optimize this cervical cancer

NOTE Confidence: 0.986896685

00:25:25.208 --> 00:25:26.972 screening and treatment cascade

NOTE Confidence: 0.986896685

00:25:26.972 --> 00:25:28.967 for women living with HIV.

NOTE Confidence: 0.986896685

00:25:28.970 --> 00:25:31.226 Looking at all these issues in

NOTE Confidence: 0.986896685

00:25:31.226 --> 00:25:33.628 the care continuum care of care.  
NOTE Confidence: 0.986896685

00:25:33.628 --> 00:25:35.688 From screening uptake to management  
NOTE Confidence: 0.986896685

00:25:35.688 --> 00:25:36.840 of positives,  
NOTE Confidence: 0.986896685

00:25:36.840 --> 00:25:40.446 pre cancer treatment and so forth.  
NOTE Confidence: 0.986896685

00:25:40.450 --> 00:25:42.094 Although this will be a will  
NOTE Confidence: 0.986896685

00:25:42.094 --> 00:25:44.089 have sites in the United States,  
NOTE Confidence: 0.986896685

00:25:44.090 --> 00:25:45.758 we will also include sites in  
NOTE Confidence: 0.986896685

00:25:45.758 --> 00:25:47.480 low and middle income countries.  
NOTE Confidence: 0.856792578333333

00:25:49.730 --> 00:25:51.926 A last mile, as I mentioned,  
NOTE Confidence: 0.856792578333333

00:25:51.930 --> 00:25:55.188 is really going to, we hope,  
NOTE Confidence: 0.856792578333333

00:25:55.190 --> 00:25:57.644 bring HPV testing of self collected  
NOTE Confidence: 0.856792578333333

00:25:57.644 --> 00:25:59.799 samples online in the United  
NOTE Confidence: 0.856792578333333

00:25:59.799 --> 00:26:01.892 States and we're working very  
NOTE Confidence: 0.856792578333333

00:26:01.892 --> 00:26:03.764 closely with the FDA on this.  
NOTE Confidence: 0.856792578333333

00:26:03.770 --> 00:26:06.110 And just to say that.  
NOTE Confidence: 0.856792578333333

00:26:06.110 --> 00:26:08.738 I've spent 15 years working on

NOTE Confidence: 0.8567925783333333  
00:26:08.738 --> 00:26:11.349 this topic more than 15 years.  
NOTE Confidence: 0.8567925783333333  
00:26:11.350 --> 00:26:12.290 I know I look young,  
NOTE Confidence: 0.8567925783333333  
00:26:12.290 --> 00:26:14.634 but it has been more than 15 years  
NOTE Confidence: 0.8567925783333333  
00:26:14.634 --> 00:26:16.589 working on this particular one,  
NOTE Confidence: 0.8567925783333333  
00:26:16.590 --> 00:26:20.475 that the idea that we can democratize  
NOTE Confidence: 0.8567925783333333  
00:26:20.475 --> 00:26:23.294 screening by bringing screening to  
NOTE Confidence: 0.8567925783333333  
00:26:23.294 --> 00:26:26.900 the homes or to convenient areas for  
NOTE Confidence: 0.8567925783333333  
00:26:26.900 --> 00:26:29.050 participation in screening, I think,  
NOTE Confidence: 0.8567925783333333  
00:26:29.050 --> 00:26:31.570 is going to be a game changer,  
NOTE Confidence: 0.8567925783333333  
00:26:31.570 --> 00:26:33.890 not just nationally but globally.  
NOTE Confidence: 0.8567925783333333  
00:26:33.890 --> 00:26:35.962 Although most countries don't  
NOTE Confidence: 0.8567925783333333  
00:26:35.962 --> 00:26:38.034 necessarily take FDA approval.  
NOTE Confidence: 0.8567925783333333  
00:26:38.040 --> 00:26:39.222 Directly in consideration,  
NOTE Confidence: 0.8567925783333333  
00:26:39.222 --> 00:26:43.488 it is a big deal to have an FDA approval  
NOTE Confidence: 0.8567925783333333  
00:26:43.488 --> 00:26:45.858 for a particular intervention so.  
NOTE Confidence: 0.8567925783333333

00:26:45.860 --> 00:26:48.620 We're very excited about this initiative,  
NOTE Confidence: 0.8567925783333333

00:26:48.620 --> 00:26:50.845 which we're hoping to launch  
NOTE Confidence: 0.8567925783333333

00:26:50.845 --> 00:26:53.450 in the next year or so.  
NOTE Confidence: 0.8567925783333333

00:26:53.450 --> 00:26:55.818 And and the other thing to say about  
NOTE Confidence: 0.8567925783333333

00:26:55.818 --> 00:26:58.494 this is from the meta analysis that  
NOTE Confidence: 0.8567925783333333

00:26:58.494 --> 00:27:00.340 I've participated in and others  
NOTE Confidence: 0.8567925783333333

00:27:00.340 --> 00:27:02.230 we know that women prefer this.  
NOTE Confidence: 0.8567925783333333

00:27:02.230 --> 00:27:02.860 I mean,  
NOTE Confidence: 0.8567925783333333

00:27:02.860 --> 00:27:05.065 it's kind of a no brainer and  
NOTE Confidence: 0.8567925783333333

00:27:05.065 --> 00:27:07.574 using a PCR based HPV test there's  
NOTE Confidence: 0.8567925783333333

00:27:07.574 --> 00:27:09.686 really little or no decrement  
NOTE Confidence: 0.8567925783333333

00:27:09.686 --> 00:27:11.558 in clinical performance,  
NOTE Confidence: 0.8567925783333333

00:27:11.560 --> 00:27:14.050 so this is a big deal.  
NOTE Confidence: 0.8567925783333333

00:27:14.050 --> 00:27:15.298 If we can get it underway.  
NOTE Confidence: 0.8567925783333333

00:27:15.300 --> 00:27:18.940 And it's a big deal in the global  
NOTE Confidence: 0.8567925783333333

00:27:18.940 --> 00:27:21.060 battle against cervical cancer.

NOTE Confidence: 0.884094322  
00:27:24.030 --> 00:27:27.547 ERN was established in 2000, UM,  
NOTE Confidence: 0.884094322  
00:27:27.547 --> 00:27:29.055 to support investigator initiated  
NOTE Confidence: 0.884094322  
00:27:29.055 --> 00:27:30.563 research for the development  
NOTE Confidence: 0.884094322  
00:27:30.563 --> 00:27:32.348 and validation of biomarkers,  
NOTE Confidence: 0.884094322  
00:27:32.350 --> 00:27:34.150 foster interaction cooperation  
NOTE Confidence: 0.884094322  
00:27:34.150 --> 00:27:36.200 between academic, clinical,  
NOTE Confidence: 0.884094322  
00:27:36.200 --> 00:27:39.600 industrial partners or leaders.  
NOTE Confidence: 0.884094322  
00:27:39.600 --> 00:27:42.070 Furnish and apply standardized biomarker  
NOTE Confidence: 0.884094322  
00:27:42.070 --> 00:27:44.046 validation criterion quality assurance  
NOTE Confidence: 0.884094322  
00:27:44.046 --> 00:27:47.194 and facilitate regulatory process to bring  
NOTE Confidence: 0.884094322  
00:27:47.194 --> 00:27:49.354 biomarkers rapidly into clinical use.  
NOTE Confidence: 0.884094322  
00:27:49.360 --> 00:27:51.115 This is really our core  
NOTE Confidence: 0.884094322  
00:27:51.115 --> 00:27:52.519 biomarker for you know,  
NOTE Confidence: 0.884094322  
00:27:52.520 --> 00:27:55.760 screening for prevention and early detection,  
NOTE Confidence: 0.884094322  
00:27:55.760 --> 00:27:58.155 and Sudhir has done an  
NOTE Confidence: 0.884094322

00:27:58.155 --> 00:28:00.550 amazing job on this program.  
NOTE Confidence: 0.884094322

00:28:00.550 --> 00:28:03.052 This just gives you a sense of the of  
NOTE Confidence: 0.884094322

00:28:03.052 --> 00:28:05.846 the of the different components of this.  
NOTE Confidence: 0.884094322

00:28:05.850 --> 00:28:07.225 There are four main research  
NOTE Confidence: 0.884094322

00:28:07.225 --> 00:28:08.050 groups shown here.  
NOTE Confidence: 0.884094322

00:28:08.050 --> 00:28:10.584 On the left there's a steering executive,  
NOTE Confidence: 0.884094322

00:28:10.590 --> 00:28:13.290 committees that oversee and review  
NOTE Confidence: 0.884094322

00:28:13.290 --> 00:28:16.640 the program on a regular basis.  
NOTE Confidence: 0.884094322

00:28:16.640 --> 00:28:18.782 We have a consulting team and then  
NOTE Confidence: 0.884094322

00:28:18.782 --> 00:28:21.118 earn because of its breadth and depth,  
NOTE Confidence: 0.884094322

00:28:21.120 --> 00:28:24.360 is really started to come.  
NOTE Confidence: 0.884094322

00:28:24.360 --> 00:28:30.156 You know, permeate all areas related to.  
NOTE Confidence: 0.884094322

00:28:30.160 --> 00:28:32.445 Early detection biomarkers related to  
NOTE Confidence: 0.884094322

00:28:32.445 --> 00:28:34.970 early detection and prevention projects.  
NOTE Confidence: 0.884094322

00:28:34.970 --> 00:28:37.730 Collaborations with Japan, India,  
NOTE Confidence: 0.884094322

00:28:37.730 --> 00:28:39.720 France.

NOTE Confidence: 0.884094322

00:28:39.720 --> 00:28:41.655 Uhm, we've gotten Co funding

NOTE Confidence: 0.884094322

00:28:41.655 --> 00:28:43.590 from a variety of organizations.

NOTE Confidence: 0.884094322

00:28:43.590 --> 00:28:45.345 As I mentioned,

NOTE Confidence: 0.884094322

00:28:45.345 --> 00:28:48.270 there are tangential collaborative groups

NOTE Confidence: 0.884094322

00:28:48.270 --> 00:28:51.176 that expand on particular areas of EDR,

NOTE Confidence: 0.884094322

00:28:51.180 --> 00:28:53.872 and many associate members,

NOTE Confidence: 0.884094322

00:28:53.872 --> 00:28:55.218 federal partners,

NOTE Confidence: 0.884094322

00:28:55.220 --> 00:28:57.725 and we engage directly with

NOTE Confidence: 0.884094322

00:28:57.725 --> 00:28:59.228 pharma biotech industry.

NOTE Confidence: 0.986455656923077

00:29:01.760 --> 00:29:03.038 These are just some of the

NOTE Confidence: 0.986455656923077

00:29:03.038 --> 00:29:04.578 tests and I won't go over them.

NOTE Confidence: 0.986455656923077

00:29:04.580 --> 00:29:06.464 Obviously the perhaps the

NOTE Confidence: 0.986455656923077

00:29:06.464 --> 00:29:08.819 one that you're you know.

NOTE Confidence: 0.986455656923077

00:29:08.820 --> 00:29:10.724 Hearing a lot about his cancer seek

NOTE Confidence: 0.986455656923077

00:29:10.724 --> 00:29:13.258 which is a multi cancer early detection

NOTE Confidence: 0.986455656923077

00:29:13.260 --> 00:29:16.056 which was supported by the DRN.  
NOTE Confidence: 0.986455656923077

00:29:16.060 --> 00:29:18.180 But there are many more and with this  
NOTE Confidence: 0.986455656923077

00:29:18.180 --> 00:29:19.946 next round of renewal we're really  
NOTE Confidence: 0.986455656923077

00:29:19.946 --> 00:29:22.134 hoping to push more things to FDA  
NOTE Confidence: 0.986455656923077

00:29:22.134 --> 00:29:23.979 approval and into clinical practice.  
NOTE Confidence: 0.986455656923077

00:29:23.980 --> 00:29:25.919 And that's really going to be our  
NOTE Confidence: 0.986455656923077

00:29:25.919 --> 00:29:27.538 metric going forward is how much  
NOTE Confidence: 0.986455656923077

00:29:27.538 --> 00:29:29.008 of this gets into routine care?  
NOTE Confidence: 0.9421395475

00:29:31.520 --> 00:29:33.600 Uh, I sort of alluded to this before,  
NOTE Confidence: 0.9421395475

00:29:33.600 --> 00:29:35.770 but the idea that we could bring  
NOTE Confidence: 0.9421395475

00:29:35.770 --> 00:29:37.240 these two pipelines together  
NOTE Confidence: 0.9421395475

00:29:37.240 --> 00:29:39.284 one is biomarker discovery,  
NOTE Confidence: 0.9421395475

00:29:39.284 --> 00:29:43.688 as well as and as well as bringing  
NOTE Confidence: 0.9421395475

00:29:43.688 --> 00:29:46.517 a preventive agent into the mix  
NOTE Confidence: 0.9421395475

00:29:46.517 --> 00:29:48.491 and so that you could detect  
NOTE Confidence: 0.9421395475

00:29:48.491 --> 00:29:52.000 and mitigate cancer risk, but.



NOTE Confidence: 0.9421395475

00:29:52.000 --> 00:29:53.326 As I will talk about later,

NOTE Confidence: 0.9421395475

00:29:53.330 --> 00:29:55.754 I really want to expand what we call

NOTE Confidence: 0.9421395475

00:29:55.754 --> 00:29:57.568 precision cancer prevention and I will

NOTE Confidence: 0.9421395475

00:29:57.568 --> 00:29:59.690 talk about that a little bit later.

NOTE Confidence: 0.9421395475

00:29:59.690 --> 00:30:01.240 We also do symptom management,

NOTE Confidence: 0.9421395475

00:30:01.240 --> 00:30:04.210 which seems odd, but that's the way it is.

NOTE Confidence: 0.9421395475

00:30:04.210 --> 00:30:06.275 And actually I'm very excited about this.

NOTE Confidence: 0.9421395475

00:30:06.280 --> 00:30:08.036 I think there's tremendous

NOTE Confidence: 0.9421395475

00:30:08.036 --> 00:30:09.792 opportunity to improve symptom

NOTE Confidence: 0.9421395475

00:30:09.792 --> 00:30:11.710 management and supportive care.

NOTE Confidence: 0.9421395475

00:30:11.710 --> 00:30:13.285 What's really important about this

NOTE Confidence: 0.9421395475

00:30:13.285 --> 00:30:15.798 to me is that the prevention and

NOTE Confidence: 0.9421395475

00:30:15.798 --> 00:30:17.836 treatment of symptoms from cancer

NOTE Confidence: 0.9421395475

00:30:17.836 --> 00:30:20.014 cancer treatment really has a profound

NOTE Confidence: 0.9421395475

00:30:20.014 --> 00:30:22.020 effect on the quality of life.

NOTE Confidence: 0.9421395475

00:30:22.020 --> 00:30:22.754 Of patients,  
NOTE Confidence: 0.9421395475

00:30:22.754 --> 00:30:24.956 but also their ability to survive  
NOTE Confidence: 0.9421395475

00:30:24.956 --> 00:30:26.917 the cancer and cancer treatment  
NOTE Confidence: 0.9421395475

00:30:26.917 --> 00:30:29.233 if we can manage symptoms better.  
NOTE Confidence: 0.9421395475

00:30:29.240 --> 00:30:30.384 As you well know,  
NOTE Confidence: 0.9421395475

00:30:30.384 --> 00:30:31.814 many of you are oncologists.  
NOTE Confidence: 0.9421395475

00:30:31.820 --> 00:30:33.404 The clinical performance remains  
NOTE Confidence: 0.9421395475

00:30:33.404 --> 00:30:36.196 high and so patients really not only  
NOTE Confidence: 0.9421395475

00:30:36.196 --> 00:30:38.266 get their first line of treatment,  
NOTE Confidence: 0.9421395475

00:30:38.270 --> 00:30:39.848 they get their second and third  
NOTE Confidence: 0.9421395475

00:30:39.848 --> 00:30:41.265 line treatment and even treatments  
NOTE Confidence: 0.9421395475

00:30:41.265 --> 00:30:42.820 that haven't been invented today  
NOTE Confidence: 0.9421395475

00:30:42.820 --> 00:30:44.064 but will be tomorrow.  
NOTE Confidence: 0.975361141428571

00:30:46.350 --> 00:30:49.087 So we have a very broad portfolio,  
NOTE Confidence: 0.975361141428571

00:30:49.090 --> 00:30:52.186 big and broad portfolio and and  
NOTE Confidence: 0.975361141428571

00:30:52.190 --> 00:30:55.880 in symptom management shown here.

NOTE Confidence: 0.975361141428571

00:30:55.880 --> 00:30:58.064 Uh, those are the number in the

NOTE Confidence: 0.975361141428571

00:30:58.064 --> 00:31:00.022 upper left hand panel is the

NOTE Confidence: 0.975361141428571

00:31:00.022 --> 00:31:01.924 number of grants per per year.

NOTE Confidence: 0.96990851

00:31:04.660 --> 00:31:07.460 Are we really the only group at the

NOTE Confidence: 0.96990851

00:31:07.460 --> 00:31:10.400 NCI that focuses on pain management?

NOTE Confidence: 0.96990851

00:31:10.400 --> 00:31:12.764 And much of these activities happen

NOTE Confidence: 0.96990851

00:31:12.764 --> 00:31:14.920 within our clinical trials network,

NOTE Confidence: 0.96990851

00:31:14.920 --> 00:31:19.080 now called Encor. It used to be sikap.

NOTE Confidence: 0.96990851

00:31:19.080 --> 00:31:22.158 So this is again the pipeline and I use

NOTE Confidence: 0.96990851

00:31:22.158 --> 00:31:24.920 this as a is a sort of a platform for

NOTE Confidence: 0.96990851

00:31:24.920 --> 00:31:27.019 thinking about where we want to go.

NOTE Confidence: 0.96990851

00:31:27.020 --> 00:31:30.734 We have a lot of. You know,

NOTE Confidence: 0.96990851

00:31:30.734 --> 00:31:32.144 activities in our clinical trials,

NOTE Confidence: 0.96990851

00:31:32.150 --> 00:31:34.190 but what's really lacking is an

NOTE Confidence: 0.96990851

00:31:34.190 --> 00:31:36.432 investment in the biology and genetics

NOTE Confidence: 0.96990851

00:31:36.432 --> 00:31:38.477 of symptoms and symptom management.  
NOTE Confidence: 0.96990851

00:31:38.480 --> 00:31:40.226 What we'll call here is precision  
NOTE Confidence: 0.96990851

00:31:40.226 --> 00:31:42.988 symptom management, or symptom science.  
NOTE Confidence: 0.96990851

00:31:42.990 --> 00:31:44.650 Uh, and so we really.  
NOTE Confidence: 0.96990851

00:31:44.650 --> 00:31:47.269 I'm hoping in the next couple years to make  
NOTE Confidence: 0.96990851

00:31:47.269 --> 00:31:49.965 to get some NCI investment in this area.  
NOTE Confidence: 0.96990851

00:31:49.970 --> 00:31:52.651 There's no reason for trial and error  
NOTE Confidence: 0.96990851

00:31:52.651 --> 00:31:54.794 related to symptom management anymore  
NOTE Confidence: 0.96990851

00:31:54.794 --> 00:31:58.035 than there is for cancer treatment itself.  
NOTE Confidence: 0.96990851

00:31:58.040 --> 00:32:01.296 Uh, we've been doing a lot on, UM.  
NOTE Confidence: 0.96990851

00:32:01.296 --> 00:32:03.024 Defining patient reported  
NOTE Confidence: 0.96990851

00:32:03.024 --> 00:32:05.328 outcomes and standardizing them,  
NOTE Confidence: 0.96990851

00:32:05.330 --> 00:32:08.120 which is important for a sort of a base  
NOTE Confidence: 0.96990851

00:32:08.120 --> 00:32:10.809 for doing anything to improve symptom  
NOTE Confidence: 0.96990851

00:32:10.809 --> 00:32:14.130 management if we can't measure the outcomes,  
NOTE Confidence: 0.96990851

00:32:14.130 --> 00:32:16.062 then there's not much for us

NOTE Confidence: 0.96990851

00:32:16.062 --> 00:32:17.844 to do and not much.

NOTE Confidence: 0.96990851

00:32:17.844 --> 00:32:19.356 We can't show anything.

NOTE Confidence: 0.96990851

00:32:19.360 --> 00:32:22.230 So the this moon shot that tolerability

NOTE Confidence: 0.96990851

00:32:22.230 --> 00:32:24.200 consortium focused on analyzing,

NOTE Confidence: 0.96990851

00:32:24.200 --> 00:32:24.684 interpreting,

NOTE Confidence: 0.96990851

00:32:24.684 --> 00:32:27.104 clinician and patient adverse event

NOTE Confidence: 0.96990851

00:32:27.104 --> 00:32:30.010 data to better understand Taler ability.

NOTE Confidence: 0.96990851

00:32:30.010 --> 00:32:33.342 Doing so by creating a consortium to

NOTE Confidence: 0.96990851

00:32:33.342 --> 00:32:36.384 share analytic approaches and so let

NOTE Confidence: 0.96990851

00:32:36.384 --> 00:32:39.572 me conclude with a few slides here and

NOTE Confidence: 0.96990851

00:32:39.572 --> 00:32:42.429 then it will open up for questions.

NOTE Confidence: 0.96990851

00:32:42.430 --> 00:32:44.100 These are certain my informal,

NOTE Confidence: 0.96990851

00:32:44.100 --> 00:32:45.969 UM, unofficial priorities,

NOTE Confidence: 0.96990851

00:32:45.969 --> 00:32:49.084 really understanding biologic risk and

NOTE Confidence: 0.96990851

00:32:49.084 --> 00:32:54.190 using that to guide what we do for patients,

NOTE Confidence: 0.96990851

00:32:54.190 --> 00:32:56.190 but also population risk to  
NOTE Confidence: 0.96990851

00:32:56.190 --> 00:32:58.550 decide who gets screened and how.  
NOTE Confidence: 0.96990851

00:32:58.550 --> 00:32:59.798 How to screen,  
NOTE Confidence: 0.96990851

00:32:59.798 --> 00:33:01.890 how to screen positives are  
NOTE Confidence: 0.96990851

00:33:01.890 --> 00:33:04.410 managed and how to harmonize care.  
NOTE Confidence: 0.96990851

00:33:04.410 --> 00:33:06.336 What I call equal risk equal  
NOTE Confidence: 0.96990851

00:33:06.336 --> 00:33:07.620 care for equal risk,  
NOTE Confidence: 0.96990851

00:33:07.620 --> 00:33:10.148 which is an idea that we had promulgated  
NOTE Confidence: 0.96990851

00:33:10.148 --> 00:33:12.429 over 15 years ago in the cervix.  
NOTE Confidence: 0.96990851

00:33:12.430 --> 00:33:12.679 World,  
NOTE Confidence: 0.96990851

00:33:12.679 --> 00:33:14.671 as we saw that there were the all  
NOTE Confidence: 0.96990851

00:33:14.671 --> 00:33:16.168 these new tools coming and there  
NOTE Confidence: 0.96990851

00:33:16.168 --> 00:33:18.485 was going to be a great deal of  
NOTE Confidence: 0.96990851

00:33:18.485 --> 00:33:19.909 heterogeneity in the population.  
NOTE Confidence: 0.96990851

00:33:19.910 --> 00:33:21.918 Risk to their vaccination.  
NOTE Confidence: 0.96990851

00:33:21.918 --> 00:33:25.390 We really needed a organizing principle here.

NOTE Confidence: 0.96990851

00:33:25.390 --> 00:33:28.930 Obesity, as I mentioned before.

NOTE Confidence: 0.96990851

00:33:28.930 --> 00:33:31.930 Causes so much of the burden of cancer

NOTE Confidence: 0.96990851

00:33:31.930 --> 00:33:35.020 and we really don't understand it.

NOTE Confidence: 0.96990851

00:33:35.020 --> 00:33:35.848 If we did,

NOTE Confidence: 0.96990851

00:33:35.848 --> 00:33:37.228 we could mitigate its effects.

NOTE Confidence: 0.96990851

00:33:37.230 --> 00:33:37.562 Obviously,

NOTE Confidence: 0.96990851

00:33:37.562 --> 00:33:39.554 changing lifestyle behavior would be ideal,

NOTE Confidence: 0.96990851

00:33:39.560 --> 00:33:42.368 but I think it's a real challenge to get

NOTE Confidence: 0.96990851

00:33:42.368 --> 00:33:44.850 people to change their their lifestyle

NOTE Confidence: 0.96990851

00:33:44.850 --> 00:33:48.150 behavior over a course of decades.

NOTE Confidence: 0.96990851

00:33:48.150 --> 00:33:49.326 And so I'm not saying that

NOTE Confidence: 0.96990851

00:33:49.326 --> 00:33:50.360 we shouldn't invest in that,

NOTE Confidence: 0.96990851

00:33:50.360 --> 00:33:52.610 but I'm saying complementary to that.

NOTE Confidence: 0.96990851

00:33:52.610 --> 00:33:55.440 We really should understand the

NOTE Confidence: 0.96990851

00:33:55.440 --> 00:33:58.270 pathways and how obesity contributes

NOTE Confidence: 0.96990851

00:33:58.353 --> 00:34:01.095 to carcinogenesis so that we can.  
NOTE Confidence: 0.96990851

00:34:01.100 --> 00:34:03.480 Combine that with changes in  
NOTE Confidence: 0.96990851

00:34:03.480 --> 00:34:04.908 lifestyle and behavior.  
NOTE Confidence: 0.96990851

00:34:04.910 --> 00:34:06.765 I think I've said enough about precision,  
NOTE Confidence: 0.96990851

00:34:06.770 --> 00:34:08.958 symptom, prevention,  
NOTE Confidence: 0.96990851

00:34:08.958 --> 00:34:10.746 and management, but I you know,  
NOTE Confidence: 0.96990851

00:34:10.750 --> 00:34:12.230 just to emphasize that I,  
NOTE Confidence: 0.96990851

00:34:12.230 --> 00:34:13.862 I think we need to move away from  
NOTE Confidence: 0.96990851

00:34:13.862 --> 00:34:15.527 the trial and error that often  
NOTE Confidence: 0.96990851

00:34:15.527 --> 00:34:16.735 occurs in clinical management.  
NOTE Confidence: 0.96990851

00:34:16.740 --> 00:34:18.160 That's not a criticism of  
NOTE Confidence: 0.96990851

00:34:18.160 --> 00:34:19.296 the clinicians at all,  
NOTE Confidence: 0.96990851

00:34:19.300 --> 00:34:20.590 it's just that we haven't.  
NOTE Confidence: 0.988031320333334

00:34:20.590 --> 00:34:23.159 We haven't really taken this as seriously  
NOTE Confidence: 0.988031320333334

00:34:23.159 --> 00:34:25.889 as we should in terms of bringing the  
NOTE Confidence: 0.988031320333334

00:34:25.889 --> 00:34:28.215 same kind of focus on precision medicine



NOTE Confidence: 0.988031320333334

00:34:28.215 --> 00:34:31.355 to this area as we have in other areas.

NOTE Confidence: 0.988031320333334

00:34:31.355 --> 00:34:33.545 Health disparities I. I think there's

NOTE Confidence: 0.988031320333334

00:34:33.545 --> 00:34:36.580 a lot of opportunity for innovation.

NOTE Confidence: 0.988031320333334

00:34:36.580 --> 00:34:39.940 I mentioned self collection developing point

NOTE Confidence: 0.988031320333334

00:34:39.940 --> 00:34:43.426 of care testing like for HCV. You know,

NOTE Confidence: 0.988031320333334

00:34:43.426 --> 00:34:45.290 bring the bring the tests to the people,

NOTE Confidence: 0.988031320333334

00:34:45.290 --> 00:34:47.265 or bringing the intervention of

NOTE Confidence: 0.988031320333334

00:34:47.265 --> 00:34:49.630 the people rather than just relying

NOTE Confidence: 0.988031320333334

00:34:49.630 --> 00:34:51.856 on them to come to the clinic.

NOTE Confidence: 0.988031320333334

00:34:51.860 --> 00:34:54.302 I know that persistent reality is

NOTE Confidence: 0.988031320333334

00:34:54.302 --> 00:34:56.860 a major risk factor for cancer,

NOTE Confidence: 0.988031320333334

00:34:56.860 --> 00:34:58.860 and then we're being bombarded

NOTE Confidence: 0.988031320333334

00:34:58.860 --> 00:35:00.060 with new technologies,

NOTE Confidence: 0.988031320333334

00:35:00.060 --> 00:35:02.120 AI multi cancer, early detection,

NOTE Confidence: 0.988031320333334

00:35:02.120 --> 00:35:03.524 synthetic biomarkers, etc etc.

NOTE Confidence: 0.988031320333334

00:35:03.524 --> 00:35:06.001 We really the NCI plays a pivotal  
NOTE Confidence: 0.988031320333334

00:35:06.001 --> 00:35:08.409 role in sort of getting out in front  
NOTE Confidence: 0.988031320333334

00:35:08.409 --> 00:35:10.693 and figuring out what's good and  
NOTE Confidence: 0.988031320333334

00:35:10.693 --> 00:35:12.608 what's not without bias without.  
NOTE Confidence: 0.988031320333334

00:35:12.610 --> 00:35:15.002 And gender and and I think we need  
NOTE Confidence: 0.988031320333334

00:35:15.002 --> 00:35:18.775 to do that more and more as these new  
NOTE Confidence: 0.988031320333334

00:35:18.775 --> 00:35:21.000 technologies rollout faster and faster.  
NOTE Confidence: 0.988031320333334

00:35:21.000 --> 00:35:23.538 Uhm, I wanna pose something that  
NOTE Confidence: 0.988031320333334

00:35:23.538 --> 00:35:26.839 might be a little bit controversial,  
NOTE Confidence: 0.988031320333334

00:35:26.840 --> 00:35:29.550 which is a broader definition  
NOTE Confidence: 0.988031320333334

00:35:29.550 --> 00:35:31.718 of precision cancer prevention.  
NOTE Confidence: 0.988031320333334

00:35:31.720 --> 00:35:34.858 To achieve equitable care for all.  
NOTE Confidence: 0.988031320333334

00:35:34.860 --> 00:35:37.016 And the core principles here are the  
NOTE Confidence: 0.988031320333334

00:35:37.016 --> 00:35:39.368 benefits to harms ratio and understanding.  
NOTE Confidence: 0.988031320333334

00:35:39.370 --> 00:35:41.162 All causes of differences,  
NOTE Confidence: 0.988031320333334

00:35:41.162 --> 00:35:42.506 not just biological,

NOTE Confidence: 0.988031320333334

00:35:42.510 --> 00:35:45.150 which informs how we can be more precise.

NOTE Confidence: 0.988031320333334

00:35:45.150 --> 00:35:46.535 So what we've typically figured

NOTE Confidence: 0.988031320333334

00:35:46.535 --> 00:35:47.643 on is the what,

NOTE Confidence: 0.988031320333334

00:35:47.650 --> 00:35:49.930 which is based on an understanding

NOTE Confidence: 0.988031320333334

00:35:49.930 --> 00:35:51.070 of carcinogenic processes.

NOTE Confidence: 0.988031320333334

00:35:51.070 --> 00:35:53.130 Target early changes via

NOTE Confidence: 0.988031320333334

00:35:53.130 --> 00:35:54.675 screening or interception,

NOTE Confidence: 0.988031320333334

00:35:54.680 --> 00:35:57.227 but I want to add The Who into this,

NOTE Confidence: 0.988031320333334

00:35:57.230 --> 00:35:59.006 which isn't always integrated into this,

NOTE Confidence: 0.988031320333334

00:35:59.010 --> 00:36:01.386 which is who's at risk and how much risk.

NOTE Confidence: 0.988031320333334

00:36:01.390 --> 00:36:05.126 And that really tells us, not just.

NOTE Confidence: 0.988031320333334

00:36:05.126 --> 00:36:09.872 What age but what kind of screen?

NOTE Confidence: 0.988031320333334

00:36:09.880 --> 00:36:12.127 To use or what kind of intervention

NOTE Confidence: 0.988031320333334

00:36:12.127 --> 00:36:14.980 to use and what's the follow-up care?

NOTE Confidence: 0.988031320333334

00:36:14.980 --> 00:36:16.776 Where a?

NOTE Confidence: 0.988031320333334

00:36:16.776 --> 00:36:19.470 Alternative delivery strategies,  
NOTE Confidence: 0.988031320333334

00:36:19.470 --> 00:36:21.582 like I mentioned home based sample  
NOTE Confidence: 0.988031320333334

00:36:21.582 --> 00:36:22.990 collection collection of testing,  
NOTE Confidence: 0.988031320333334

00:36:22.990 --> 00:36:25.528 app based interventions and so forth  
NOTE Confidence: 0.988031320333334

00:36:25.528 --> 00:36:29.280 and then how benefits and harms can be  
NOTE Confidence: 0.988031320333334

00:36:29.280 --> 00:36:31.760 manipulated by alternative routes of  
NOTE Confidence: 0.988031320333334

00:36:31.760 --> 00:36:34.008 administration like topical tamoxifen,  
NOTE Confidence: 0.988031320333334

00:36:34.010 --> 00:36:36.450 maintaining effective doses more  
NOTE Confidence: 0.988031320333334

00:36:36.450 --> 00:36:38.890 consistently through sustained release  
NOTE Confidence: 0.988031320333334

00:36:38.890 --> 00:36:42.294 to reduce toxicity and perhaps even  
NOTE Confidence: 0.988031320333334

00:36:42.294 --> 00:36:44.238 increase improve the benefits.  
NOTE Confidence: 0.988031320333334

00:36:44.238 --> 00:36:45.570 The cancer prevention,  
NOTE Confidence: 0.988031320333334

00:36:45.570 --> 00:36:47.330 benefits and even strategies.  
NOTE Confidence: 0.988031320333334

00:36:47.330 --> 00:36:49.970 For immunization and we we often  
NOTE Confidence: 0.988031320333334

00:36:50.042 --> 00:36:52.098 focus on active immunization,  
NOTE Confidence: 0.988031320333334

00:36:52.100 --> 00:36:54.200 but sometimes you can't develop a good

NOTE Confidence: 0.988031320333334  
00:36:54.200 --> 00:36:56.320 response or a sufficient response.  
NOTE Confidence: 0.988031320333334  
00:36:56.320 --> 00:36:58.945 So maybe we have to make antibodies  
NOTE Confidence: 0.988031320333334  
00:36:58.945 --> 00:37:00.595 like anti nicotine antibiotics  
NOTE Confidence: 0.988031320333334  
00:37:00.595 --> 00:37:03.277 which we are supporting right now  
NOTE Confidence: 0.988031320333334  
00:37:03.280 --> 00:37:05.932 to give people the immune spot  
NOTE Confidence: 0.988031320333334  
00:37:05.932 --> 00:37:08.180 immune response that they need.  
NOTE Confidence: 0.988031320333334  
00:37:08.180 --> 00:37:09.916 I think this is my final slide,  
NOTE Confidence: 0.988031320333334  
00:37:09.920 --> 00:37:12.216 which is just a call out for our  
NOTE Confidence: 0.988031320333334  
00:37:12.216 --> 00:37:13.939 cancer prevention fellowship program,  
NOTE Confidence: 0.988031320333334  
00:37:13.940 --> 00:37:15.440 from which I spawned.  
NOTE Confidence: 0.988031320333334  
00:37:15.440 --> 00:37:17.690 So how bad can it be?  
NOTE Confidence: 0.988031320333334  
00:37:17.690 --> 00:37:19.274 This is a multidisciplinary,  
NOTE Confidence: 0.988031320333334  
00:37:19.274 --> 00:37:19.670 diverse,  
NOTE Confidence: 0.988031320333334  
00:37:19.670 --> 00:37:21.598 and highly competitive postdoctoral  
NOTE Confidence: 0.988031320333334  
00:37:21.598 --> 00:37:24.008 training program that provides flexibility  
NOTE Confidence: 0.988031320333334

00:37:24.008 --> 00:37:26.648 for fellows to generate and pursue  
NOTE Confidence: 0.988031320333334

00:37:26.648 --> 00:37:28.738 original scientific ideas and structure,  
NOTE Confidence: 0.988031320333334

00:37:28.740 --> 00:37:30.282 to develop competencies,  
NOTE Confidence: 0.988031320333334

00:37:30.282 --> 00:37:34.460 support their future as leaders in the field.  
NOTE Confidence: 0.988031320333334

00:37:34.460 --> 00:37:36.770 But I'm very proud of is we've  
NOTE Confidence: 0.988031320333334

00:37:36.770 --> 00:37:38.728 got now cancer prevention fellows  
NOTE Confidence: 0.988031320333334

00:37:38.728 --> 00:37:41.857 from Costa Rica and we are working  
NOTE Confidence: 0.988031320333334

00:37:41.857 --> 00:37:45.238 towards the idea of having an ongoing  
NOTE Confidence: 0.988031320333334

00:37:45.238 --> 00:37:47.142 international training component to  
NOTE Confidence: 0.9854279

00:37:47.150 --> 00:37:49.326 this cancer prevention fellowship.  
NOTE Confidence: 0.9854279

00:37:49.326 --> 00:37:52.046 And then the Cancer Prevention  
NOTE Confidence: 0.9854279

00:37:52.046 --> 00:37:54.243 Fellowship program has alumni across  
NOTE Confidence: 0.9854279

00:37:54.243 --> 00:37:57.110 all across the country in the world.  
NOTE Confidence: 0.9854279

00:37:57.110 --> 00:38:00.494 You know it's been around for 35 years  
NOTE Confidence: 0.9854279

00:38:00.494 --> 00:38:04.551 now and fellows are at major cancer  
NOTE Confidence: 0.9854279

00:38:04.551 --> 00:38:07.043 centers and leadership positions.

NOTE Confidence: 0.9854279

00:38:07.050 --> 00:38:09.186 Government agencies, research firms,

NOTE Confidence: 0.9854279

00:38:09.186 --> 00:38:10.974 foundations, and policy organizations,

NOTE Confidence: 0.9854279

00:38:10.974 --> 00:38:13.482 and the website for the Cancer

NOTE Confidence: 0.9854279

00:38:13.482 --> 00:38:15.150 Prevention Fellowship program.

NOTE Confidence: 0.9854279

00:38:15.150 --> 00:38:16.750 Shown there at the bottom.

NOTE Confidence: 0.9854279

00:38:16.750 --> 00:38:19.326 So with that, I'll say thank you

NOTE Confidence: 0.9854279

00:38:19.326 --> 00:38:21.640 and I'll take any questions.

NOTE Confidence: 0.9854279

00:38:21.640 --> 00:38:23.789 From the audience and thanks again for

NOTE Confidence: 0.9854279

00:38:23.789 --> 00:38:25.808 the invitation to Yale Cancer Center.

NOTE Confidence: 0.97188425

00:38:29.380 --> 00:38:30.676 Thank you very much.

NOTE Confidence: 0.97188425

00:38:30.676 --> 00:38:32.296 Doctor Castle and Great talking,

NOTE Confidence: 0.97188425

00:38:32.300 --> 00:38:33.870 kind of a whirlwind overview.

NOTE Confidence: 0.9817157383333333

00:38:36.070 --> 00:38:38.275 What's been going on with

NOTE Confidence: 0.9817157383333333

00:38:38.275 --> 00:38:41.760 exciting preview of next steps?

NOTE Confidence: 0.9817157383333333

00:38:41.760 --> 00:38:43.825 So I'll ask people to send questions

NOTE Confidence: 0.9817157383333333

00:38:43.825 --> 00:38:46.249 via the chat button while we're waiting  
NOTE Confidence: 0.9817157383333333

00:38:46.249 --> 00:38:48.457 for some other questions that they  
NOTE Confidence: 0.9817157383333333

00:38:48.518 --> 00:38:50.750 had one just to get the ball rolling.  
NOTE Confidence: 0.9817157383333333

00:38:50.750 --> 00:38:53.554 So. In your position,  
NOTE Confidence: 0.9817157383333333

00:38:53.554 --> 00:38:55.882 the decisions need to be made  
NOTE Confidence: 0.9817157383333333

00:38:55.882 --> 00:38:58.168 with regarding prioritization of  
NOTE Confidence: 0.9817157383333333

00:38:58.168 --> 00:39:01.193 large scale efforts forward in  
NOTE Confidence: 0.9817157383333333

00:39:01.193 --> 00:39:03.530 overarching strategies at the center.  
NOTE Confidence: 0.9817157383333333

00:39:03.530 --> 00:39:06.370 Beneath that there are four  
NOTE Confidence: 0.9817157383333333

00:39:06.370 --> 00:39:08.074 tactical decisions which.  
NOTE Confidence: 0.9817157383333333

00:39:08.080 --> 00:39:11.254 Which plans to find out which teams he  
NOTE Confidence: 0.9817157383333333

00:39:11.254 --> 00:39:14.348 grants or program projects so for WhatsApp.  
NOTE Confidence: 0.9817157383333333

00:39:14.350 --> 00:39:17.660 So my question to you is how do  
NOTE Confidence: 0.9817157383333333

00:39:17.660 --> 00:39:19.270 you track success that how do you?  
NOTE Confidence: 0.9817157383333333

00:39:19.270 --> 00:39:21.374 How do you know five years from now  
NOTE Confidence: 0.9817157383333333

00:39:21.374 --> 00:39:23.808 whether you made the right decisions or that?



NOTE Confidence: 0.981715738333333

00:39:23.810 --> 00:39:25.308 Like if you imagine an alternate universe

NOTE Confidence: 0.981715738333333

00:39:25.308 --> 00:39:26.668 where you could have been focused,

NOTE Confidence: 0.981715738333333

00:39:26.670 --> 00:39:28.560 you know the center could have been

NOTE Confidence: 0.981715738333333

00:39:28.560 --> 00:39:30.242 focusing on completely different things

NOTE Confidence: 0.981715738333333

00:39:30.242 --> 00:39:31.886 are completely different strategies.

NOTE Confidence: 0.981715738333333

00:39:31.890 --> 00:39:34.171 They can have different outcomes, so I don't.

NOTE Confidence: 0.981715738333333

00:39:34.171 --> 00:39:36.530 I'm just curious how you think about

NOTE Confidence: 0.981715738333333

00:39:36.606 --> 00:39:38.965 how you know how to evaluate the

NOTE Confidence: 0.981715738333333

00:39:38.965 --> 00:39:41.668 progress of the centers making it both.

NOTE Confidence: 0.981715738333333

00:39:41.670 --> 00:39:44.310 So what's the time horizon is one of

NOTE Confidence: 0.981715738333333

00:39:44.310 --> 00:39:46.620 the metrics for evaluating success.

NOTE Confidence: 0.981715738333333

00:39:46.620 --> 00:39:47.440 Boy you've touched it.

NOTE Confidence: 0.981715738333333

00:39:47.440 --> 00:39:49.420 I mean you went right to the heart of it,

NOTE Confidence: 0.981715738333333

00:39:49.420 --> 00:39:49.700 right?

NOTE Confidence: 0.981715738333333

00:39:49.700 --> 00:39:51.380 Not just from a programmatic standpoint

NOTE Confidence: 0.981715738333333

00:39:51.380 --> 00:39:53.359 but from a prevention standpoint,  
NOTE Confidence: 0.9817157383333333

00:39:53.360 --> 00:39:55.215 because it often takes more than five  
NOTE Confidence: 0.9817157383333333

00:39:55.215 --> 00:39:57.319 years to show any of this stuff works,  
NOTE Confidence: 0.9817157383333333

00:39:57.320 --> 00:39:58.379 and I think.  
NOTE Confidence: 0.9817157383333333

00:39:58.379 --> 00:40:01.601 That is sort of one of the major  
NOTE Confidence: 0.9817157383333333

00:40:01.601 --> 00:40:04.241 barriers for researchers getting  
NOTE Confidence: 0.9817157383333333

00:40:04.241 --> 00:40:07.541 into the prevention field because.  
NOTE Confidence: 0.9817157383333333

00:40:07.550 --> 00:40:08.370 It's just hard, you know,  
NOTE Confidence: 0.9817157383333333

00:40:08.370 --> 00:40:10.477 even you know and and the more  
NOTE Confidence: 0.9817157383333333

00:40:10.477 --> 00:40:12.620 successful you are like for screening,  
NOTE Confidence: 0.9817157383333333

00:40:12.620 --> 00:40:14.996 even harder it is to do a prevention trial,  
NOTE Confidence: 0.9817157383333333

00:40:15.000 --> 00:40:15.352 right?  
NOTE Confidence: 0.9817157383333333

00:40:15.352 --> 00:40:17.464 'cause then you start extending screening  
NOTE Confidence: 0.9817157383333333

00:40:17.464 --> 00:40:19.397 intervals to the point where you  
NOTE Confidence: 0.9817157383333333

00:40:19.397 --> 00:40:21.570 can't even study it within an hour one.  
NOTE Confidence: 0.9817157383333333

00:40:21.570 --> 00:40:24.125 So I mean some of these things.

NOTE Confidence: 0.981715738333333  
00:40:24.130 --> 00:40:24.572 You know,  
NOTE Confidence: 0.981715738333333  
00:40:24.572 --> 00:40:26.340 that's why we have to do things more,  
NOTE Confidence: 0.981715738333333  
00:40:26.340 --> 00:40:28.296 sort of directed by the NCI  
NOTE Confidence: 0.981715738333333  
00:40:28.296 --> 00:40:29.600 as a clinical trial,  
NOTE Confidence: 0.981715738333333  
00:40:29.600 --> 00:40:31.805 rather than just relying on our one.  
NOTE Confidence: 0.981715738333333  
00:40:31.810 --> 00:40:33.160 I know everybody wants to put  
NOTE Confidence: 0.981715738333333  
00:40:33.160 --> 00:40:34.439 all the money into the R1,  
NOTE Confidence: 0.981715738333333  
00:40:34.440 --> 00:40:36.392 but my calling is to come up with  
NOTE Confidence: 0.981715738333333  
00:40:36.392 --> 00:40:37.714 the best prevention strategies  
NOTE Confidence: 0.981715738333333  
00:40:37.714 --> 00:40:40.018 and sometimes it just doesn't fit  
NOTE Confidence: 0.981715738333333  
00:40:40.018 --> 00:40:42.190 within the the framework of an R1.  
NOTE Confidence: 0.981715738333333  
00:40:42.190 --> 00:40:44.350 There's no way that I can know in  
NOTE Confidence: 0.981715738333333  
00:40:44.350 --> 00:40:46.058 advance whether my guesses are good.  
NOTE Confidence: 0.981715738333333  
00:40:46.060 --> 00:40:46.940 And as you pointed out,  
NOTE Confidence: 0.981715738333333  
00:40:46.940 --> 00:40:49.500 I have to make guess I have to make informed.  
NOTE Confidence: 0.981715738333333

00:40:49.500 --> 00:40:51.368 I hope. Informed guesses.  
NOTE Confidence: 0.9817157383333333

00:40:51.368 --> 00:40:55.020 About where we should put our energies.  
NOTE Confidence: 0.9817157383333333

00:40:55.020 --> 00:40:57.596 I think what I've been trying to impress  
NOTE Confidence: 0.9817157383333333

00:40:57.596 --> 00:41:00.775 upon my staff and through my staff to  
NOTE Confidence: 0.9817157383333333

00:41:00.775 --> 00:41:03.217 the extramural investigators we want to  
NOTE Confidence: 0.9817157383333333

00:41:03.217 --> 00:41:05.779 ground this in the best science possible,  
NOTE Confidence: 0.9817157383333333

00:41:05.780 --> 00:41:08.111 knowing that even that may not be good enough  
NOTE Confidence: 0.9817157383333333

00:41:08.111 --> 00:41:10.436 and and one of the challenges and we were,  
NOTE Confidence: 0.9817157383333333

00:41:10.440 --> 00:41:13.030 we have an ongoing workshop  
NOTE Confidence: 0.9817157383333333

00:41:13.030 --> 00:41:16.240 the last couple days is that.  
NOTE Confidence: 0.9817157383333333

00:41:16.240 --> 00:41:18.112 We rely particularly for  
NOTE Confidence: 0.9817157383333333

00:41:18.112 --> 00:41:20.452 preventive agents on mouse models.  
NOTE Confidence: 0.9817157383333333

00:41:20.460 --> 00:41:22.678 But there's a lot of issues  
NOTE Confidence: 0.9817157383333333

00:41:22.678 --> 00:41:23.752 with mouse models.  
NOTE Confidence: 0.9817157383333333

00:41:23.752 --> 00:41:24.468 You know?  
NOTE Confidence: 0.9817157383333333

00:41:24.470 --> 00:41:27.656 How well does it recapitulate human biology?

NOTE Confidence: 0.981715738333333  
00:41:27.656 --> 00:41:30.092 How much can we rely on that?  
NOTE Confidence: 0.981715738333333  
00:41:30.100 --> 00:41:31.468 Because what happens,  
NOTE Confidence: 0.981715738333333  
00:41:31.468 --> 00:41:32.380 of course,  
NOTE Confidence: 0.986137464  
00:41:32.380 --> 00:41:35.172 is then we go to, you know,  
NOTE Confidence: 0.986137464  
00:41:35.172 --> 00:41:37.398 human trials based on those results.  
NOTE Confidence: 0.986137464  
00:41:37.400 --> 00:41:39.175 Even the phase one phase  
NOTE Confidence: 0.986137464  
00:41:39.175 --> 00:41:40.595 two trials are expensive.  
NOTE Confidence: 0.986137464  
00:41:40.600 --> 00:41:42.630 They take a long time and and  
NOTE Confidence: 0.986137464  
00:41:42.630 --> 00:41:44.720 don't have an efficacy readout.  
NOTE Confidence: 0.986137464  
00:41:44.720 --> 00:41:46.918 So let's say the toxicity is OK.  
NOTE Confidence: 0.986137464  
00:41:46.920 --> 00:41:48.943 Then you go into a five or  
NOTE Confidence: 0.986137464  
00:41:48.943 --> 00:41:50.709 seven or ten year trial.  
NOTE Confidence: 0.986137464  
00:41:50.710 --> 00:41:53.540 And only at the end there do you figure out,  
NOTE Confidence: 0.986137464  
00:41:53.540 --> 00:41:55.058 Oh my God, this doesn't work.  
NOTE Confidence: 0.986137464  
00:41:55.060 --> 00:41:58.114 We've just spent \$100 million for something  
NOTE Confidence: 0.986137464

00:41:58.114 --> 00:41:59.596 that's not going to help anybody.  
NOTE Confidence: 0.986137464

00:41:59.600 --> 00:42:01.058 So it really is a challenge  
NOTE Confidence: 0.986137464

00:42:01.058 --> 00:42:02.868 and I don't have a good answer.  
NOTE Confidence: 0.986137464

00:42:02.870 --> 00:42:05.320 I would say that one of the.  
NOTE Confidence: 0.986137464

00:42:05.320 --> 00:42:07.180 Ways forward is we really  
NOTE Confidence: 0.986137464

00:42:07.180 --> 00:42:09.040 have to think hard about.  
NOTE Confidence: 0.986137464

00:42:09.040 --> 00:42:11.392 Surrogate endpoints for cancer  
NOTE Confidence: 0.986137464

00:42:11.392 --> 00:42:13.447 risk or cancer mortality.  
NOTE Confidence: 0.986137464

00:42:13.447 --> 00:42:15.403 So screening trials are  
NOTE Confidence: 0.986137464

00:42:15.403 --> 00:42:16.870 particularly challenging because  
NOTE Confidence: 0.986137464

00:42:16.941 --> 00:42:19.034 right now the only thing that we,  
NOTE Confidence: 0.986137464

00:42:19.040 --> 00:42:21.176 I think everybody can completely agree  
NOTE Confidence: 0.986137464

00:42:21.176 --> 00:42:24.378 upon is if it reduces cancer mortality.  
NOTE Confidence: 0.986137464

00:42:24.380 --> 00:42:25.376 It works,  
NOTE Confidence: 0.986137464

00:42:25.376 --> 00:42:27.368 but stage shift doesn't  
NOTE Confidence: 0.986137464

00:42:27.368 --> 00:42:28.364 necessarily translate,

NOTE Confidence: 0.986137464

00:42:28.370 --> 00:42:31.490 at least right now into benefit,

NOTE Confidence: 0.986137464

00:42:31.490 --> 00:42:33.882 and you can see the UK ovarian cancer

NOTE Confidence: 0.986137464

00:42:33.882 --> 00:42:35.778 screening trial is an example of that.

NOTE Confidence: 0.986137464

00:42:35.780 --> 00:42:37.848 Although I I believe.

NOTE Confidence: 0.986137464

00:42:37.848 --> 00:42:39.916 Eventually stage shift should

NOTE Confidence: 0.986137464

00:42:39.916 --> 00:42:42.440 translate into mortality benefit,

NOTE Confidence: 0.986137464

00:42:42.440 --> 00:42:44.516 but until we've shown you know,

NOTE Confidence: 0.986137464

00:42:44.520 --> 00:42:47.220 until that becomes a reliable.

NOTE Confidence: 0.986137464

00:42:47.220 --> 00:42:48.786 Sarah did endpoint,

NOTE Confidence: 0.986137464

00:42:48.786 --> 00:42:49.830 it doesn't.

NOTE Confidence: 0.986137464

00:42:49.830 --> 00:42:51.795 It's hard to then recommend

NOTE Confidence: 0.986137464

00:42:51.795 --> 00:42:53.367 something for general use,

NOTE Confidence: 0.986137464

00:42:53.370 --> 00:42:55.306 so are you know one of our challenges,

NOTE Confidence: 0.986137464

00:42:55.310 --> 00:42:57.710 whether it's and I've been

NOTE Confidence: 0.986137464

00:42:57.710 --> 00:42:59.630 challenging the nutritional science

NOTE Confidence: 0.986137464

00:42:59.630 --> 00:43:01.850 group within our that we can't  
NOTE Confidence: 0.986137464

00:43:01.850 --> 00:43:04.150 go into this black box of like.  
NOTE Confidence: 0.986137464

00:43:04.150 --> 00:43:05.905 Eat this we you know we can get people  
NOTE Confidence: 0.986137464

00:43:05.905 --> 00:43:07.517 to do this and then we're going to  
NOTE Confidence: 0.986137464

00:43:07.517 --> 00:43:09.678 go into a clinical trial to show you know,  
NOTE Confidence: 0.986137464

00:43:09.680 --> 00:43:10.932 reduction of cancer incidence,  
NOTE Confidence: 0.986137464

00:43:10.932 --> 00:43:12.810 which will take years and years  
NOTE Confidence: 0.986137464

00:43:12.865 --> 00:43:14.179 and years and years to do.  
NOTE Confidence: 0.986137464

00:43:14.180 --> 00:43:16.000 We need intermediate endpoints  
NOTE Confidence: 0.986137464

00:43:16.000 --> 00:43:19.559 that we can rely on that at least.  
NOTE Confidence: 0.986137464

00:43:19.560 --> 00:43:21.240 Push us in the right direction,  
NOTE Confidence: 0.986137464

00:43:21.240 --> 00:43:21.570 right?  
NOTE Confidence: 0.986137464

00:43:21.570 --> 00:43:24.250 The screen out the you know some of  
NOTE Confidence: 0.986137464

00:43:24.250 --> 00:43:26.700 the things that aren't going to work.  
NOTE Confidence: 0.986137464

00:43:26.700 --> 00:43:29.066 I do think that we have because of the  
NOTE Confidence: 0.986137464

00:43:29.066 --> 00:43:31.320 time and the expense we're going to



NOTE Confidence: 0.986137464

00:43:31.384 --> 00:43:33.960 have to be more specific than sensitive.

NOTE Confidence: 0.986137464

00:43:33.960 --> 00:43:35.640 We can't chase after everything,

NOTE Confidence: 0.986137464

00:43:35.640 --> 00:43:38.160 so we have to place a sort of higher

NOTE Confidence: 0.986137464

00:43:38.160 --> 00:43:40.324 bar in this development process

NOTE Confidence: 0.986137464

00:43:40.324 --> 00:43:42.679 and and recognizing that we're

NOTE Confidence: 0.986137464

00:43:42.679 --> 00:43:45.207 going to miss some opportunities.

NOTE Confidence: 0.986137464

00:43:45.210 --> 00:43:47.688 But the the opportunity costs of

NOTE Confidence: 0.986137464

00:43:47.688 --> 00:43:50.502 chasing after our tail are really

NOTE Confidence: 0.986137464

00:43:50.502 --> 00:43:52.658 significant and and problematic.

NOTE Confidence: 0.986137464

00:43:52.660 --> 00:43:54.520 So there is no good solution.

NOTE Confidence: 0.986137464

00:43:54.520 --> 00:43:57.464 If you have one, please tell me because.

NOTE Confidence: 0.986137464

00:43:57.470 --> 00:43:59.666 You know, we talk about this all the time.

NOTE Confidence: 0.986137464

00:43:59.670 --> 00:44:00.612 It's just hard.

NOTE Confidence: 0.986137464

00:44:00.612 --> 00:44:02.496 It's hard to do prevention and

NOTE Confidence: 0.986137464

00:44:02.496 --> 00:44:04.630 yet everybody knows I mean.

NOTE Confidence: 0.986137464

00:44:04.630 --> 00:44:07.064 Even the most \*\*\*\*\* oncologists  
NOTE Confidence: 0.986137464

00:44:07.064 --> 00:44:09.520 would tell you no.  
NOTE Confidence: 0.986137464

00:44:09.520 --> 00:44:10.292 You know,  
NOTE Confidence: 0.986137464

00:44:10.292 --> 00:44:12.994 prevention is our first line of defense,  
NOTE Confidence: 0.986137464

00:44:13.000 --> 00:44:14.736 and if you know and I always  
NOTE Confidence: 0.986137464

00:44:14.736 --> 00:44:16.350 say this to my audiences,  
NOTE Confidence: 0.986137464

00:44:16.350 --> 00:44:18.597 they walk down the street after Kovid  
NOTE Confidence: 0.986137464

00:44:18.597 --> 00:44:20.855 when it's safe and ask the first  
NOTE Confidence: 0.986137464

00:44:20.855 --> 00:44:23.020 hundred people you walk into and say,  
NOTE Confidence: 0.986137464

00:44:23.020 --> 00:44:25.325 would you like your cancer  
NOTE Confidence: 0.986137464

00:44:25.325 --> 00:44:26.708 prevented or treated?  
NOTE Confidence: 0.986137464

00:44:26.710 --> 00:44:27.328 You know,  
NOTE Confidence: 0.986137464

00:44:27.328 --> 00:44:29.491 I'll take that bet with odds that  
NOTE Confidence: 0.986137464

00:44:29.491 --> 00:44:31.634 every one of them is going to say.  
NOTE Confidence: 0.98612561

00:44:31.640 --> 00:44:34.616 Of course, I want my cancer prevented so.  
NOTE Confidence: 0.98612561

00:44:34.620 --> 00:44:36.738 We all know it's important we

NOTE Confidence: 0.98612561

00:44:36.738 --> 00:44:38.586 all want it to go forward,

NOTE Confidence: 0.98612561

00:44:38.590 --> 00:44:40.368 but there are some real challenges to

NOTE Confidence: 0.98612561

00:44:40.368 --> 00:44:42.454 it and you know, as I mentioned before,

NOTE Confidence: 0.98612561

00:44:42.454 --> 00:44:44.432 the other challenge, of course,

NOTE Confidence: 0.98612561

00:44:44.432 --> 00:44:48.404 is very low tolerance for toxicity if

NOTE Confidence: 0.98612561

00:44:48.404 --> 00:44:50.228 you're primarily dealing with average risk.

NOTE Confidence: 0.98612561

00:44:50.230 --> 00:44:51.748 People who are on that day,

NOTE Confidence: 0.98612561

00:44:51.750 --> 00:44:53.282 most of them healthy.

NOTE Confidence: 0.98612561

00:44:53.282 --> 00:44:54.522 You can't. You know,

NOTE Confidence: 0.98612561

00:44:54.522 --> 00:44:56.410 you just can't do bad things to them,

NOTE Confidence: 0.98612561

00:44:56.410 --> 00:44:58.954 understandably so you know the the

NOTE Confidence: 0.98612561

00:44:58.954 --> 00:45:01.890 cervix world is sort of the outlier.

NOTE Confidence: 0.98612561

00:45:01.890 --> 00:45:04.402 In a way, it's it was the low

NOTE Confidence: 0.98612561

00:45:04.402 --> 00:45:06.149 hanging hanging fruit you have.

NOTE Confidence: 0.98612561

00:45:06.150 --> 00:45:08.325 You know you have relatively

NOTE Confidence: 0.98612561

00:45:08.325 --> 00:45:09.630 easily accessible tissue.  
NOTE Confidence: 0.98612561

00:45:09.630 --> 00:45:12.750 You have a single causal agent.  
NOTE Confidence: 0.98612561

00:45:12.750 --> 00:45:15.585 And you it takes 20 to 25 years ago  
NOTE Confidence: 0.98612561

00:45:15.585 --> 00:45:18.429 from infection on average to cancer.  
NOTE Confidence: 0.98612561

00:45:18.430 --> 00:45:19.750 I mean that you know,  
NOTE Confidence: 0.98612561

00:45:19.750 --> 00:45:21.630 if we if I want to be honest about them,  
NOTE Confidence: 0.98612561

00:45:21.630 --> 00:45:23.807 that one was supposed to be successful  
NOTE Confidence: 0.98612561

00:45:23.807 --> 00:45:26.488 and and the other ones are much harder.  
NOTE Confidence: 0.98612561

00:45:26.490 --> 00:45:26.980 So.  
NOTE Confidence: 0.976699213333333

00:45:30.220 --> 00:45:32.110 Thank you, no, I don't have a clear answer.  
NOTE Confidence: 0.976699213333333

00:45:32.110 --> 00:45:33.502 That's why I asked,  
NOTE Confidence: 0.976699213333333

00:45:33.502 --> 00:45:35.180 you know, I, I believe me.  
NOTE Confidence: 0.976699213333333

00:45:35.180 --> 00:45:36.516 If I had an answer I would share  
NOTE Confidence: 0.976699213333333

00:45:36.516 --> 00:45:37.980 it with you, but I I don't.  
NOTE Confidence: 0.976699213333333

00:45:37.980 --> 00:45:38.900 We struggle with this.  
NOTE Confidence: 0.976699213333333

00:45:38.900 --> 00:45:40.820 I think the best thing we can do is brown.

NOTE Confidence: 0.976699213333333  
00:45:40.820 --> 00:45:42.556 Listen better science, right?  
NOTE Confidence: 0.976699213333333  
00:45:42.556 --> 00:45:44.292 Understanding the molecular mean  
NOTE Confidence: 0.976699213333333  
00:45:44.292 --> 00:45:46.712 people wanted the magic bullet, right?  
NOTE Confidence: 0.976699213333333  
00:45:46.712 --> 00:45:48.800 If you eat this.  
NOTE Confidence: 0.976699213333333  
00:45:48.800 --> 00:45:49.899 This is going to work and I'm  
NOTE Confidence: 0.976699213333333  
00:45:49.899 --> 00:45:50.968 not saying that that won't work,  
NOTE Confidence: 0.976699213333333  
00:45:50.970 --> 00:45:52.916 but let's look at nutrition for a  
NOTE Confidence: 0.976699213333333  
00:45:52.916 --> 00:45:55.536 second here and I apologize to any  
NOTE Confidence: 0.976699213333333  
00:45:55.536 --> 00:45:57.264 nutritional epidemiologists or scientists.  
NOTE Confidence: 0.983406416  
00:45:59.530 --> 00:46:01.265 But the challenges of going  
NOTE Confidence: 0.983406416  
00:46:01.265 --> 00:46:03.000 from eating something into a  
NOTE Confidence: 0.983406416  
00:46:03.070 --> 00:46:05.120 clinical trial or profound right?  
NOTE Confidence: 0.983406416  
00:46:05.120 --> 00:46:07.020 So likely it's going to  
NOTE Confidence: 0.983406416  
00:46:07.020 --> 00:46:08.817 be a low penetrance thing.  
NOTE Confidence: 0.983406416  
00:46:08.817 --> 00:46:11.033 Even if you can measure it and the  
NOTE Confidence: 0.983406416

00:46:11.033 --> 00:46:13.276 the ability to show it both at the  
NOTE Confidence: 0.983406416

00:46:13.276 --> 00:46:15.666 lab level and if you go through the  
NOTE Confidence: 0.983406416

00:46:15.666 --> 00:46:17.969 hill criteria and say we've got to get  
NOTE Confidence: 0.983406416

00:46:17.969 --> 00:46:19.810 to a certain number of those before,  
NOTE Confidence: 0.983406416

00:46:19.810 --> 00:46:21.258 we're going to go into a clinical trial.  
NOTE Confidence: 0.983406416

00:46:21.260 --> 00:46:22.930 And then in most cases,  
NOTE Confidence: 0.983406416

00:46:22.930 --> 00:46:25.336 you're really talking about a low  
NOTE Confidence: 0.983406416

00:46:25.336 --> 00:46:26.940 penetrance or weak penetrance  
NOTE Confidence: 0.983406416

00:46:27.004 --> 00:46:28.464 of or weak effect, right?  
NOTE Confidence: 0.983406416

00:46:28.464 --> 00:46:30.976 So then you're talking about a huge trial.  
NOTE Confidence: 0.983406416

00:46:30.980 --> 00:46:33.740 You know, you're really rolling the dice on,  
NOTE Confidence: 0.983406416

00:46:33.740 --> 00:46:36.470 you know, 50 to \$100 million trial  
NOTE Confidence: 0.983406416

00:46:36.470 --> 00:46:37.910 to get the kinds of endpoints.  
NOTE Confidence: 0.983406416

00:46:37.910 --> 00:46:39.710 And that's and we failed.  
NOTE Confidence: 0.983406416

00:46:39.710 --> 00:46:41.594 We've had a number of failures  
NOTE Confidence: 0.983406416

00:46:41.594 --> 00:46:42.850 and and you know,

NOTE Confidence: 0.983406416

00:46:42.850 --> 00:46:45.111 the other one that people have been

NOTE Confidence: 0.983406416

00:46:45.111 --> 00:46:47.487 chasing after his metformin and were or.

NOTE Confidence: 0.983406416

00:46:47.490 --> 00:46:49.850 And that's really turning out to not not

NOTE Confidence: 0.983406416

00:46:49.850 --> 00:46:51.869 be relevant in the prevention space,

NOTE Confidence: 0.983406416

00:46:51.870 --> 00:46:53.590 or it's so it's such a weak effect

NOTE Confidence: 0.983406416

00:46:53.590 --> 00:46:55.175 that we can't measure it, right?

NOTE Confidence: 0.983406416

00:46:55.175 --> 00:46:56.300 So that's the other problem.

NOTE Confidence: 0.983406416

00:46:56.300 --> 00:46:58.790 It might have a modifying effect,

NOTE Confidence: 0.983406416

00:46:58.790 --> 00:46:59.573 but we can't.

NOTE Confidence: 0.983406416

00:46:59.573 --> 00:47:00.878 Measure it and therefore we

NOTE Confidence: 0.983406416

00:47:00.878 --> 00:47:01.590 can't recommend it.

NOTE Confidence: 0.983406416

00:47:01.590 --> 00:47:03.696 And more importantly EU S Preventive

NOTE Confidence: 0.983406416

00:47:03.696 --> 00:47:05.899 Services Task Force can't recommend it.

NOTE Confidence: 0.983406416

00:47:05.900 --> 00:47:08.858 So and and you know that.

NOTE Confidence: 0.983406416

00:47:08.860 --> 00:47:10.615 So I mean part of it is we want

NOTE Confidence: 0.983406416

00:47:10.615 --> 00:47:11.674 something that's so cheap that  
NOTE Confidence: 0.983406416

00:47:11.674 --> 00:47:13.380 you can get it off the shelf or.  
NOTE Confidence: 0.983406416

00:47:13.380 --> 00:47:14.598 Or you can go to the grocery  
NOTE Confidence: 0.983406416

00:47:14.598 --> 00:47:15.290 store and eat it.  
NOTE Confidence: 0.980951666470588

00:47:17.310 --> 00:47:19.446 That has not panned out and and and  
NOTE Confidence: 0.980951666470588

00:47:19.446 --> 00:47:21.767 there can be a lot of reasons for that.  
NOTE Confidence: 0.980951666470588

00:47:21.770 --> 00:47:23.690 And it doesn't mean that it doesn't work,  
NOTE Confidence: 0.980951666470588

00:47:23.690 --> 00:47:26.132 but it's hard to show it, and it's hard  
NOTE Confidence: 0.980951666470588

00:47:26.132 --> 00:47:28.890 to invest that money in showing it.  
NOTE Confidence: 0.980951666470588

00:47:28.890 --> 00:47:31.530 So follow up question thinking about  
NOTE Confidence: 0.980951666470588

00:47:31.530 --> 00:47:33.807 the challenge of small effect sizes.  
NOTE Confidence: 0.980951666470588

00:47:33.807 --> 00:47:36.502 Or it could be a large sample size  
NOTE Confidence: 0.980951666470588

00:47:36.502 --> 00:47:38.848 of getting needed and create expense.  
NOTE Confidence: 0.980951666470588

00:47:38.850 --> 00:47:40.535 Just thinking about the experience  
NOTE Confidence: 0.980951666470588

00:47:40.535 --> 00:47:43.829 during COVID, but the UK.  
NOTE Confidence: 0.980951666470588

00:47:43.830 --> 00:47:45.588 Some kind of ran circles around



NOTE Confidence: 0.980951666470588

00:47:45.588 --> 00:47:48.406 us as a nation with regard to the

NOTE Confidence: 0.980951666470588

00:47:48.406 --> 00:47:50.381 facility with conducting these large

NOTE Confidence: 0.980951666470588

00:47:50.381 --> 00:47:52.846 trials so that they have the recovery

NOTE Confidence: 0.980951666470588

00:47:52.846 --> 00:47:54.774 trial which actually enrolled 10%

NOTE Confidence: 0.980951666470588

00:47:54.774 --> 00:47:57.282 of all patients across the country

NOTE Confidence: 0.980951666470588

00:47:57.282 --> 00:48:00.031 who are hospitalized in the UK were

NOTE Confidence: 0.980951666470588

00:48:00.031 --> 00:48:01.960 involved in this large sent.

NOTE Confidence: 0.980951666470588

00:48:01.960 --> 00:48:03.680 You know, it's large,

NOTE Confidence: 0.980951666470588

00:48:03.680 --> 00:48:05.400 centrally coordinated trial randomization.

NOTE Confidence: 0.980951666470588

00:48:05.400 --> 00:48:08.574 It is generated a great deal of prompt.

NOTE Confidence: 0.980951666470588

00:48:08.574 --> 00:48:11.436 Really informative information is kind of.

NOTE Confidence: 0.980951666470588

00:48:11.440 --> 00:48:12.420 People have subsequently been

NOTE Confidence: 0.980951666470588

00:48:12.420 --> 00:48:13.890 saying or what can we learn?

NOTE Confidence: 0.980951666470588

00:48:13.890 --> 00:48:16.008 Post code it's not covered child.

NOTE Confidence: 0.980951666470588

00:48:16.010 --> 00:48:17.314 The more centralized approach,

NOTE Confidence: 0.980951666470588

00:48:17.314 --> 00:48:19.674 so you know building and and you  
NOTE Confidence: 0.980951666470588

00:48:19.674 --> 00:48:21.762 mentioned is that the screening and  
NOTE Confidence: 0.980951666470588

00:48:21.762 --> 00:48:23.504 early detection network and what  
NOTE Confidence: 0.980951666470588

00:48:23.504 --> 00:48:25.104 are the strategies for creating  
NOTE Confidence: 0.980951666470588

00:48:25.104 --> 00:48:26.638 this large amount of people.  
NOTE Confidence: 0.980951666470588

00:48:26.638 --> 00:48:28.342 That and other things out there  
NOTE Confidence: 0.980951666470588

00:48:28.342 --> 00:48:30.197 for large systems where we could  
NOTE Confidence: 0.980951666470588

00:48:30.197 --> 00:48:32.033 be running multiple trials at the  
NOTE Confidence: 0.980951666470588

00:48:32.094 --> 00:48:34.467 same time and have like a single  
NOTE Confidence: 0.980951666470588

00:48:34.467 --> 00:48:36.098 infrastructure that's really, really big.  
NOTE Confidence: 0.980951666470588

00:48:36.098 --> 00:48:36.706 Well we've,  
NOTE Confidence: 0.980951666470588

00:48:36.706 --> 00:48:39.222 I mean to some extent we've done that  
NOTE Confidence: 0.980951666470588

00:48:39.222 --> 00:48:41.170 with enkor, but that tends to be,  
NOTE Confidence: 0.980951666470588

00:48:41.170 --> 00:48:41.794 you know,  
NOTE Confidence: 0.980951666470588

00:48:41.794 --> 00:48:43.666 a cancer centers and you know  
NOTE Confidence: 0.980951666470588

00:48:43.666 --> 00:48:44.290 oncology services.

NOTE Confidence: 0.980951666470588  
00:48:44.290 --> 00:48:44.670 I mean,  
NOTE Confidence: 0.980951666470588  
00:48:44.670 --> 00:48:46.000 so some of the things that we're  
NOTE Confidence: 0.980951666470588  
00:48:46.000 --> 00:48:47.370 doing like Team Nest where you  
NOTE Confidence: 0.980951666470588  
00:48:47.370 --> 00:48:48.505 have to have radiology anyway,  
NOTE Confidence: 0.980951666470588  
00:48:48.510 --> 00:48:52.390 that that kind of works in that network, but.  
NOTE Confidence: 0.980951666470588  
00:48:52.390 --> 00:48:54.436 We have other networks that are  
NOTE Confidence: 0.980951666470588  
00:48:54.436 --> 00:48:56.740 in place that could be leveraged.  
NOTE Confidence: 0.980951666470588  
00:48:56.740 --> 00:48:58.455 It's a matter of coordinating  
NOTE Confidence: 0.980951666470588  
00:48:58.455 --> 00:49:00.170 them and being willing now.  
NOTE Confidence: 0.980951666470588  
00:49:00.170 --> 00:49:01.730 Some people would say Kaiser,  
NOTE Confidence: 0.980951666470588  
00:49:01.730 --> 00:49:03.950 though my experience and I've worked  
NOTE Confidence: 0.980951666470588  
00:49:03.950 --> 00:49:05.430 with Kaiser Permanente Northern  
NOTE Confidence: 0.980951666470588  
00:49:05.488 --> 00:49:07.093 California for 15 plus years.  
NOTE Confidence: 0.980951666470588  
00:49:07.093 --> 00:49:08.498 They're not really set up  
NOTE Confidence: 0.980951666470588  
00:49:08.498 --> 00:49:10.110 to do clinical trials,  
NOTE Confidence: 0.980951666470588

00:49:10.110 --> 00:49:14.082 but one could imagine some combination  
NOTE Confidence: 0.980951666470588

00:49:14.082 --> 00:49:16.662 of FQHC's and other providers,  
NOTE Confidence: 0.980951666470588

00:49:16.662 --> 00:49:19.530 but starting to link them now.  
NOTE Confidence: 0.980951666470588

00:49:19.530 --> 00:49:20.966 Between you and me,  
NOTE Confidence: 0.980951666470588

00:49:20.966 --> 00:49:24.668 and I'll deny this if if anybody quotes me.  
NOTE Confidence: 0.980951666470588

00:49:24.670 --> 00:49:25.690 If you start doing that,  
NOTE Confidence: 0.980951666470588

00:49:25.690 --> 00:49:28.455 you start building a a public health.  
NOTE Confidence: 0.980951666470588

00:49:28.460 --> 00:49:30.512 Infrastructure which I think  
NOTE Confidence: 0.980951666470588

00:49:30.512 --> 00:49:33.077 COVID revealed we didn't have  
NOTE Confidence: 0.980951666470588

00:49:33.077 --> 00:49:35.438 in the United States so.  
NOTE Confidence: 0.980951666470588

00:49:35.440 --> 00:49:37.429 It is easier to do some of the stuff  
NOTE Confidence: 0.980951666470588

00:49:37.429 --> 00:49:39.697 in Europe because they have organized  
NOTE Confidence: 0.980951666470588

00:49:39.697 --> 00:49:42.030 programs they have organized health care.  
NOTE Confidence: 0.980951666470588

00:49:42.030 --> 00:49:44.034 They have organized screening.  
NOTE Confidence: 0.980951666470588

00:49:44.034 --> 00:49:45.537 We do not.  
NOTE Confidence: 0.980951666470588

00:49:45.540 --> 00:49:47.409 But I think we can start pushing

NOTE Confidence: 0.980951666470588

00:49:47.409 --> 00:49:49.410 along those ways and it would be hope.

NOTE Confidence: 0.980951666470588

00:49:49.410 --> 00:49:50.654 My hope you know,

NOTE Confidence: 0.980951666470588

00:49:50.654 --> 00:49:52.209 probably long after I'm gone,

NOTE Confidence: 0.980951666470588

00:49:52.210 --> 00:49:54.340 but that by doing these kinds

NOTE Confidence: 0.980951666470588

00:49:54.340 --> 00:49:56.225 of activities where he showed

NOTE Confidence: 0.980951666470588

00:49:56.225 --> 00:49:58.170 networks can work together that

NOTE Confidence: 0.980951666470588

00:49:58.170 --> 00:50:00.830 you start to build the an informal

NOTE Confidence: 0.980951666470588

00:50:00.830 --> 00:50:03.820 organized screening program we know.

NOTE Confidence: 0.980951666470588

00:50:03.820 --> 00:50:05.932 There's a lot of data now to suggest

NOTE Confidence: 0.980951666470588

00:50:05.932 --> 00:50:07.192 that organized screening really

NOTE Confidence: 0.980951666470588

00:50:07.192 --> 00:50:09.214 makes a difference in terms of

NOTE Confidence: 0.980951666470588

00:50:09.214 --> 00:50:10.719 the effectiveness of the program,

NOTE Confidence: 0.980951666470588

00:50:10.720 --> 00:50:13.132 and I've had the privilege and

NOTE Confidence: 0.980951666470588

00:50:13.132 --> 00:50:14.740 just reviewing another paper

NOTE Confidence: 0.982569481578948

00:50:14.811 --> 00:50:16.857 from them of working with Norway

NOTE Confidence: 0.982569481578948

00:50:16.857 --> 00:50:19.044 for the last eight or nine years.  
NOTE Confidence: 0.982569481578948

00:50:19.044 --> 00:50:21.078 And that's been a real pleasure to  
NOTE Confidence: 0.982569481578948

00:50:21.078 --> 00:50:23.508 like what they can do to you know,  
NOTE Confidence: 0.982569481578948

00:50:23.508 --> 00:50:26.124 and how they can make switches,  
NOTE Confidence: 0.982569481578948

00:50:26.130 --> 00:50:28.846 how they can really get high coverage  
NOTE Confidence: 0.982569481578948

00:50:28.846 --> 00:50:31.236 and and identify people for whom  
NOTE Confidence: 0.982569481578948

00:50:31.236 --> 00:50:33.534 the system is not working right.  
NOTE Confidence: 0.982569481578948

00:50:33.540 --> 00:50:35.759 And and come up with alternative strategies.  
NOTE Confidence: 0.982569481578948

00:50:35.760 --> 00:50:38.336 So we know that screening like even  
NOTE Confidence: 0.982569481578948

00:50:38.336 --> 00:50:41.096 for cervix we know that 2010 to 20%  
NOTE Confidence: 0.982569481578948

00:50:41.100 --> 00:50:42.774 of people don't get their routine  
NOTE Confidence: 0.982569481578948

00:50:42.774 --> 00:50:44.740 screening or don't get screened at all.  
NOTE Confidence: 0.982569481578948

00:50:44.740 --> 00:50:46.762 And that's where half of the  
NOTE Confidence: 0.982569481578948

00:50:46.762 --> 00:50:47.773 cervical cancers occur.  
NOTE Confidence: 0.982569481578948

00:50:47.780 --> 00:50:50.307 So if we can bridge that gap,  
NOTE Confidence: 0.982569481578948

00:50:50.310 --> 00:50:52.034 then we're making progress.

NOTE Confidence: 0.982569481578948  
00:50:52.034 --> 00:50:54.770 So I mean, that's not the typical innovation  
NOTE Confidence: 0.982569481578948  
00:50:54.770 --> 00:50:56.820 that the division is focused on the past,  
NOTE Confidence: 0.982569481578948  
00:50:56.820 --> 00:50:58.240 but I'm a population scientist  
NOTE Confidence: 0.982569481578948  
00:50:58.240 --> 00:51:00.300 who's worked on some of this stuff,  
NOTE Confidence: 0.982569481578948  
00:51:00.300 --> 00:51:01.302 so that's why.  
NOTE Confidence: 0.982569481578948  
00:51:01.302 --> 00:51:03.640 I've sort of been thinking about my  
NOTE Confidence: 0.982569481578948  
00:51:03.710 --> 00:51:05.915 own definition of precision cancer  
NOTE Confidence: 0.982569481578948  
00:51:05.915 --> 00:51:08.467 prevention and trying to expand that  
NOTE Confidence: 0.982569481578948  
00:51:08.467 --> 00:51:11.768 to say it isn't just what we do like  
NOTE Confidence: 0.982569481578948  
00:51:11.768 --> 00:51:13.199 targeting carcinogenic pathways.  
NOTE Confidence: 0.982569481578948  
00:51:13.200 --> 00:51:16.290 It's also how we do it and where we do it,  
NOTE Confidence: 0.982569481578948  
00:51:16.290 --> 00:51:18.386 and for whom do we do it so?  
NOTE Confidence: 0.970965175  
00:51:21.580 --> 00:51:23.800 That's great baby. Let me pause, I do.  
NOTE Confidence: 0.970965175  
00:51:23.800 --> 00:51:25.690 I don't wanna turn this into a  
NOTE Confidence: 0.970965175  
00:51:25.690 --> 00:51:27.400 fireside chat would be nice I  
NOTE Confidence: 0.970965175

00:51:27.400 --> 00:51:29.200 wanna try I like fireside chats.  
NOTE Confidence: 0.970965175

00:51:29.200 --> 00:51:31.180 I'm happy to happen even separately.  
NOTE Confidence: 0.970965175

00:51:31.180 --> 00:51:35.410 I can come back. Come.  
NOTE Confidence: 0.970965175

00:51:35.410 --> 00:51:36.586 Well, I had one other question.  
NOTE Confidence: 0.970965175

00:51:36.590 --> 00:51:38.180 No other questions from the groups.  
NOTE Confidence: 0.970965175

00:51:38.180 --> 00:51:40.826 One other quick question is on.  
NOTE Confidence: 0.970965175

00:51:40.830 --> 00:51:43.080 Mr. President.  
NOTE Confidence: 0.970965175

00:51:43.080 --> 00:51:45.040 What are you thoughts about some form  
NOTE Confidence: 0.970965175

00:51:45.040 --> 00:51:47.360 of a whole of government approach  
NOTE Confidence: 0.970965175

00:51:47.360 --> 00:51:49.730 intersectoral approach were talking about?  
NOTE Confidence: 0.970965175

00:51:49.730 --> 00:51:53.228 You know things like you know.  
NOTE Confidence: 0.970965175

00:51:53.230 --> 00:51:53.920 Is it critical?  
NOTE Confidence: 0.970965175

00:51:53.920 --> 00:51:55.790 So I wanted to find out which Ave,  
NOTE Confidence: 0.970965175

00:51:55.790 --> 00:51:57.470 but you know we subsidized corn.  
NOTE Confidence: 0.970965175

00:51:57.470 --> 00:51:58.950 So we our government on the one hand,  
NOTE Confidence: 0.970965175

00:51:58.950 --> 00:52:00.540 is doing things that actually



NOTE Confidence: 0.970965175  
00:52:00.540 --> 00:52:02.130 increasing the obesity our country.  
NOTE Confidence: 0.970965175  
00:52:02.130 --> 00:52:04.870 So just thinking are there  
NOTE Confidence: 0.970965175  
00:52:04.870 --> 00:52:06.607 avenues towards UM?  
NOTE Confidence: 0.970965175  
00:52:06.607 --> 00:52:08.518 Collaborating across sectors  
NOTE Confidence: 0.970965175  
00:52:08.518 --> 00:52:10.429 within the government,  
NOTE Confidence: 0.970965175  
00:52:10.430 --> 00:52:11.636 to, you know,  
NOTE Confidence: 0.970965175  
00:52:11.636 --> 00:52:13.244 think about changes at  
NOTE Confidence: 0.970965175  
00:52:13.244 --> 00:52:15.101 the policy level to come.  
NOTE Confidence: 0.970965175  
00:52:15.101 --> 00:52:19.326 I'm gonna change the diet or or you know,  
NOTE Confidence: 0.970965175  
00:52:19.326 --> 00:52:21.240 kind of incorporate.  
NOTE Confidence: 0.970965175  
00:52:21.240 --> 00:52:23.221 So we to evidence based policy change  
NOTE Confidence: 0.970965175  
00:52:23.221 --> 00:52:25.040 under some kind of demonstration.  
NOTE Confidence: 0.970965175  
00:52:25.040 --> 00:52:27.658 Part projects that could relate to things,  
NOTE Confidence: 0.970965175  
00:52:27.660 --> 00:52:29.610 which is the change in diet?  
NOTE Confidence: 0.970965175  
00:52:29.610 --> 00:52:31.155 You know population efforts to  
NOTE Confidence: 0.970965175

00:52:31.155 --> 00:52:33.374 to address obesity or in see how  
NOTE Confidence: 0.970965175

00:52:33.374 --> 00:52:35.206 that might affect cancer, right?  
NOTE Confidence: 0.970965175

00:52:35.206 --> 00:52:35.802 Well,  
NOTE Confidence: 0.970965175

00:52:35.802 --> 00:52:39.378 that's an interesting question of course.  
NOTE Confidence: 0.970965175

00:52:39.380 --> 00:52:40.717 You know one of the things that  
NOTE Confidence: 0.970965175

00:52:40.717 --> 00:52:42.080 I think about is, you know,  
NOTE Confidence: 0.970965175

00:52:42.080 --> 00:52:43.910 this crossover of obesity and smoking.  
NOTE Confidence: 0.970965175

00:52:43.910 --> 00:52:44.702 I mean,  
NOTE Confidence: 0.970965175

00:52:44.702 --> 00:52:45.890 smoking suppresses diet,  
NOTE Confidence: 0.970965175

00:52:45.890 --> 00:52:48.202 so is there going to be a point  
NOTE Confidence: 0.970965175

00:52:48.202 --> 00:52:50.228 of crossover where where obesity  
NOTE Confidence: 0.970965175

00:52:50.228 --> 00:52:52.528 becomes more important than smoking?  
NOTE Confidence: 0.970965175

00:52:52.530 --> 00:52:54.780 But I'm not suggesting that anybody  
NOTE Confidence: 0.970965175

00:52:54.780 --> 00:52:57.430 should start smoking to prevent recently,  
NOTE Confidence: 0.970965175

00:52:57.430 --> 00:52:58.060 by the way.  
NOTE Confidence: 0.922078117857143

00:53:00.150 --> 00:53:03.086 If you think about the successes of public

NOTE Confidence: 0.922078117857143  
00:53:03.086 --> 00:53:05.199 health successes in the United States,  
NOTE Confidence: 0.922078117857143  
00:53:05.200 --> 00:53:06.895 they've really come.  
NOTE Confidence: 0.922078117857143  
00:53:06.895 --> 00:53:08.590 They've been driven.  
NOTE Confidence: 0.922078117857143  
00:53:08.590 --> 00:53:10.778 Sort of from the ground up, right?  
NOTE Confidence: 0.922078117857143  
00:53:10.778 --> 00:53:13.706 So if you look at smoking?  
NOTE Confidence: 0.922078117857143  
00:53:13.710 --> 00:53:16.366 You know it was lawsuits and you know,  
NOTE Confidence: 0.922078117857143  
00:53:16.370 --> 00:53:18.150 demands from the public to  
NOTE Confidence: 0.922078117857143  
00:53:18.150 --> 00:53:20.500 say this is this is, you know,  
NOTE Confidence: 0.922078117857143  
00:53:20.500 --> 00:53:21.925 we have to do something.  
NOTE Confidence: 0.922078117857143  
00:53:21.930 --> 00:53:24.482 Uh, even the you know one of the  
NOTE Confidence: 0.922078117857143  
00:53:24.482 --> 00:53:26.009 most successful public health  
NOTE Confidence: 0.922078117857143  
00:53:26.009 --> 00:53:29.240 campaigns has been HIV, right and?  
NOTE Confidence: 0.922078117857143  
00:53:29.240 --> 00:53:32.420 And and that's because.  
NOTE Confidence: 0.922078117857143  
00:53:32.420 --> 00:53:34.280 People demanded they got up on  
NOTE Confidence: 0.922078117857143  
00:53:34.280 --> 00:53:35.880 their soapbox and they said,  
NOTE Confidence: 0.922078117857143

00:53:35.880 --> 00:53:37.080 you have to do something.  
NOTE Confidence: 0.922078117857143

00:53:37.080 --> 00:53:40.200 And so I think you know one of my jobs.  
NOTE Confidence: 0.922078117857143

00:53:40.200 --> 00:53:43.154 Although you know I'm not a implementation  
NOTE Confidence: 0.922078117857143

00:53:43.154 --> 00:53:45.498 and dissemination person that's in DCCPS,  
NOTE Confidence: 0.922078117857143

00:53:45.500 --> 00:53:49.127 but I've done that work for my entire career.  
NOTE Confidence: 0.922078117857143

00:53:49.130 --> 00:53:50.992 And we can speak about the audit  
NOTE Confidence: 0.922078117857143

00:53:50.992 --> 00:53:52.461 evening leading the division of  
NOTE Confidence: 0.922078117857143

00:53:52.461 --> 00:53:53.996 cancer prevention if you want.  
NOTE Confidence: 0.922078117857143

00:53:54.000 --> 00:53:54.615 But the I.  
NOTE Confidence: 0.922078117857143

00:53:54.615 --> 00:53:56.833 I do think that we have to educate the  
NOTE Confidence: 0.922078117857143

00:53:56.833 --> 00:53:58.999 public on the possibility of prevention,  
NOTE Confidence: 0.922078117857143

00:53:59.000 --> 00:54:00.863 which is why I wrote that OP Ed to  
NOTE Confidence: 0.922078117857143

00:54:00.863 --> 00:54:02.656 say if we can do this for COVID,  
NOTE Confidence: 0.922078117857143

00:54:02.660 --> 00:54:05.348 we should be doing it for cancer prevention.  
NOTE Confidence: 0.922078117857143

00:54:05.350 --> 00:54:07.107 That it's our first line of defense.  
NOTE Confidence: 0.922078117857143

00:54:07.110 --> 00:54:08.790 Not that we're going to prevent all cancer.

NOTE Confidence: 0.922078117857143  
00:54:08.790 --> 00:54:09.354 You know.  
NOTE Confidence: 0.922078117857143  
00:54:09.354 --> 00:54:11.046 I have no illusions of that,  
NOTE Confidence: 0.922078117857143  
00:54:11.050 --> 00:54:12.346 but I think there's a lot more and  
NOTE Confidence: 0.922078117857143  
00:54:12.346 --> 00:54:13.579 you have to make the investment.  
NOTE Confidence: 0.922078117857143  
00:54:13.580 --> 00:54:16.564 We invest three times just in the government.  
NOTE Confidence: 0.922078117857143  
00:54:16.570 --> 00:54:17.975 We invest three times more  
NOTE Confidence: 0.922078117857143  
00:54:17.975 --> 00:54:19.380 into treatment than we do.  
NOTE Confidence: 0.922078117857143  
00:54:19.380 --> 00:54:20.980 Prevention, let alone pharma.  
NOTE Confidence: 0.922078117857143  
00:54:20.980 --> 00:54:22.180 I mean pharma.  
NOTE Confidence: 0.922078117857143  
00:54:22.180 --> 00:54:25.686 It's got to be 20 to one or more,  
NOTE Confidence: 0.922078117857143  
00:54:25.686 --> 00:54:29.544 so I think it's it's getting.  
NOTE Confidence: 0.922078117857143  
00:54:29.550 --> 00:54:30.762 Getting voices to say.  
NOTE Confidence: 0.922078117857143  
00:54:30.762 --> 00:54:33.169 You know we need to make these  
NOTE Confidence: 0.922078117857143  
00:54:33.169 --> 00:54:34.720 investments in prevention.  
NOTE Confidence: 0.922078117857143  
00:54:34.720 --> 00:54:37.000 We need to understand obesity.  
NOTE Confidence: 0.922078117857143

00:54:37.000 --> 00:54:40.384 We need to also have policies  
NOTE Confidence: 0.922078117857143

00:54:40.384 --> 00:54:43.052 about you know what we make  
NOTE Confidence: 0.922078117857143

00:54:43.052 --> 00:54:44.996 available for foods and and tax.  
NOTE Confidence: 0.922078117857143

00:54:45.000 --> 00:54:47.592 You know one of the most  
NOTE Confidence: 0.922078117857143

00:54:47.592 --> 00:54:49.320 effective strategies is taxation.  
NOTE Confidence: 0.922078117857143

00:54:49.320 --> 00:54:50.217 So you know,  
NOTE Confidence: 0.922078117857143

00:54:50.217 --> 00:54:52.675 I'm ten years ago I was sitting at  
NOTE Confidence: 0.922078117857143

00:54:52.675 --> 00:54:54.684 the UN meeting on ends, you know,  
NOTE Confidence: 0.922078117857143

00:54:54.684 --> 00:54:56.286 global warming CDs and you know,  
NOTE Confidence: 0.922078117857143

00:54:56.290 --> 00:54:58.742 there's a lot of talk about the  
NOTE Confidence: 0.922078117857143

00:54:58.742 --> 00:55:02.590 policy end and taxation, and you know,  
NOTE Confidence: 0.922078117857143

00:55:02.590 --> 00:55:06.344 making sugary foods less available, right?  
NOTE Confidence: 0.922078117857143

00:55:06.344 --> 00:55:08.468 If you want 'cause I think.  
NOTE Confidence: 0.922078117857143

00:55:08.470 --> 00:55:10.710 This is my opinion and I I don't  
NOTE Confidence: 0.922078117857143

00:55:10.710 --> 00:55:13.308 mean to be offensive in any way but.  
NOTE Confidence: 0.922078117857143

00:55:13.310 --> 00:55:15.590 We are hardwired to eat.

NOTE Confidence: 0.922078117857143  
00:55:15.590 --> 00:55:18.342 It is primal and I don't think we  
NOTE Confidence: 0.922078117857143  
00:55:18.342 --> 00:55:21.457 evolved to have unlimited access to food.  
NOTE Confidence: 0.922078117857143  
00:55:21.460 --> 00:55:22.476 But we do now.  
NOTE Confidence: 0.922078117857143  
00:55:22.476 --> 00:55:24.813 And so I know I have like no  
NOTE Confidence: 0.922078117857143  
00:55:24.813 --> 00:55:27.033 resistance and the fact that I'm  
NOTE Confidence: 0.922078117857143  
00:55:27.033 --> 00:55:29.626 sitting in home and I'm, you know,  
NOTE Confidence: 0.922078117857143  
00:55:29.626 --> 00:55:31.716 literally 20 feet away from  
NOTE Confidence: 0.922078117857143  
00:55:31.716 --> 00:55:33.650 my refrigerator is trouble.  
NOTE Confidence: 0.922078117857143  
00:55:33.650 --> 00:55:35.228 Like if I'm not around it,  
NOTE Confidence: 0.922078117857143  
00:55:35.230 --> 00:55:36.862 I'm much better off.  
NOTE Confidence: 0.922078117857143  
00:55:36.862 --> 00:55:38.086 I just am.  
NOTE Confidence: 0.922078117857143  
00:55:38.090 --> 00:55:40.110 But if and in fact, when I was at Einstein,  
NOTE Confidence: 0.922078117857143  
00:55:40.110 --> 00:55:41.442 I wouldn't take anything to work  
NOTE Confidence: 0.922078117857143  
00:55:41.442 --> 00:55:43.718 because I knew that, you know it just.  
NOTE Confidence: 0.922078117857143  
00:55:43.718 --> 00:55:45.842 If it's not there, I don't eat it,  
NOTE Confidence: 0.922078117857143

00:55:45.842 --> 00:55:46.574 but if it's there,  
NOTE Confidence: 0.922078117857143

00:55:46.580 --> 00:55:47.420 I will eat it.  
NOTE Confidence: 0.922078117857143

00:55:47.420 --> 00:55:48.967 I have like no resistance and I  
NOTE Confidence: 0.922078117857143

00:55:48.967 --> 00:55:50.395 don't think I'm unusual that way.  
NOTE Confidence: 0.922078117857143

00:55:50.400 --> 00:55:52.040 I think I'm fairly represented  
NOTE Confidence: 0.922078117857143

00:55:52.040 --> 00:55:53.352 despite my knowledge base,  
NOTE Confidence: 0.977730603333333

00:55:53.360 --> 00:55:56.078 right? So I think you know.  
NOTE Confidence: 0.977730603333333

00:55:56.080 --> 00:55:57.848 Our challenge is understanding  
NOTE Confidence: 0.977730603333333

00:55:57.848 --> 00:56:00.500 fundamentally what we're hardwired to do.  
NOTE Confidence: 0.977730603333333

00:56:00.500 --> 00:56:02.411 I mean, smoking is a little different  
NOTE Confidence: 0.977730603333333

00:56:02.411 --> 00:56:04.149 because it's not a survival thing,  
NOTE Confidence: 0.977730603333333

00:56:04.150 --> 00:56:05.354 but once you're addicted,  
NOTE Confidence: 0.977730603333333

00:56:05.354 --> 00:56:06.344 you're addicted, right?  
NOTE Confidence: 0.977730603333333

00:56:06.344 --> 00:56:09.242 Your wiring, you know, you've you've done.  
NOTE Confidence: 0.977730603333333

00:56:09.242 --> 00:56:10.150 You've played.  
NOTE Confidence: 0.977730603333333

00:56:10.150 --> 00:56:11.262 You know, it's haywire.



NOTE Confidence: 0.9777306033333333  
00:56:11.262 --> 00:56:12.930 You know you've messed with your,  
NOTE Confidence: 0.9777306033333333  
00:56:12.930 --> 00:56:14.810 you know with the program.  
NOTE Confidence: 0.9777306033333333  
00:56:14.810 --> 00:56:16.866 But food is fundamental.  
NOTE Confidence: 0.9777306033333333  
00:56:16.866 --> 00:56:19.436 We eat to survive so.  
NOTE Confidence: 0.9777306033333333  
00:56:19.440 --> 00:56:21.940 We evolved that capacity over,  
NOTE Confidence: 0.9777306033333333  
00:56:21.940 --> 00:56:23.614 you know, millennia.  
NOTE Confidence: 0.9777306033333333  
00:56:23.614 --> 00:56:27.950 To you know, and when we evolved it,  
NOTE Confidence: 0.9777306033333333  
00:56:27.950 --> 00:56:29.406 we evolved it when we had to go  
NOTE Confidence: 0.9777306033333333  
00:56:29.406 --> 00:56:30.891 out and hunt and gather, right?  
NOTE Confidence: 0.9777306033333333  
00:56:30.891 --> 00:56:33.459 So there was a lot of exercise and  
NOTE Confidence: 0.9777306033333333  
00:56:33.459 --> 00:56:35.956 the marginal difference between our  
NOTE Confidence: 0.9777306033333333  
00:56:35.956 --> 00:56:38.576 caloric expenditure and our intake  
NOTE Confidence: 0.9777306033333333  
00:56:38.580 --> 00:56:39.906 kept things in the right place.  
NOTE Confidence: 0.9777306033333333  
00:56:39.910 --> 00:56:42.206 But now I can go down to  
NOTE Confidence: 0.9777306033333333  
00:56:42.206 --> 00:56:44.410 the store and get you know,  
NOTE Confidence: 0.9777306033333333

00:56:44.410 --> 00:56:46.930 or to a restaurant and get 1000  
NOTE Confidence: 0.9777306033333333

00:56:46.930 --> 00:56:48.607 thousand calorie lunch easily.  
NOTE Confidence: 0.9777306033333333

00:56:48.607 --> 00:56:52.120 When we're not even supposed to exceed 2000,  
NOTE Confidence: 0.9777306033333333

00:56:52.120 --> 00:56:53.656 right? So one meal and I,  
NOTE Confidence: 0.9777306033333333

00:56:53.660 --> 00:56:54.572 you know.  
NOTE Confidence: 0.9777306033333333

00:56:54.572 --> 00:56:55.940 It's all haywire,  
NOTE Confidence: 0.9777306033333333

00:56:55.940 --> 00:56:57.634 so I you see what I'm saying.  
NOTE Confidence: 0.9777306033333333

00:56:57.640 --> 00:56:59.928 I think it really for the obesity thing.  
NOTE Confidence: 0.9777306033333333

00:56:59.930 --> 00:57:00.486 I mean,  
NOTE Confidence: 0.9777306033333333

00:57:00.486 --> 00:57:02.432 I do think that the NCIS responsibility  
NOTE Confidence: 0.9777306033333333

00:57:02.432 --> 00:57:04.635 to do research to understand and come  
NOTE Confidence: 0.9777306033333333

00:57:04.635 --> 00:57:06.610 up with strategies to mitigate it,  
NOTE Confidence: 0.9777306033333333

00:57:06.610 --> 00:57:08.194 recognizing that there are we may  
NOTE Confidence: 0.9777306033333333

00:57:08.194 --> 00:57:10.100 not get these other problems solved,  
NOTE Confidence: 0.9777306033333333

00:57:10.100 --> 00:57:12.152 but I think this is going to be a  
NOTE Confidence: 0.9777306033333333

00:57:12.152 --> 00:57:14.089 policy ultimately just like smoking.

NOTE Confidence: 0.967927462

00:57:16.450 --> 00:57:19.090 Thank you up and down.

NOTE Confidence: 0.967927462

00:57:19.090 --> 00:57:20.938 Actually, yeah, now I feel guilty about.

NOTE Confidence: 0.967927462

00:57:20.940 --> 00:57:22.452 I'm about to walk out and buy

NOTE Confidence: 0.967927462

00:57:22.452 --> 00:57:23.590 1000 calories lunch right now.

NOTE Confidence: 0.967927462

00:57:23.590 --> 00:57:26.420 Thank you, but no thank you for so much for

NOTE Confidence: 0.967927462

00:57:26.493 --> 00:57:29.206 joining us and for your thoughts, were I.

NOTE Confidence: 0.967927462

00:57:29.206 --> 00:57:30.546 I hope it was provocative.

NOTE Confidence: 0.967927462

00:57:30.550 --> 00:57:33.320 I hope people got out a lot of it wasn't

NOTE Confidence: 0.967927462

00:57:33.397 --> 00:57:34.836 your typical scientific presentation,

NOTE Confidence: 0.967927462

00:57:34.836 --> 00:57:37.260 but I really wanted to get out and

NOTE Confidence: 0.967927462

00:57:37.319 --> 00:57:39.153 sort of encourage people to come to

NOTE Confidence: 0.967927462

00:57:39.153 --> 00:57:40.730 the division of cancer prevention

NOTE Confidence: 0.967927462

00:57:40.730 --> 00:57:42.565 with their new prevention ideas.

NOTE Confidence: 0.967927462

00:57:42.570 --> 00:57:46.242 We really need everybody in the boat.

NOTE Confidence: 0.967927462

00:57:46.242 --> 00:57:48.670 You know, coming up with new

NOTE Confidence: 0.967927462

00:57:48.670 --> 00:57:50.270 strategies to prevent cancer.

NOTE Confidence: 0.967927462

00:57:50.270 --> 00:57:53.606 I think the public deserves it.

NOTE Confidence: 0.967927462

00:57:53.610 --> 00:57:54.274 Absolutely well.

NOTE Confidence: 0.967927462

00:57:54.274 --> 00:57:56.266 Thank you so much all right.

NOTE Confidence: 0.967927462

00:57:56.270 --> 00:57:57.299 Good luck everyone.