

WEBVTT

NOTE duration:"00:40:42.5900000"

NOTE recognizability:0.832

NOTE language:en-us

NOTE Confidence: 0.921713136666667

00:00:00.000 --> 00:00:01.596 Thank you all for joining today.

NOTE Confidence: 0.921713136666667

00:00:01.600 --> 00:00:03.570 Today we have Lucia Ohana Machado,

NOTE Confidence: 0.921713136666667

00:00:03.570 --> 00:00:05.695 who's the Professor of Medicine

NOTE Confidence: 0.921713136666667

00:00:05.695 --> 00:00:07.386 and Professor of Biomedical

NOTE Confidence: 0.921713136666667

00:00:07.386 --> 00:00:09.074 Informatics and Data Science.

NOTE Confidence: 0.921713136666667

00:00:09.080 --> 00:00:10.688 She's also the Deputy Dean for

NOTE Confidence: 0.921713136666667

00:00:10.688 --> 00:00:12.559 Biomedical Informatics and Chair

NOTE Confidence: 0.921713136666667

00:00:12.560 --> 00:00:14.408 of the new Section of Biomedical

NOTE Confidence: 0.921713136666667

00:00:14.408 --> 00:00:15.998 Informatics and Data Science.

NOTE Confidence: 0.921713136666667

00:00:16.000 --> 00:00:18.680 Lucilla came to us from the

NOTE Confidence: 0.921713136666667

00:00:18.680 --> 00:00:20.799 University of California in San Diego

NOTE Confidence: 0.89262000125

00:00:20.800 --> 00:00:22.960 where she was the Associate Dean and Chair

NOTE Confidence: 0.6564597725

00:00:22.960 --> 00:00:26.380 of Bio, Chair of Department of

NOTE Confidence: 0.6564597725

00:00:26.380 --> 00:00:28.040 Biomedical Informatics and she
NOTE Confidence: 0.6564597725

00:00:28.040 --> 00:00:30.100 is going to describe some of the
NOTE Confidence: 0.6564597725

00:00:30.100 --> 00:00:33.480 initiatives that BIDS is running towards
NOTE Confidence: 0.6564597725

00:00:33.480 --> 00:00:35.720 broadening biomedical and clinical
NOTE Confidence: 0.6564597725

00:00:35.720 --> 00:00:39.520 data access and utilization at Yale.
NOTE Confidence: 0.6564597725

00:00:39.520 --> 00:00:40.159 Thank you, Leslie.
NOTE Confidence: 0.88452262

00:00:42.400 --> 00:00:46.705 Thank you. Let me share the screen
NOTE Confidence: 0.88452262

00:00:46.705 --> 00:00:49.238 and make sure it's the right one.
NOTE Confidence: 0.88452262

00:00:49.240 --> 00:00:51.725 We can see it looks great excellent.
NOTE Confidence: 0.88452262

00:00:51.725 --> 00:00:54.290 So thank you and and because it's a small
NOTE Confidence: 0.88452262

00:00:54.346 --> 00:00:56.320 group please feel free to interrupt.
NOTE Confidence: 0.88452262

00:00:56.320 --> 00:00:58.864 I might not always see your hand up
NOTE Confidence: 0.88452262

00:00:58.864 --> 00:01:01.776 but I asked the the organizers to help
NOTE Confidence: 0.88452262

00:01:01.776 --> 00:01:04.732 me if there is any question in the
NOTE Confidence: 0.88452262

00:01:04.732 --> 00:01:07.873 middle in and today what I will present
NOTE Confidence: 0.88452262

00:01:07.873 --> 00:01:11.560 is mostly what's in it for you at the

NOTE Confidence: 0.88452262

00:01:11.560 --> 00:01:13.160 Biomedical Informatics and Data Science.

NOTE Confidence: 0.88452262

00:01:13.160 --> 00:01:16.380 I'm not necessarily presenting

NOTE Confidence: 0.88452262

00:01:16.380 --> 00:01:20.336 our research or featuring a lot of

NOTE Confidence: 0.88452262

00:01:20.336 --> 00:01:22.640 projects that are ongoing right now,

NOTE Confidence: 0.88452262

00:01:22.640 --> 00:01:25.244 but it's essentially how you can

NOTE Confidence: 0.88452262

00:01:25.244 --> 00:01:28.329 take advantage of new things that are

NOTE Confidence: 0.88452262

00:01:28.329 --> 00:01:32.920 coming to enhance your own portfolio.

NOTE Confidence: 0.88452262

00:01:32.920 --> 00:01:35.496 So as you know informatics has been

NOTE Confidence: 0.88452262

00:01:35.496 --> 00:01:38.040 at you for a very long time.

NOTE Confidence: 0.88452262

00:01:38.040 --> 00:01:38.440 Since

NOTE Confidence: 0.761572602

00:01:42.680 --> 00:01:45.248 19, 1985 or 86 there has

NOTE Confidence: 0.761572602

00:01:45.248 --> 00:01:46.960 been a training grant.

NOTE Confidence: 0.761572602

00:01:46.960 --> 00:01:49.830 So you can imagine before that there

NOTE Confidence: 0.761572602

00:01:49.830 --> 00:01:52.369 was already activity in this area

NOTE Confidence: 0.761572602

00:01:52.369 --> 00:01:54.829 with the Yale Center for Medical

NOTE Confidence: 0.761572602

00:01:54.829 --> 00:01:57.517 Informatics as well as many
NOTE Confidence: 0.761572602

00:01:57.517 --> 00:01:59.277 activities in Computational biology.
NOTE Confidence: 0.761572602

00:01:59.280 --> 00:02:01.600 But the faculty had appointments
NOTE Confidence: 0.761572602

00:02:01.600 --> 00:02:03.920 in different departments and and
NOTE Confidence: 0.761572602

00:02:03.920 --> 00:02:09.520 Yale was not perceived as a
NOTE Confidence: 0.761572602

00:02:09.520 --> 00:02:13.624 large informatics academic unit.
NOTE Confidence: 0.761572602

00:02:13.624 --> 00:02:18.400 So we came to fulfill that that
NOTE Confidence: 0.761572602

00:02:18.400 --> 00:02:21.120 need and created the section,
NOTE Confidence: 0.761572602

00:02:21.120 --> 00:02:23.420 the first standing section of
NOTE Confidence: 0.761572602

00:02:23.420 --> 00:02:25.260 Biomedical Informatics and Data
NOTE Confidence: 0.761572602

00:02:25.260 --> 00:02:27.740 Science starting January 1st of 2023.
NOTE Confidence: 0.761572602

00:02:27.740 --> 00:02:30.680 So we're here for a little over
NOTE Confidence: 0.761572602

00:02:30.680 --> 00:02:33.501 a year and with the the mission
NOTE Confidence: 0.761572602

00:02:33.501 --> 00:02:35.639 of research training and services
NOTE Confidence: 0.761572602

00:02:35.639 --> 00:02:38.195 with the research with the faculty
NOTE Confidence: 0.761572602

00:02:38.195 --> 00:02:40.609 who are currently in department

NOTE Confidence: 0.761572602

00:02:40.609 --> 00:02:43.662 focusing on AI and medicine in

NOTE Confidence: 0.761572602

00:02:43.662 --> 00:02:45.990 our natural language processing

NOTE Confidence: 0.761572602

00:02:45.990 --> 00:02:48.318 including large language models,

NOTE Confidence: 0.761572602

00:02:48.320 --> 00:02:50.528 privacy enhancing technology,

NOTE Confidence: 0.761572602

00:02:50.528 --> 00:02:52.000 blockchain technology.

NOTE Confidence: 0.761572602

00:02:52.000 --> 00:02:55.198 In some examples of large projects

NOTE Confidence: 0.761572602

00:02:55.198 --> 00:02:57.920 that did transfer to Yale,

NOTE Confidence: 0.761572602

00:02:57.920 --> 00:03:00.060 the Centre of Excellence in

NOTE Confidence: 0.761572602

00:03:00.060 --> 00:03:02.720 Genome Science focused on admix

NOTE Confidence: 0.761572602

00:03:02.720 --> 00:03:05.053 genomes and also recruitment.

NOTE Confidence: 0.761572602

00:03:05.053 --> 00:03:09.317 A portion of the all of Us precision

NOTE Confidence: 0.761572602

00:03:09.317 --> 00:03:12.316 medicine program is is not here at

NOTE Confidence: 0.761572602

00:03:12.316 --> 00:03:15.279 Yale and we're in Puerto Rico as

NOTE Confidence: 0.761572602

00:03:15.280 --> 00:03:18.680 an associated entity in training.

NOTE Confidence: 0.761572602

00:03:18.680 --> 00:03:23.760 We have curriculum for Master's PhD students.

NOTE Confidence: 0.761572602

00:03:23.760 --> 00:03:26.360 We, we do mentor postdocs,
NOTE Confidence: 0.761572602

00:03:26.360 --> 00:03:29.040 clinicians moving into this area,
NOTE Confidence: 0.761572602

00:03:29.040 --> 00:03:31.535 biomedical data scientists and we'll
NOTE Confidence: 0.761572602

00:03:31.535 --> 00:03:34.551 have summer interns from North America
NOTE Confidence: 0.761572602

00:03:34.551 --> 00:03:37.673 and also from Africa starting this year.
NOTE Confidence: 0.761572602

00:03:37.680 --> 00:03:40.830 The new certificate program in medical
NOTE Confidence: 0.761572602

00:03:40.830 --> 00:03:44.996 software and medical AI has been advertised.
NOTE Confidence: 0.761572602

00:03:45.000 --> 00:03:48.810 The applicants have submitted their forms
NOTE Confidence: 0.761572602

00:03:48.810 --> 00:03:53.560 and we are going to start very soon.
NOTE Confidence: 0.761572602

00:03:53.560 --> 00:03:56.398 In terms of infrastructure and services,
NOTE Confidence: 0.761572602

00:03:56.400 --> 00:03:58.000 we are mounting the research,
NOTE Confidence: 0.761572602

00:03:58.000 --> 00:04:00.195 computing and clinical and biomedical
NOTE Confidence: 0.761572602

00:04:00.195 --> 00:04:03.092 data services that may be of interest
NOTE Confidence: 0.761572602

00:04:03.092 --> 00:04:06.420 to you and that's what I'll focus
NOTE Confidence: 0.761572602

00:04:06.420 --> 00:04:09.342 my presentation on and of course
NOTE Confidence: 0.761572602

00:04:09.342 --> 00:04:11.078 collaborating and grant proposals,

NOTE Confidence: 0.761572602

00:04:11.080 --> 00:04:14.440 quality safety research.

NOTE Confidence: 0.761572602

00:04:14.440 --> 00:04:17.457 We were fortunate to to get about

NOTE Confidence: 0.761572602

00:04:17.457 --> 00:04:20.720 \$17 million this year of of grants.

NOTE Confidence: 0.761572602

00:04:20.720 --> 00:04:24.520 Since the multiple year grants we hope to

NOTE Confidence: 0.761572602

00:04:24.520 --> 00:04:28.396 have increased that in subsequent years.

NOTE Confidence: 0.761572602

00:04:28.400 --> 00:04:31.100 There were 19 grants in contracts

NOTE Confidence: 0.761572602

00:04:31.100 --> 00:04:34.240 and 27 new proposals by our faculty.

NOTE Confidence: 0.761572602

00:04:34.240 --> 00:04:37.705 So I'll talk mostly about the service

NOTE Confidence: 0.761572602

00:04:37.705 --> 00:04:41.397 portion which is staffed by our faculty.

NOTE Confidence: 0.761572602

00:04:41.400 --> 00:04:43.885 It's the Yale Biomedical Informatics

NOTE Confidence: 0.761572602

00:04:43.885 --> 00:04:44.879 and Computing

NOTE Confidence: 0.881053924545455

00:04:47.560 --> 00:04:50.815 Center, or CORE, in which we have

NOTE Confidence: 0.881053924545455

00:04:50.815 --> 00:04:52.960 a Research Information officer,

NOTE Confidence: 0.881053924545455

00:04:52.960 --> 00:04:58.624 and that's the Doctor Daniella Meeker in a

NOTE Confidence: 0.881053924545455

00:04:58.624 --> 00:05:01.044 Computational Infrastructure Officer with

NOTE Confidence: 0.881053924545455

00:05:01.044 --> 00:05:03.554 Assistant Dean for Informatics washroom.
NOTE Confidence: 0.881053924545455

00:05:03.560 --> 00:05:07.800 And the principle here is our section,
NOTE Confidence: 0.881053924545455

00:05:07.800 --> 00:05:10.890 it's one of several units that
NOTE Confidence: 0.881053924545455

00:05:10.890 --> 00:05:12.435 benefits from informatics,
NOTE Confidence: 0.881053924545455

00:05:12.440 --> 00:05:13.292 informatics, infrastructure,
NOTE Confidence: 0.881053924545455

00:05:13.292 --> 00:05:16.274 the Department of Medicine is another one,
NOTE Confidence: 0.881053924545455

00:05:16.280 --> 00:05:18.440 surgery, various departments,
NOTE Confidence: 0.77445807

00:05:20.600 --> 00:05:21.920 YCCI, the YCC and so on.
NOTE Confidence: 0.77445807

00:05:21.920 --> 00:05:24.888 And then we operate with partner entities
NOTE Confidence: 0.77445807

00:05:24.888 --> 00:05:28.400 such as the EU New Haven Health System,
NOTE Confidence: 0.77445807

00:05:28.400 --> 00:05:30.560 the EU University and so on.
NOTE Confidence: 0.77445807

00:05:30.560 --> 00:05:35.760 And we have to do that with compatible
NOTE Confidence: 0.77445807

00:05:35.760 --> 00:05:39.913 policies in essentially we're here
NOTE Confidence: 0.77445807

00:05:39.913 --> 00:05:42.357 to support research operations
NOTE Confidence: 0.77445807

00:05:42.360 --> 00:05:46.164 related to data and compute that
NOTE Confidence: 0.77445807

00:05:46.164 --> 00:05:51.200 tied together this this 3 units.

NOTE Confidence: 0.77445807

00:05:51.200 --> 00:05:53.797 So in terms of the department centres,

NOTE Confidence: 0.77445807

00:05:53.800 --> 00:05:56.060 every department will have

NOTE Confidence: 0.77445807

00:05:56.060 --> 00:05:57.755 an informatics liaison.

NOTE Confidence: 0.77445807

00:05:57.760 --> 00:06:00.518 Who is the main point of contact?

NOTE Confidence: 0.77445807

00:06:00.520 --> 00:06:02.930 Who gather helps prioritize needs

NOTE Confidence: 0.77445807

00:06:02.930 --> 00:06:06.273 of the departments and bring to us

NOTE Confidence: 0.77445807

00:06:06.273 --> 00:06:08.835 identify data sources that are needed,

NOTE Confidence: 0.77445807

00:06:08.840 --> 00:06:10.252 refer trainees,

NOTE Confidence: 0.77445807

00:06:10.252 --> 00:06:13.782 and partner in grant proposals

NOTE Confidence: 0.77445807

00:06:13.782 --> 00:06:15.709 or other activities.

NOTE Confidence: 0.77445807

00:06:15.709 --> 00:06:19.272 So let me get back to here

NOTE Confidence: 0.77445807

00:06:19.272 --> 00:06:23.022 that you see an initial set of

NOTE Confidence: 0.77445807

00:06:23.022 --> 00:06:25.777 Advisory Board members who help

NOTE Confidence: 0.77445807

00:06:25.777 --> 00:06:28.879 us prioritize what we need to do.

NOTE Confidence: 0.77445807

00:06:28.880 --> 00:06:31.440 Not all departments yet represented,

NOTE Confidence: 0.77445807

00:06:31.440 --> 00:06:34.737 but we we think we have a large
NOTE Confidence: 0.77445807

00:06:34.737 --> 00:06:38.439 coverage here and plan to expand.
NOTE Confidence: 0.77445807

00:06:38.440 --> 00:06:41.860 Now we ran an AI survey you you may
NOTE Confidence: 0.77445807

00:06:41.860 --> 00:06:44.736 have gotten this spam in our inboxes
NOTE Confidence: 0.77445807

00:06:44.736 --> 00:06:48.424 more than once and we wanted to survey
NOTE Confidence: 0.77445807

00:06:48.424 --> 00:06:51.322 what are the capabilities and interest
NOTE Confidence: 0.77445807

00:06:51.412 --> 00:06:54.079 in AI at the School of Medicine.
NOTE Confidence: 0.77445807

00:06:54.080 --> 00:06:57.746 So we had 1100 respondents from
NOTE Confidence: 0.77445807

00:06:57.746 --> 00:07:00.144 all categories and there's high
NOTE Confidence: 0.77445807

00:07:00.144 --> 00:07:03.680 interest in AI and in AI training.
NOTE Confidence: 0.77445807

00:07:03.680 --> 00:07:06.164 So on the right hand side you will
NOTE Confidence: 0.77445807

00:07:06.164 --> 00:07:08.336 see the number of respondents and
NOTE Confidence: 0.77445807

00:07:08.336 --> 00:07:10.889 then the on the line going across
NOTE Confidence: 0.77445807

00:07:10.889 --> 00:07:13.547 it is the percentage of them
NOTE Confidence: 0.77445807

00:07:13.547 --> 00:07:16.559 who were interested in training.
NOTE Confidence: 0.77445807

00:07:16.560 --> 00:07:18.976 So you can see it's it's all more

NOTE Confidence: 0.77445807

00:07:18.976 --> 00:07:20.920 than half of the respondents

NOTE Confidence: 0.77445807

00:07:20.920 --> 00:07:25.000 and in general great interest in

NOTE Confidence: 0.77445807

00:07:25.000 --> 00:07:27.840 ChatGPT in machine learning and

NOTE Confidence: 0.77445807

00:07:27.840 --> 00:07:31.470 language models and so on.

NOTE Confidence: 0.77445807

00:07:31.470 --> 00:07:36.300 Now we ran in two months we organized

NOTE Confidence: 0.77445807

00:07:36.300 --> 00:07:38.080 an AI in medicine symposium,

NOTE Confidence: 0.77445807

00:07:38.080 --> 00:07:40.824 the first one here at the School

NOTE Confidence: 0.77445807

00:07:40.824 --> 00:07:44.093 of Medicine in which we wanted also

NOTE Confidence: 0.77445807

00:07:44.093 --> 00:07:46.598 to showcase and actually honestly

NOTE Confidence: 0.77445807

00:07:46.600 --> 00:07:49.442 learn about what kinds of AI are

NOTE Confidence: 0.77445807

00:07:49.442 --> 00:07:52.519 being done in various departments.

NOTE Confidence: 0.77445807

00:07:52.520 --> 00:07:55.859 We one of the presentations was about

NOTE Confidence: 0.77445807

00:07:55.859 --> 00:07:58.800 that this model we we call Meiyama

NOTE Confidence: 0.77445807

00:07:58.800 --> 00:08:01.400 a medical large language models.

NOTE Confidence: 0.77445807

00:08:01.400 --> 00:08:06.808 LAMA is a foundation model produced by Meta,

NOTE Confidence: 0.77445807

00:08:06.808 --> 00:08:08.040 formerly Facebook,
NOTE Confidence: 0.77445807

00:08:08.040 --> 00:08:10.360 in which you can add things on top of it,
NOTE Confidence: 0.77445807

00:08:10.360 --> 00:08:13.720 do more training on top of an existing
NOTE Confidence: 0.77445807

00:08:13.720 --> 00:08:15.959 foundation model and then create
NOTE Confidence: 0.77445807

00:08:15.959 --> 00:08:18.480 medical large language models and
NOTE Confidence: 0.77445807

00:08:18.480 --> 00:08:22.047 that that was done by researchers from
NOTE Confidence: 0.77445807

00:08:22.047 --> 00:08:24.878 our team and there are others as well.
NOTE Confidence: 0.77445807

00:08:24.880 --> 00:08:26.920 So this is one of them.
NOTE Confidence: 0.77445807

00:08:26.920 --> 00:08:28.760 Another one is called Meditrom,
NOTE Confidence: 0.77445807

00:08:28.760 --> 00:08:31.556 also a faculty member in BIDS.
NOTE Confidence: 0.77445807

00:08:31.560 --> 00:08:33.920 In our unit there's ophthalmology
NOTE Confidence: 0.77445807

00:08:33.920 --> 00:08:37.704 GPT and this is done by a faculty
NOTE Confidence: 0.77445807

00:08:37.704 --> 00:08:40.374 who has joint appointments with us
NOTE Confidence: 0.77445807

00:08:40.374 --> 00:08:42.728 and with a secondary appointment
NOTE Confidence: 0.77445807

00:08:42.728 --> 00:08:44.016 in ophthalmology.
NOTE Confidence: 0.77445807

00:08:44.016 --> 00:08:49.092 And also there is GUT GPT and another

NOTE Confidence: 0.77445807

00:08:49.092 --> 00:08:53.334 large language models and and this one

NOTE Confidence: 0.77445807

00:08:53.334 --> 00:08:56.680 coordinated by by Dennis Chung and NGI.

NOTE Confidence: 0.77445807

00:08:56.680 --> 00:08:58.309 There are opportunities.

NOTE Confidence: 0.77445807

00:08:58.309 --> 00:09:01.567 So Doctor Kara has mounted this

NOTE Confidence: 0.77445807

00:09:01.567 --> 00:09:04.662 slide in in terms of engagement

NOTE Confidence: 0.77445807

00:09:04.662 --> 00:09:07.117 with healthcare that there are

NOTE Confidence: 0.77445807

00:09:07.120 --> 00:09:09.696 parts of it that we are currently

NOTE Confidence: 0.77445807

00:09:09.696 --> 00:09:12.032 not doing as adequately to get

NOTE Confidence: 0.77445807

00:09:12.032 --> 00:09:14.452 to the endpoint of having people

NOTE Confidence: 0.77445807

00:09:14.452 --> 00:09:16.517 interact with the health system.

NOTE Confidence: 0.77445807

00:09:16.520 --> 00:09:19.928 So he he mentions experts cannot

NOTE Confidence: 0.77445807

00:09:19.928 --> 00:09:22.200 consistently diagnose structural heart

NOTE Confidence: 0.853477144285714

00:09:22.280 --> 00:09:24.824 disorders and it's a hidden disease

NOTE Confidence: 0.853477144285714

00:09:24.824 --> 00:09:27.480 and we often only diagnose when

NOTE Confidence: 0.853477144285714

00:09:27.480 --> 00:09:30.120 it's at a more advanced stage.

NOTE Confidence: 0.853477144285714

00:09:30.120 --> 00:09:33.725 So there are apps and there are
NOTE Confidence: 0.853477144285714

00:09:33.725 --> 00:09:36.288 other AI based techniques that
NOTE Confidence: 0.853477144285714

00:09:36.288 --> 00:09:40.288 help diagnose earlier before the
NOTE Confidence: 0.853477144285714

00:09:40.288 --> 00:09:42.633 advanced treatment and evaluation.
NOTE Confidence: 0.853477144285714

00:09:42.633 --> 00:09:46.516 So here is a slide from his lab
NOTE Confidence: 0.853477144285714

00:09:46.516 --> 00:09:49.670 in which he puts on the left hand
NOTE Confidence: 0.853477144285714

00:09:49.670 --> 00:09:51.756 side the AICG applications that
NOTE Confidence: 0.853477144285714

00:09:51.756 --> 00:09:54.640 he has already put it out there.
NOTE Confidence: 0.853477144285714

00:09:54.640 --> 00:09:59.560 There's a wearable cards DS plus
NOTE Confidence: 0.853477144285714

00:09:59.560 --> 00:10:01.690 application as well and trials
NOTE Confidence: 0.853477144285714

00:10:01.690 --> 00:10:04.404 that have been done on top
NOTE Confidence: 0.853477144285714

00:10:04.404 --> 00:10:06.400 of machine learning models,
NOTE Confidence: 0.853477144285714

00:10:06.400 --> 00:10:09.280 again developed here at Yale.
NOTE Confidence: 0.557269772857143

00:10:11.800 --> 00:10:16.035 Doctor Sheng in GI is also several
NOTE Confidence: 0.557269772857143

00:10:16.040 --> 00:10:20.042 applications, one of them related to
NOTE Confidence: 0.557269772857143

00:10:20.042 --> 00:10:22.710 human algorithmic interaction with

NOTE Confidence: 0.557269772857143
00:10:22.808 --> 00:10:26.192 several collaborators and that uses that
NOTE Confidence: 0.557269772857143
00:10:26.192 --> 00:10:29.200 gut GPT application that I I mentioned.
NOTE Confidence: 0.557269772857143
00:10:29.200 --> 00:10:31.720 So a lot of interesting
NOTE Confidence: 0.557269772857143
00:10:31.720 --> 00:10:37.880 applications here at at Yale.
NOTE Confidence: 0.557269772857143
00:10:37.880 --> 00:10:41.030 Those two by the way are secondarily
NOTE Confidence: 0.557269772857143
00:10:41.030 --> 00:10:43.148 appointment with us and they're
NOTE Confidence: 0.557269772857143
00:10:43.148 --> 00:10:44.816 primarily appointed in the
NOTE Confidence: 0.557269772857143
00:10:44.816 --> 00:10:47.039 Department of Medicine at sections
NOTE Confidence: 0.557269772857143
00:10:47.039 --> 00:10:49.324 of cardiology and GI respectively.
NOTE Confidence: 0.557269772857143
00:10:49.324 --> 00:10:52.698 The BIDS faculty we have now 12
NOTE Confidence: 0.557269772857143
00:10:52.698 --> 00:10:55.680 ladder rank primary faculty and 13
NOTE Confidence: 0.557269772857143
00:10:55.680 --> 00:10:58.706 non ladder rank faculty and then
NOTE Confidence: 0.557269772857143
00:10:58.706 --> 00:11:01.862 again 40 people who were appointed
NOTE Confidence: 0.557269772857143
00:11:01.862 --> 00:11:04.576 in other departments and have
NOTE Confidence: 0.557269772857143
00:11:04.576 --> 00:11:08.905 secondary with us and those are in 20
NOTE Confidence: 0.557269772857143

00:11:08.905 --> 00:11:11.106 departments in five different schools.
NOTE Confidence: 0.557269772857143

00:11:11.106 --> 00:11:15.738 So what we see is on the on the left hand
NOTE Confidence: 0.557269772857143

00:11:15.738 --> 00:11:18.552 side BIDS having data workflow management,
NOTE Confidence: 0.557269772857143

00:11:18.560 --> 00:11:20.480 AI and methods expertise in
NOTE Confidence: 0.557269772857143

00:11:20.480 --> 00:11:22.400 the departments and centre 7.
NOTE Confidence: 0.557269772857143

00:11:22.400 --> 00:11:24.486 On the right hand side the data
NOTE Confidence: 0.557269772857143

00:11:24.486 --> 00:11:26.726 and the domain expertise for the
NOTE Confidence: 0.557269772857143

00:11:26.726 --> 00:11:28.861 particular application that we are
NOTE Confidence: 0.557269772857143

00:11:28.861 --> 00:11:31.371 talking about be that AI or other
NOTE Confidence: 0.557269772857143

00:11:31.371 --> 00:11:33.526 forms of informatics and data science.
NOTE Confidence: 0.557269772857143

00:11:33.526 --> 00:11:36.356 So in terms of modalities,
NOTE Confidence: 0.557269772857143

00:11:36.360 --> 00:11:39.176 we do have bioinformatics,
NOTE Confidence: 0.557269772857143

00:11:39.176 --> 00:11:42.004 imaging and clinical informatics and
NOTE Confidence: 0.557269772857143

00:11:42.004 --> 00:11:45.344 some are more populated than others at
NOTE Confidence: 0.557269772857143

00:11:45.344 --> 00:11:49.144 present and our plan is to keep moving
NOTE Confidence: 0.557269772857143

00:11:49.144 --> 00:11:52.664 and having this applications done on on.

NOTE Confidence: 0.557269772857143
00:11:52.664 --> 00:11:55.280 Again on the department and centre
NOTE Confidence: 0.557269772857143
00:11:55.363 --> 00:11:57.847 side we find many people who
NOTE Confidence: 0.557269772857143
00:11:57.847 --> 00:11:59.880 have been doing informatics on a
NOTE Confidence: 0.557269772857143
00:11:59.880 --> 00:12:02.624 fragmented way and would try to not
NOTE Confidence: 0.557269772857143
00:12:02.624 --> 00:12:04.840 only acknowledge what they're doing,
NOTE Confidence: 0.557269772857143
00:12:04.840 --> 00:12:09.064 but try to synergize and create
NOTE Confidence: 0.557269772857143
00:12:09.064 --> 00:12:11.176 the computational infrastructure
NOTE Confidence: 0.557269772857143
00:12:11.176 --> 00:12:15.044 that it can again can get to high
NOTE Confidence: 0.557269772857143
00:12:15.044 --> 00:12:17.923 higher levels because there are more
NOTE Confidence: 0.557269772857143
00:12:17.923 --> 00:12:20.760 people using them at this point.
NOTE Confidence: 0.557269772857143
00:12:20.760 --> 00:12:23.588 So our goal of developing new computer
NOTE Confidence: 0.557269772857143
00:12:23.588 --> 00:12:26.224 based methods and systems to improve
NOTE Confidence: 0.557269772857143
00:12:26.224 --> 00:12:29.664 human health is part of our mission to
NOTE Confidence: 0.557269772857143
00:12:29.664 --> 00:12:32.479 train the next generation and then help
NOTE Confidence: 0.557269772857143
00:12:32.479 --> 00:12:34.717 researchers make maximal use of data.
NOTE Confidence: 0.557269772857143

00:12:34.720 --> 00:12:38.148 So I would expect many today in
NOTE Confidence: 0.557269772857143

00:12:38.148 --> 00:12:40.392 the audience are working with the
NOTE Confidence: 0.557269772857143

00:12:40.392 --> 00:12:43.200 data from the health system or from
NOTE Confidence: 0.557269772857143

00:12:43.200 --> 00:12:45.760 clinical trials or from basic science
NOTE Confidence: 0.557269772857143

00:12:45.760 --> 00:12:49.390 and in that all data management
NOTE Confidence: 0.557269772857143

00:12:49.390 --> 00:12:53.600 in advanced methods may benefit.
NOTE Confidence: 0.557269772857143

00:12:53.600 --> 00:12:57.730 So AI is the current interest of
NOTE Confidence: 0.557269772857143

00:12:57.730 --> 00:13:00.845 of many people and there are NIH
NOTE Confidence: 0.557269772857143

00:13:00.845 --> 00:13:03.479 requests for applications in many,
NOTE Confidence: 0.557269772857143

00:13:03.480 --> 00:13:05.680 many different areas in institute
NOTE Confidence: 0.557269772857143

00:13:05.680 --> 00:13:08.052 that puts them here as examples.
NOTE Confidence: 0.557269772857143

00:13:08.052 --> 00:13:10.194 And then on the left hand side,
NOTE Confidence: 0.557269772857143

00:13:10.200 --> 00:13:14.240 I select some topics that are very,
NOTE Confidence: 0.557269772857143

00:13:14.240 --> 00:13:17.304 very related to it as well as projects
NOTE Confidence: 0.557269772857143

00:13:17.304 --> 00:13:20.078 that we are currently involved.
NOTE Confidence: 0.557269772857143

00:13:20.080 --> 00:13:23.440 One is aim ahead the HealthEquity and

NOTE Confidence: 0.557269772857143
00:13:23.440 --> 00:13:26.080 advanced diversity for the workforce.
NOTE Confidence: 0.557269772857143
00:13:26.080 --> 00:13:29.365 The other one is Bridge two AI in
NOTE Confidence: 0.557269772857143
00:13:29.365 --> 00:13:31.795 other common fund programs and and
NOTE Confidence: 0.557269772857143
00:13:31.795 --> 00:13:35.045 as I mentioned before the all of
NOTE Confidence: 0.557269772857143
00:13:35.045 --> 00:13:36.993 Us Precision Medicine initiative
NOTE Confidence: 0.557269772857143
00:13:37.000 --> 00:13:38.200 AI is a team sport.
NOTE Confidence: 0.557269772857143
00:13:38.200 --> 00:13:42.376 So again I put both both sides here so
NOTE Confidence: 0.557269772857143
00:13:42.376 --> 00:13:44.856 that we don't exist on methods only
NOTE Confidence: 0.557269772857143
00:13:44.856 --> 00:13:47.657 we have to have you know important
NOTE Confidence: 0.557269772857143
00:13:47.657 --> 00:13:49.957 applications and have the right
NOTE Confidence: 0.557269772857143
00:13:49.957 --> 00:13:52.707 questions to answer and that's where
NOTE Confidence: 0.557269772857143
00:13:52.707 --> 00:13:55.242 regardless of the medical specialty
NOTE Confidence: 0.557269772857143
00:13:55.242 --> 00:13:59.319 we we do need partnerships and help.
NOTE Confidence: 0.557269772857143
00:13:59.319 --> 00:14:00.277 So data,
NOTE Confidence: 0.557269772857143
00:14:00.277 --> 00:14:02.193 computational infrastructure and training
NOTE Confidence: 0.557269772857143

00:14:02.193 --> 00:14:05.000 is what we're we're trying to do.
NOTE Confidence: 0.557269772857143

00:14:05.000 --> 00:14:08.888 And and here's a busy diagram in
NOTE Confidence: 0.557269772857143

00:14:08.888 --> 00:14:11.408 terms of the computing infrastructure
NOTE Confidence: 0.557269772857143

00:14:11.408 --> 00:14:12.920 that we found
NOTE Confidence: 0.877619138181818

00:14:13.003 --> 00:14:15.502 needs to be developed at Yale so
NOTE Confidence: 0.877619138181818

00:14:15.502 --> 00:14:18.312 that we can have everyone fulfill
NOTE Confidence: 0.877619138181818

00:14:18.312 --> 00:14:21.272 their application needs as well
NOTE Confidence: 0.877619138181818

00:14:21.272 --> 00:14:24.520 as new development of methods.
NOTE Confidence: 0.877619138181818

00:14:24.520 --> 00:14:28.398 So going from from #1 to #4,
NOTE Confidence: 0.877619138181818

00:14:28.400 --> 00:14:31.255 what safe is a computational
NOTE Confidence: 0.877619138181818

00:14:31.255 --> 00:14:34.110 infrastructure designed to have HIPAA
NOTE Confidence: 0.877619138181818

00:14:34.196 --> 00:14:37.880 compliance and to have protect sensitive
NOTE Confidence: 0.877619138181818

00:14:37.880 --> 00:14:40.996 information such as electronic health
NOTE Confidence: 0.877619138181818

00:14:40.996 --> 00:14:44.142 records and clinical trial data and
NOTE Confidence: 0.877619138181818

00:14:44.142 --> 00:14:47.159 that has a certain amount of storage
NOTE Confidence: 0.877619138181818

00:14:47.159 --> 00:14:49.520 that that needs to increase from.

NOTE Confidence: 0.877619138181818
00:14:49.520 --> 00:14:50.600 What is that?
NOTE Confidence: 0.877619138181818
00:14:50.600 --> 00:14:53.155 There is already a system in there,
NOTE Confidence: 0.877619138181818
00:14:53.160 --> 00:14:57.692 but it it needs a lot of updates for
NOTE Confidence: 0.877619138181818
00:14:57.692 --> 00:15:02.420 that and the research Virtual Display
NOTE Confidence: 0.877619138181818
00:15:02.420 --> 00:15:07.040 Interface is how you use your own
NOTE Confidence: 0.877619138181818
00:15:07.040 --> 00:15:09.836 computer to serve as a terminal to
NOTE Confidence: 0.877619138181818
00:15:09.836 --> 00:15:11.870 servers that are much more powerful
NOTE Confidence: 0.877619138181818
00:15:11.943 --> 00:15:14.355 and again secured for this operation.
NOTE Confidence: 0.877619138181818
00:15:14.360 --> 00:15:18.562 So you you use your computer to access data
NOTE Confidence: 0.877619138181818
00:15:18.562 --> 00:15:22.800 and to do analysis on this protected server.
NOTE Confidence: 0.877619138181818
00:15:22.800 --> 00:15:26.985 So, so this again is is being enhanced from
NOTE Confidence: 0.877619138181818
00:15:26.985 --> 00:15:31.096 an existing seed compute infrastructure
NOTE Confidence: 0.877619138181818
00:15:31.096 --> 00:15:35.080 that existed and then you have the cloud,
NOTE Confidence: 0.877619138181818
00:15:35.080 --> 00:15:38.608 the Amazon Web Services spin up plus
NOTE Confidence: 0.877619138181818
00:15:38.608 --> 00:15:43.052 which will be more secure version of
NOTE Confidence: 0.877619138181818

00:15:43.052 --> 00:15:46.239 the current capability that exists
NOTE Confidence: 0.877619138181818

00:15:46.239 --> 00:15:47.958 throughout the university.
NOTE Confidence: 0.877619138181818

00:15:47.960 --> 00:15:51.260 This will be possibly adequate
NOTE Confidence: 0.877619138181818

00:15:51.260 --> 00:15:53.240 for genome annotation,
NOTE Confidence: 0.877619138181818

00:15:53.240 --> 00:15:58.035 genome analysis and image processing as well.
NOTE Confidence: 0.877619138181818

00:15:58.040 --> 00:16:00.600 And then finally on the right hand side,
NOTE Confidence: 0.877619138181818

00:16:00.600 --> 00:16:03.372 it's what we are calling Microscope
NOTE Confidence: 0.877619138181818

00:16:03.372 --> 00:16:04.758 High Performance Computing.
NOTE Confidence: 0.877619138181818

00:16:04.760 --> 00:16:08.990 And this is a set of servers with GPU nodes
NOTE Confidence: 0.877619138181818

00:16:09.091 --> 00:16:12.925 and these are graphic processing units
NOTE Confidence: 0.877619138181818

00:16:12.925 --> 00:16:16.952 where they're necessary to do AI these days.
NOTE Confidence: 0.877619138181818

00:16:16.952 --> 00:16:20.004 And it is something that currently is
NOTE Confidence: 0.877619138181818

00:16:20.004 --> 00:16:24.560 not available to to our community.
NOTE Confidence: 0.877619138181818

00:16:24.560 --> 00:16:26.240 So why do we do all that?
NOTE Confidence: 0.877619138181818

00:16:26.240 --> 00:16:26.505 Well,
NOTE Confidence: 0.877619138181818

00:16:26.505 --> 00:16:28.360 because we we want to use data.

NOTE Confidence: 0.877619138181818
00:16:28.360 --> 00:16:30.290 And in the past I've
NOTE Confidence: 0.877619138181818
00:16:30.290 --> 00:16:31.834 created data networks from
NOTE Confidence: 0.9496188
00:16:33.880 --> 00:16:35.092 several institutions,
NOTE Confidence: 0.9496188
00:16:35.092 --> 00:16:37.516 including the national VA,
NOTE Confidence: 0.9496188
00:16:37.520 --> 00:16:41.120 so that we could use more data because
NOTE Confidence: 0.9496188
00:16:41.120 --> 00:16:44.516 however large our system can be,
NOTE Confidence: 0.9496188
00:16:44.520 --> 00:16:46.665 there are important other diversity
NOTE Confidence: 0.9496188
00:16:46.665 --> 00:16:49.360 of data in in other areas.
NOTE Confidence: 0.9496188
00:16:49.360 --> 00:16:52.060 So that's something we want to
NOTE Confidence: 0.9496188
00:16:52.060 --> 00:16:54.658 eventually participate in this clinical
NOTE Confidence: 0.9496188
00:16:54.658 --> 00:16:58.080 data networks with participation of
NOTE Confidence: 0.9496188
00:16:58.080 --> 00:17:00.745 the Yale electronic health records,
NOTE Confidence: 0.9496188
00:17:00.745 --> 00:17:02.320 clinical data and so on.
NOTE Confidence: 0.9496188
00:17:02.320 --> 00:17:03.920 We're we're not there yet.
NOTE Confidence: 0.9496188
00:17:03.920 --> 00:17:06.216 There's a lot to be done in data
NOTE Confidence: 0.9496188

00:17:06.216 --> 00:17:08.604 curation and preparation but but we're

NOTE Confidence: 0.9496188

00:17:08.604 --> 00:17:11.296 working towards that goal also in

NOTE Confidence: 0.9496188

00:17:11.296 --> 00:17:14.020 terms of precision medicine and and

NOTE Confidence: 0.9496188

00:17:14.112 --> 00:17:17.196 PRS which has polygenic risk scores.

NOTE Confidence: 0.9496188

00:17:17.200 --> 00:17:20.638 We we do think we need to pay attention

NOTE Confidence: 0.9496188

00:17:20.638 --> 00:17:24.224 to that particularly because the

NOTE Confidence: 0.9496188

00:17:24.224 --> 00:17:28.066 current studies are lacking diversity

NOTE Confidence: 0.9496188

00:17:28.066 --> 00:17:30.796 in the population and they're

NOTE Confidence: 0.9496188

00:17:30.796 --> 00:17:32.920 incorrect findings being reduced.

NOTE Confidence: 0.9496188

00:17:32.920 --> 00:17:36.760 So can we play a role in that

NOTE Confidence: 0.9496188

00:17:36.760 --> 00:17:39.575 with again the diversity of the

NOTE Confidence: 0.9496188

00:17:39.575 --> 00:17:40.976 local population participating

NOTE Confidence: 0.9496188

00:17:40.976 --> 00:17:43.988 in in more studies and and then

NOTE Confidence: 0.9496188

00:17:43.988 --> 00:17:46.440 doing this large networks as well?

NOTE Confidence: 0.9496188

00:17:46.440 --> 00:17:48.942 Can we do that without introducing

NOTE Confidence: 0.9496188

00:17:48.942 --> 00:17:52.158 more biases and can we protect privacy?

NOTE Confidence: 0.9496188
00:17:52.160 --> 00:17:55.625 How do we study individuals from mixed
NOTE Confidence: 0.9496188
00:17:55.625 --> 00:17:58.491 ancestries who are currently many
NOTE Confidence: 0.9496188
00:17:58.491 --> 00:18:01.716 times discarded from analysis because
NOTE Confidence: 0.9496188
00:18:01.720 --> 00:18:04.760 it's harder to do the competition with them?
NOTE Confidence: 0.9496188
00:18:04.760 --> 00:18:07.512 So we have a A Center of Excellence
NOTE Confidence: 0.9496188
00:18:07.512 --> 00:18:10.421 in Genome Science based on Admixture
NOTE Confidence: 0.9496188
00:18:10.421 --> 00:18:13.096 Center of Admixture Science and
NOTE Confidence: 0.9496188
00:18:13.096 --> 00:18:16.410 Technology in which we want to
NOTE Confidence: 0.9496188
00:18:16.410 --> 00:18:18.804 account for particular ancestry
NOTE Confidence: 0.9496188
00:18:18.804 --> 00:18:22.656 based on the specific chromosome and
NOTE Confidence: 0.9496188
00:18:22.656 --> 00:18:25.685 location rather than global ancestry
NOTE Confidence: 0.9496188
00:18:25.685 --> 00:18:28.997 as it's currently done in genetic
NOTE Confidence: 0.9496188
00:18:28.997 --> 00:18:31.643 studies because we know there's
NOTE Confidence: 0.9496188
00:18:31.643 --> 00:18:34.637 improve power if we include that
NOTE Confidence: 0.9496188
00:18:34.640 --> 00:18:38.560 mixed populations in the studies.
NOTE Confidence: 0.9496188

00:18:38.560 --> 00:18:43.060 So just schematically A trait is
NOTE Confidence: 0.9496188

00:18:43.060 --> 00:18:45.520 influenced by genetic determinants,
NOTE Confidence: 0.9496188

00:18:45.520 --> 00:18:46.181 exposures,
NOTE Confidence: 0.9496188

00:18:46.181 --> 00:18:49.486 social determinants and within genetic
NOTE Confidence: 0.9496188

00:18:49.486 --> 00:18:52.880 determinants there are variant effects.
NOTE Confidence: 0.9496188

00:18:52.880 --> 00:18:56.639 There is also ancestry effects and
NOTE Confidence: 0.9496188

00:18:56.639 --> 00:18:58.871 we need to account for for all of
NOTE Confidence: 0.9496188

00:18:58.871 --> 00:19:00.880 that and the way we do things,
NOTE Confidence: 0.9496188

00:19:00.880 --> 00:19:02.740 unfortunately or fortunately,
NOTE Confidence: 0.9496188

00:19:02.740 --> 00:19:05.840 that the data are sequestered
NOTE Confidence: 0.9496188

00:19:05.840 --> 00:19:08.640 in different compute enclaves.
NOTE Confidence: 0.9496188

00:19:08.640 --> 00:19:11.960 Fortunately because that helps protect
NOTE Confidence: 0.9496188

00:19:11.960 --> 00:19:15.558 the security and privacy of the data,
NOTE Confidence: 0.9496188

00:19:15.560 --> 00:19:18.245 but unfortunately because it makes
NOTE Confidence: 0.9496188

00:19:18.245 --> 00:19:20.792 the calculations way more difficult
NOTE Confidence: 0.9496188

00:19:20.792 --> 00:19:22.360 to to be done.

NOTE Confidence: 0.9496188

00:19:22.360 --> 00:19:26.120 But we have technology workarounds

NOTE Confidence: 0.9496188

00:19:26.120 --> 00:19:29.304 that allow us to compute with both sets

NOTE Confidence: 0.9496188

00:19:29.304 --> 00:19:32.775 of data that this will be eventually

NOTE Confidence: 0.9496188

00:19:32.775 --> 00:19:35.360 2 million whole genome sequences

NOTE Confidence: 0.9496188

00:19:35.448 --> 00:19:38.540 that we can use to do precision medicine.

NOTE Confidence: 0.9496188

00:19:38.540 --> 00:19:42.497 So we have work in this area of

NOTE Confidence: 0.9496188

00:19:42.497 --> 00:19:44.761 secure Federated algorithms in

NOTE Confidence: 0.9496188

00:19:44.761 --> 00:19:47.682 which currently we are working

NOTE Confidence: 0.9496188

00:19:47.682 --> 00:19:49.640 with computing with all of U.S.

NOTE Confidence: 0.9496188

00:19:49.640 --> 00:19:53.384 data and the million veteran program data.

NOTE Confidence: 0.9496188

00:19:53.384 --> 00:19:57.992 But we believe that as new Biobanks and

NOTE Confidence: 0.9496188

00:19:57.992 --> 00:20:01.680 new programs appear in other countries,

NOTE Confidence: 0.9496188

00:20:01.680 --> 00:20:04.854 if they follow a similar protocol

NOTE Confidence: 0.9496188

00:20:04.854 --> 00:20:07.430 that we could eventually do

NOTE Confidence: 0.9496188

00:20:07.430 --> 00:20:09.860 that with other nations as well.

NOTE Confidence: 0.9496188

00:20:09.860 --> 00:20:11.988 And that would greatly increase

NOTE Confidence: 0.9496188

00:20:11.988 --> 00:20:14.556 the power of all the analysis.

NOTE Confidence: 0.9496188

00:20:14.560 --> 00:20:15.716 And again,

NOTE Confidence: 0.9496188

00:20:15.716 --> 00:20:18.606 these are algorithms that allow

NOTE Confidence: 0.9496188

00:20:18.606 --> 00:20:21.478 all participant data to stay

NOTE Confidence: 0.9496188

00:20:21.478 --> 00:20:23.558 in their compute enclaves.

NOTE Confidence: 0.9496188

00:20:23.560 --> 00:20:26.005 Kindness of questions that the

NOTE Confidence: 0.9496188

00:20:26.005 --> 00:20:28.450 precision medicine programs such as

NOTE Confidence: 0.9496188

00:20:28.532 --> 00:20:32.000 all of us try to answer once again,

NOTE Confidence: 0.9496188

00:20:32.000 --> 00:20:35.168 all all sorts of them and and several

NOTE Confidence: 0.9496188

00:20:35.168 --> 00:20:36.744 different specialties, right so.

NOTE Confidence: 0.9496188

00:20:36.744 --> 00:20:39.488 So this was a slide from the

NOTE Confidence: 0.9496188

00:20:39.488 --> 00:20:41.943 program that helps to disseminate

NOTE Confidence: 0.9496188

00:20:41.943 --> 00:20:45.440 and try to convey the importance of

NOTE Confidence: 0.891751968

00:20:45.440 --> 00:20:49.668 doing a cohort like this where we

NOTE Confidence: 0.891751968

00:20:49.668 --> 00:20:52.038 have electronic health record data,

NOTE Confidence: 0.891751968

00:20:52.040 --> 00:20:54.720 survey data, physical measurement data,

NOTE Confidence: 0.891751968

00:20:54.720 --> 00:20:57.835 bio samples in a a small part,

NOTE Confidence: 0.891751968

00:20:57.840 --> 00:21:01.676 wearables and digital app data as well.

NOTE Confidence: 0.891751968

00:21:01.680 --> 00:21:05.000 So we are recruiting here

NOTE Confidence: 0.891751968

00:21:05.000 --> 00:21:08.156 in New Haven. We have at

NOTE Confidence: 0.49673167

00:21:11.280 --> 00:21:14.125 YCCRAYCCI a recruitment portion

NOTE Confidence: 0.49673167

00:21:14.125 --> 00:21:17.278 and also in in a few other places

NOTE Confidence: 0.49673167

00:21:17.278 --> 00:21:19.954 in we partner with the Precision,

NOTE Confidence: 0.845609385555556

00:21:22.000 --> 00:21:24.465 the Puerto Rico Center for

NOTE Confidence: 0.845609385555556

00:21:24.465 --> 00:21:26.437 Clinical Investigation as well.

NOTE Confidence: 0.845609385555556

00:21:26.440 --> 00:21:29.198 We have a recruitment site in there,

NOTE Confidence: 0.845609385555556

00:21:29.200 --> 00:21:32.080 so adding to to the program.

NOTE Confidence: 0.845609385555556

00:21:32.080 --> 00:21:35.384 And then another thing that I I

NOTE Confidence: 0.845609385555556

00:21:35.384 --> 00:21:38.416 wanted to talk about is because it's

NOTE Confidence: 0.845609385555556

00:21:38.416 --> 00:21:41.325 being launched as as we speak which

NOTE Confidence: 0.845609385555556

00:21:41.325 --> 00:21:44.235 is the Cosmos community data set.
NOTE Confidence: 0.845609385555556

00:21:44.240 --> 00:21:47.208 Cosmos is an initiative from Epic of the
NOTE Confidence: 0.845609385555556

00:21:47.208 --> 00:21:50.477 vendor of electronic health records system.
NOTE Confidence: 0.845609385555556

00:21:50.480 --> 00:21:53.966 In that if a particular customer of
NOTE Confidence: 0.845609385555556

00:21:53.966 --> 00:21:57.895 EPIC such as us wants to participate
NOTE Confidence: 0.845609385555556

00:21:57.895 --> 00:22:02.240 then you would have access for de
NOTE Confidence: 0.845609385555556

00:22:02.240 --> 00:22:05.440 identified data for research not
NOTE Confidence: 0.845609385555556

00:22:05.440 --> 00:22:08.939 only of our own data here at the EU
NOTE Confidence: 0.845609385555556

00:22:08.939 --> 00:22:12.111 New Haven health system but also of
NOTE Confidence: 0.845609385555556

00:22:12.111 --> 00:22:13.719 other institutions participating.
NOTE Confidence: 0.845609385555556

00:22:13.720 --> 00:22:18.194 So right now there are 230 million
NOTE Confidence: 0.845609385555556

00:22:18.194 --> 00:22:20.182 patients represented with several
NOTE Confidence: 0.845609385555556

00:22:20.182 --> 00:22:23.119 encounters and face to face visits.
NOTE Confidence: 0.845609385555556

00:22:23.120 --> 00:22:26.636 So it's it's about 1300 hospitals
NOTE Confidence: 0.845609385555556

00:22:26.636 --> 00:22:30.510 so quite a a a very large group
NOTE Confidence: 0.845609385555556

00:22:30.510 --> 00:22:33.652 of them and and you can use this

NOTE Confidence: 0.845609385555556
00:22:33.652 --> 00:22:34.798 data for research
NOTE Confidence: 0.90367057882353
00:22:37.560 --> 00:22:40.614 the analysis tools the one that
NOTE Confidence: 0.90367057882353
00:22:40.614 --> 00:22:43.196 is available for everyone is
NOTE Confidence: 0.90367057882353
00:22:43.196 --> 00:22:45.878 Slicer Dicer on this larger set.
NOTE Confidence: 0.90367057882353
00:22:45.880 --> 00:22:48.932 Of course you you already know of
NOTE Confidence: 0.90367057882353
00:22:48.932 --> 00:22:51.150 Slicer Dicer for the electronic
NOTE Confidence: 0.90367057882353
00:22:51.150 --> 00:22:53.880 health record systems for the epic
NOTE Confidence: 0.90367057882353
00:22:53.880 --> 00:22:56.439 system here at the health system.
NOTE Confidence: 0.90367057882353
00:22:56.440 --> 00:23:00.508 But this would be you can as as
NOTE Confidence: 0.90367057882353
00:23:00.508 --> 00:23:03.520 we get to this launched use Slicer
NOTE Confidence: 0.90367057882353
00:23:03.520 --> 00:23:08.590 Dicer as A to do research or to do
NOTE Confidence: 0.90367057882353
00:23:08.590 --> 00:23:12.904 some aggregate in graphics on the
NOTE Confidence: 0.90367057882353
00:23:12.904 --> 00:23:16.072 full population which is about 200.
NOTE Confidence: 0.90367057882353
00:23:16.080 --> 00:23:19.776 It's above 200 such health systems
NOTE Confidence: 0.90367057882353
00:23:19.776 --> 00:23:24.158 represented so much larger than than our own.
NOTE Confidence: 0.90367057882353

00:23:24.160 --> 00:23:26.760 And then the analysis tools.
NOTE Confidence: 0.90367057882353

00:23:26.760 --> 00:23:30.097 You can also do command line R,
NOTE Confidence: 0.90367057882353

00:23:30.097 --> 00:23:32.548 Python, SQL statements,
NOTE Confidence: 0.90367057882353

00:23:32.548 --> 00:23:36.224 but that requires certification that it
NOTE Confidence: 0.90367057882353

00:23:36.224 --> 00:23:39.080 requires that you you were trained in
NOTE Confidence: 0.90367057882353

00:23:39.152 --> 00:23:41.917 in the particular aspects of doing that.
NOTE Confidence: 0.90367057882353

00:23:41.920 --> 00:23:45.532 So what we're doing right now is
NOTE Confidence: 0.90367057882353

00:23:45.532 --> 00:23:49.439 to start with a class of 1 or more
NOTE Confidence: 0.90367057882353

00:23:49.440 --> 00:23:51.124 representatives for different departments
NOTE Confidence: 0.90367057882353

00:23:51.124 --> 00:23:54.200 so that they can be trained on this,
NOTE Confidence: 0.90367057882353

00:23:54.200 --> 00:23:57.716 and then start helping fulfill requests
NOTE Confidence: 0.90367057882353

00:23:57.716 --> 00:24:01.719 that come from their own departments.
NOTE Confidence: 0.90367057882353

00:24:01.720 --> 00:24:05.157 Their data management tools are listed here.
NOTE Confidence: 0.90367057882353

00:24:05.160 --> 00:24:07.476 And then code libraries as well.
NOTE Confidence: 0.90367057882353

00:24:07.480 --> 00:24:11.248 And some of you may recognize some of
NOTE Confidence: 0.90367057882353

00:24:11.248 --> 00:24:14.416 these libraries used for AI type research.

NOTE Confidence: 0.90367057882353

00:24:14.416 --> 00:24:18.431 The good thing too is that this whole

NOTE Confidence: 0.90367057882353

00:24:18.431 --> 00:24:20.859 computer environment is already

NOTE Confidence: 0.90367057882353

00:24:20.859 --> 00:24:24.480 existing is from the epic side.

NOTE Confidence: 0.90367057882353

00:24:24.480 --> 00:24:27.040 So while we build ours,

NOTE Confidence: 0.90367057882353

00:24:27.040 --> 00:24:29.399 there is one that can already be

NOTE Confidence: 0.90367057882353

00:24:29.399 --> 00:24:31.160 used by data analysts.

NOTE Confidence: 0.8286005575

00:24:33.720 --> 00:24:36.120 Now the the timeline is like I said,

NOTE Confidence: 0.8286005575

00:24:36.120 --> 00:24:38.480 we are right around the,

NOTE Confidence: 0.8286005575

00:24:38.480 --> 00:24:41.650 the corner of being available

NOTE Confidence: 0.8286005575

00:24:41.650 --> 00:24:45.070 in terms of Cosmos Live meaning

NOTE Confidence: 0.8286005575

00:24:45.070 --> 00:24:48.238 this slicer Dicer portion of it.

NOTE Confidence: 0.8286005575

00:24:48.240 --> 00:24:51.600 And then we we have people doing

NOTE Confidence: 0.8286005575

00:24:51.600 --> 00:24:53.802 the prerequisite completion for the

NOTE Confidence: 0.8286005575

00:24:53.802 --> 00:24:56.469 course that they will take April 8:00

NOTE Confidence: 0.8286005575

00:24:56.469 --> 00:24:58.982 and 9:00 in order to be certified

NOTE Confidence: 0.8286005575

00:24:58.982 --> 00:25:01.519 to be used for that platform.
NOTE Confidence: 0.8286005575

00:25:01.520 --> 00:25:05.192 There will be 30 initial people
NOTE Confidence: 0.8286005575

00:25:05.192 --> 00:25:07.152 trained and and then monthly
NOTE Confidence: 0.8286005575

00:25:07.152 --> 00:25:09.520 we will add a few more.
NOTE Confidence: 0.95316505882353

00:25:11.560 --> 00:25:15.336 So in summary, what we're doing for the
NOTE Confidence: 0.95316505882353

00:25:15.336 --> 00:25:17.134 informatics infrastructure for research
NOTE Confidence: 0.95316505882353

00:25:17.134 --> 00:25:21.233 that you all benefit from is catching
NOTE Confidence: 0.95316505882353

00:25:21.233 --> 00:25:24.555 up on hardware and cloud security,
NOTE Confidence: 0.95316505882353

00:25:24.555 --> 00:25:28.440 cloud environments and also on the data,
NOTE Confidence: 0.95316505882353

00:25:28.440 --> 00:25:31.280 on preparing the data for
NOTE Confidence: 0.95316505882353

00:25:31.280 --> 00:25:34.120 analysis we are are in,
NOTE Confidence: 0.95316505882353

00:25:34.120 --> 00:25:35.996 we have some initial work and policies
NOTE Confidence: 0.95316505882353

00:25:35.996 --> 00:25:37.879 and and the training of people,
NOTE Confidence: 0.95316505882353

00:25:37.880 --> 00:25:41.075 we have much more to do in this area,
NOTE Confidence: 0.95316505882353

00:25:41.080 --> 00:25:43.444 development of software and then the
NOTE Confidence: 0.95316505882353

00:25:43.444 --> 00:25:46.128 launching of services in in the overall

NOTE Confidence: 0.95316505882353

00:25:46.128 --> 00:25:48.198 training is also in the pipeline.

NOTE Confidence: 0.95316505882353

00:25:48.200 --> 00:25:53.528 But but we decided to go one thing at a

NOTE Confidence: 0.95316505882353

00:25:53.528 --> 00:25:55.840 time because we were still a small group

NOTE Confidence: 0.95316505882353

00:25:55.840 --> 00:25:59.998 as I mentioned before the researchers

NOTE Confidence: 0.95316505882353

00:26:00.000 --> 00:26:02.070 in the case we're recruiting faculty

NOTE Confidence: 0.95316505882353

00:26:02.070 --> 00:26:04.557 not only to do their own research

NOTE Confidence: 0.95316505882353

00:26:04.557 --> 00:26:06.972 and be users and testers of this

NOTE Confidence: 0.95316505882353

00:26:07.044 --> 00:26:09.438 environment but also those who lead

NOTE Confidence: 0.95316505882353

00:26:09.438 --> 00:26:11.832 the development of this whole services.

NOTE Confidence: 0.95316505882353

00:26:11.832 --> 00:26:14.208 So, so that has been an

NOTE Confidence: 0.95316505882353

00:26:14.208 --> 00:26:16.518 area of emphasis of ours,

NOTE Confidence: 0.95316505882353

00:26:16.520 --> 00:26:18.136 research scientists and postdocs.

NOTE Confidence: 0.95316505882353

00:26:18.136 --> 00:26:20.560 We need to have PhD students,

NOTE Confidence: 0.95316505882353

00:26:20.560 --> 00:26:22.240 medical students, undergrads,

NOTE Confidence: 0.95316505882353

00:26:22.240 --> 00:26:24.971 the whole community of researchers

NOTE Confidence: 0.95316505882353

00:26:24.971 --> 00:26:28.193 to to benefit from this environment.
NOTE Confidence: 0.95316505882353

00:26:28.200 --> 00:26:30.356 But the environment is still coming up,
NOTE Confidence: 0.95316505882353

00:26:30.360 --> 00:26:34.400 which is why I wanted to present here
NOTE Confidence: 0.95316505882353

00:26:34.400 --> 00:26:38.160 and then also answer any questions
NOTE Confidence: 0.95316505882353

00:26:38.160 --> 00:26:42.520 related to requirements or you know,
NOTE Confidence: 0.95316505882353

00:26:42.520 --> 00:26:46.280 interest in external data sets as well.
NOTE Confidence: 0.95316505882353

00:26:46.280 --> 00:26:47.755 Not just the electronic health
NOTE Confidence: 0.95316505882353

00:26:47.755 --> 00:26:48.640 records from EPIC,
NOTE Confidence: 0.95316505882353

00:26:48.640 --> 00:26:52.432 but some researchers work with claims
NOTE Confidence: 0.95316505882353

00:26:52.432 --> 00:26:56.726 data that are licensed from other places
NOTE Confidence: 0.95316505882353

00:26:56.726 --> 00:27:01.040 and some many other sources exist.
NOTE Confidence: 0.95316505882353

00:27:01.040 --> 00:27:01.417 So.
NOTE Confidence: 0.95316505882353

00:27:01.417 --> 00:27:04.433 So with that I'll stop sharing and see
NOTE Confidence: 0.95316505882353

00:27:04.433 --> 00:27:07.598 whether there are any questions or comments,
NOTE Confidence: 0.95316505882353

00:27:07.600 --> 00:27:10.134 suggestions on on how what you need
NOTE Confidence: 0.95316505882353

00:27:10.134 --> 00:27:12.960 to do most so we can move ahead.

NOTE Confidence: 0.86570758

00:27:22.120 --> 00:27:23.464 So I think one question I had was

NOTE Confidence: 0.86570758

00:27:23.464 --> 00:27:25.105 you know if they're faculty that are

NOTE Confidence: 0.86570758

00:27:25.105 --> 00:27:27.280 interested in working with bids is there,

NOTE Confidence: 0.86570758

00:27:27.280 --> 00:27:28.851 how can they reach out?

NOTE Confidence: 0.86570758

00:27:28.851 --> 00:27:30.360 I mean should they reach out to you,

NOTE Confidence: 0.86570758

00:27:30.360 --> 00:27:32.336 is there an online form or how

NOTE Confidence: 0.86570758

00:27:32.336 --> 00:27:36.061 does that work it it depends.

NOTE Confidence: 0.86570758

00:27:36.061 --> 00:27:38.630 Typically if they aren't like in those

NOTE Confidence: 0.86570758

00:27:38.707 --> 00:27:41.287 informatics people who happen to just

NOTE Confidence: 0.86570758

00:27:41.287 --> 00:27:44.100 be in another department but want to

NOTE Confidence: 0.86570758

00:27:44.100 --> 00:27:46.480 affiliate with us then they they talk

NOTE Confidence: 0.86570758

00:27:46.480 --> 00:27:50.580 to me we we set up a a time go over

NOTE Confidence: 0.86570758

00:27:50.580 --> 00:27:53.462 as secondary faculty what they they

NOTE Confidence: 0.86570758

00:27:53.462 --> 00:27:56.400 would like to benefit from and and so on.

NOTE Confidence: 0.86570758

00:27:56.400 --> 00:27:58.765 So those are the informatics

NOTE Confidence: 0.86570758

00:27:58.765 --> 00:28:00.392 faculty appointed elsewhere,
NOTE Confidence: 0.86570758

00:28:00.392 --> 00:28:02.696 the informatics users who
NOTE Confidence: 0.86570758

00:28:02.696 --> 00:28:05.000 want for example data.
NOTE Confidence: 0.86570758

00:28:05.000 --> 00:28:07.616 The whole JDAT.
NOTE Confidence: 0.86570758

00:28:07.616 --> 00:28:08.488 Currently,
NOTE Confidence: 0.86570758

00:28:08.488 --> 00:28:12.760 JDAT Group is being revamped and
NOTE Confidence: 0.86570758

00:28:12.760 --> 00:28:17.640 renamed and reorganized so that the the
NOTE Confidence: 0.86570758

00:28:17.640 --> 00:28:20.214 data requests can be more streamlined
NOTE Confidence: 0.86570758

00:28:20.214 --> 00:28:23.311 than they are right now and actually
NOTE Confidence: 0.86570758

00:28:23.311 --> 00:28:27.600 filtered because some of them are not,
NOTE Confidence: 0.86570758

00:28:27.600 --> 00:28:28.128 you know,
NOTE Confidence: 0.86570758

00:28:28.128 --> 00:28:30.240 at at the same level as as others.
NOTE Confidence: 0.86570758

00:28:30.240 --> 00:28:34.950 In terms of how researchers have thought
NOTE Confidence: 0.86570758

00:28:34.950 --> 00:28:38.979 about the request and whether electronic
NOTE Confidence: 0.86570758

00:28:38.979 --> 00:28:41.253 health records can really answer the
NOTE Confidence: 0.86570758

00:28:41.253 --> 00:28:43.199 question that they have in mind.

NOTE Confidence: 0.86570758

00:28:43.200 --> 00:28:45.120 Because many times it's not.

NOTE Confidence: 0.86570758

00:28:45.120 --> 00:28:48.078 The question you have is the

NOTE Confidence: 0.86570758

00:28:48.078 --> 00:28:49.557 question that's electronic

NOTE Confidence: 0.86570758

00:28:49.557 --> 00:28:52.039 health records can help answer.

NOTE Confidence: 0.86570758

00:28:52.040 --> 00:28:55.440 So there there is a lot of re

NOTE Confidence: 0.86570758

00:28:55.440 --> 00:28:58.608 restructure in that area in terms

NOTE Confidence: 0.86570758

00:28:58.608 --> 00:29:01.560 of compute against some faculty.

NOTE Confidence: 0.86570758

00:29:01.560 --> 00:29:04.948 But those are typically more the the

NOTE Confidence: 0.86570758

00:29:04.948 --> 00:29:07.410 the informatics ones have computer

NOTE Confidence: 0.86570758

00:29:07.410 --> 00:29:10.440 needs that we currently cannot fulfill.

NOTE Confidence: 0.86570758

00:29:10.440 --> 00:29:14.376 But we're designing the new structure

NOTE Confidence: 0.86570758

00:29:14.376 --> 00:29:18.664 in order to fulfill anything also

NOTE Confidence: 0.86570758

00:29:18.664 --> 00:29:23.074 related to security of people who

NOTE Confidence: 0.86570758

00:29:23.074 --> 00:29:25.464 might somehow have inherited data

NOTE Confidence: 0.86570758

00:29:25.464 --> 00:29:28.820 sets in local servers or laptops or

NOTE Confidence: 0.86570758

00:29:28.820 --> 00:29:32.000 other things that need to be moved.
NOTE Confidence: 0.86570758

00:29:32.000 --> 00:29:34.520 That's the whole area in which the
NOTE Confidence: 0.86570758

00:29:34.520 --> 00:29:36.744 Chief Research Information Officer,
NOTE Confidence: 0.86570758

00:29:36.744 --> 00:29:40.080 Doctor Meeker is is working towards,
NOTE Confidence: 0.86570758

00:29:40.080 --> 00:29:44.257 because we do have to move certain data
NOTE Confidence: 0.86570758

00:29:44.257 --> 00:29:48.679 sets into environments that are more
NOTE Confidence: 0.86570758

00:29:48.680 --> 00:29:52.320 up to date with regards to to security.
NOTE Confidence: 0.748724131666667

00:29:57.480 --> 00:30:01.224 Yeah, I have. I see a doctor
NOTE Confidence: 0.748724131666667

00:30:01.224 --> 00:30:03.720 chalk. Thank you, Doctor
NOTE Confidence: 0.6644393083333333

00:30:03.960 --> 00:30:07.400 Ono Machado for for a nice talk.
NOTE Confidence: 0.6644393083333333

00:30:07.400 --> 00:30:09.598 I just have one very short question.
NOTE Confidence: 0.6644393083333333

00:30:09.600 --> 00:30:12.232 You mentioned about the All of Us
NOTE Confidence: 0.6644393083333333

00:30:12.232 --> 00:30:13.920 precision medicine research program.
NOTE Confidence: 0.6644393083333333

00:30:13.920 --> 00:30:19.100 Is that immediately available to work on?
NOTE Confidence: 0.6644393083333333

00:30:19.100 --> 00:30:20.368 Can you speak a little
NOTE Confidence: 0.6644393083333333

00:30:20.368 --> 00:30:21.360 bit about that? Thanks.

NOTE Confidence: 0.937793013636364
00:30:21.880 --> 00:30:23.910 Yeah. So the data for the All
NOTE Confidence: 0.937793013636364
00:30:23.910 --> 00:30:25.740 of Us program is immediately
NOTE Confidence: 0.937793013636364
00:30:25.740 --> 00:30:28.410 available and in fact several Yale
NOTE Confidence: 0.937793013636364
00:30:28.410 --> 00:30:30.519 researchers have already published
NOTE Confidence: 0.937793013636364
00:30:30.520 --> 00:30:33.320 based on on data from that program.
NOTE Confidence: 0.937793013636364
00:30:33.320 --> 00:30:35.714 And the reason it's very timely
NOTE Confidence: 0.937793013636364
00:30:35.714 --> 00:30:39.146 right now is one they also provide
NOTE Confidence: 0.937793013636364
00:30:39.146 --> 00:30:41.474 their own computer environment.
NOTE Confidence: 0.937793013636364
00:30:41.480 --> 00:30:45.435 So we don't need to provide ours.
NOTE Confidence: 0.937793013636364
00:30:45.440 --> 00:30:48.998 You you essentially go online and
NOTE Confidence: 0.937793013636364
00:30:49.000 --> 00:30:52.376 as long as you have an area Commons
NOTE Confidence: 0.937793013636364
00:30:52.376 --> 00:30:54.840 account you can sign up for it.
NOTE Confidence: 0.937793013636364
00:30:54.840 --> 00:30:56.160 There are a few
NOTE Confidence: 0.91887943
00:30:58.320 --> 00:30:59.724 online training that you
NOTE Confidence: 0.91887943
00:30:59.724 --> 00:31:01.479 have to to go through.
NOTE Confidence: 0.91887943

00:31:01.480 --> 00:31:04.006 So there is some prerequisites in
NOTE Confidence: 0.91887943

00:31:04.006 --> 00:31:06.300 order to access the environment
NOTE Confidence: 0.91887943

00:31:06.300 --> 00:31:08.660 and then and that's for the
NOTE Confidence: 0.91887943

00:31:08.660 --> 00:31:09.960 environment similar to Cosmos,
NOTE Confidence: 0.91887943

00:31:09.960 --> 00:31:11.946 the environment that you do command
NOTE Confidence: 0.91887943

00:31:11.946 --> 00:31:14.398 line that you select cohorts and so on.
NOTE Confidence: 0.91887943

00:31:14.400 --> 00:31:16.824 If you just want to do a data
NOTE Confidence: 0.91887943

00:31:16.824 --> 00:31:19.477 browser so similar to Sliced Redicer,
NOTE Confidence: 0.91887943

00:31:19.480 --> 00:31:22.280 you can do it immediately
NOTE Confidence: 0.91887943

00:31:22.280 --> 00:31:23.400 without registration.
NOTE Confidence: 0.91887943

00:31:23.400 --> 00:31:26.225 The very interesting portion of
NOTE Confidence: 0.91887943

00:31:26.225 --> 00:31:28.982 it is the genome sequencing,
NOTE Confidence: 0.91887943

00:31:28.982 --> 00:31:33.600 which right now is already 350,000
NOTE Confidence: 0.91887943

00:31:33.600 --> 00:31:36.360 and that's already one of the
NOTE Confidence: 0.91887943

00:31:36.360 --> 00:31:37.968 largest collections smaller
NOTE Confidence: 0.91887943

00:31:37.968 --> 00:31:40.720 than UK Biobank currently.

NOTE Confidence: 0.91887943

00:31:40.720 --> 00:31:42.680 But in terms of diversity,

NOTE Confidence: 0.91887943

00:31:42.680 --> 00:31:46.448 is is not even comparable because

NOTE Confidence: 0.91887943

00:31:46.448 --> 00:31:49.040 the whole recruitment process,

NOTE Confidence: 0.91887943

00:31:49.040 --> 00:31:52.229 the whole program is predicated on

NOTE Confidence: 0.91887943

00:31:52.229 --> 00:31:55.174 eliminating that bias that exists

NOTE Confidence: 0.91887943

00:31:55.174 --> 00:31:58.732 that genetic studies are based on

NOTE Confidence: 0.91887943

00:31:58.732 --> 00:32:01.080 European populations for the most part.

NOTE Confidence: 0.6223626

00:32:07.520 --> 00:32:08.320 Yes, Doctor,

NOTE Confidence: 0.878725045

00:32:09.880 --> 00:32:11.290 wonderful, wonderful summary.

NOTE Confidence: 0.878725045

00:32:11.290 --> 00:32:14.080 Thank you so much for sharing.

NOTE Confidence: 0.878725045

00:32:14.080 --> 00:32:15.840 So I'm Kim Blendman.

NOTE Confidence: 0.878725045

00:32:15.840 --> 00:32:17.718 I am an assistant professor here

NOTE Confidence: 0.878725045

00:32:17.718 --> 00:32:19.654 in Medical Oncology at the School

NOTE Confidence: 0.878725045

00:32:19.654 --> 00:32:21.610 of Medicine as well as an assistant

NOTE Confidence: 0.878725045

00:32:21.610 --> 00:32:22.940 professor in Computer Science at

NOTE Confidence: 0.878725045

00:32:22.992 --> 00:32:24.392 the School of Engineering and
NOTE Confidence: 0.878725045

00:32:24.392 --> 00:32:25.792 Applied Science here as well.
NOTE Confidence: 0.878725045

00:32:25.800 --> 00:32:27.949 And I was very much so interested
NOTE Confidence: 0.878725045

00:32:27.949 --> 00:32:30.160 in your Cosmos community data set.
NOTE Confidence: 0.878725045

00:32:30.160 --> 00:32:32.757 And you mentioned that you know you
NOTE Confidence: 0.878725045

00:32:32.760 --> 00:32:34.664 will allow some of your faculty as
NOTE Confidence: 0.878725045

00:32:34.664 --> 00:32:36.746 a assistant myself to be, you know,
NOTE Confidence: 0.878725045

00:32:36.746 --> 00:32:39.248 users and beta testers for some of the
NOTE Confidence: 0.878725045

00:32:39.248 --> 00:32:40.280 things that you have moving forward.
NOTE Confidence: 0.878725045

00:32:40.280 --> 00:32:42.000 And I was just wondering, you know,
NOTE Confidence: 0.878725045

00:32:42.000 --> 00:32:43.820 how do we follow up on that to try to
NOTE Confidence: 0.878725045

00:32:43.820 --> 00:32:45.118 get a little bit more information of,
NOTE Confidence: 0.878725045

00:32:45.120 --> 00:32:46.640 you know, what's, you know,
NOTE Confidence: 0.878725045

00:32:46.640 --> 00:32:48.188 more deep dives into what's actually
NOTE Confidence: 0.878725045

00:32:48.188 --> 00:32:50.320 in the data set and things like that,
NOTE Confidence: 0.878725045

00:32:50.320 --> 00:32:51.160 that we could, you know,

NOTE Confidence: 0.878725045

00:32:51.160 --> 00:32:52.448 as faculty, you know,

NOTE Confidence: 0.878725045

00:32:52.448 --> 00:32:55.760 jump into and and and and query and you know,

NOTE Confidence: 0.878725045

00:32:55.760 --> 00:32:57.748 understand a bit more of how we

NOTE Confidence: 0.878725045

00:32:57.748 --> 00:32:59.760 can use it in our for our research,

NOTE Confidence: 0.878725045

00:32:59.760 --> 00:33:00.558 our personal research,

NOTE Confidence: 0.91642792875

00:33:01.320 --> 00:33:03.595 Right. Because the seats were

NOTE Confidence: 0.91642792875

00:33:03.595 --> 00:33:06.442 limited for the class of 30,

NOTE Confidence: 0.91642792875

00:33:06.442 --> 00:33:09.406 we had asked the department chairs

NOTE Confidence: 0.91642792875

00:33:09.406 --> 00:33:12.648 to nominate who they wanted.

NOTE Confidence: 0.91642792875

00:33:12.648 --> 00:33:15.744 And we actually did not encourage

NOTE Confidence: 0.91642792875

00:33:15.744 --> 00:33:19.434 faculty to be the the people necessarily

NOTE Confidence: 0.91642792875

00:33:19.434 --> 00:33:22.010 because whoever is first has to serve

NOTE Confidence: 0.91642792875

00:33:22.010 --> 00:33:24.598 the needs of a whole lot of others.

NOTE Confidence: 0.91642792875

00:33:24.600 --> 00:33:26.665 So we even recommended being

NOTE Confidence: 0.91642792875

00:33:26.665 --> 00:33:28.730 staff members who were highly

NOTE Confidence: 0.91642792875

00:33:28.810 --> 00:33:30.880 skilled in the data analysis,
NOTE Confidence: 0.91642792875

00:33:30.880 --> 00:33:34.066 but in some cases it was, you know,
NOTE Confidence: 0.91642792875

00:33:34.066 --> 00:33:37.264 there wasn't anyone with that description
NOTE Confidence: 0.91642792875

00:33:37.264 --> 00:33:40.918 and they wanted faculty and and so we
NOTE Confidence: 0.91642792875

00:33:40.920 --> 00:33:44.819 we fulfilled one per per department.
NOTE Confidence: 0.91642792875

00:33:44.819 --> 00:33:47.752 So. So the moving forward there will
NOTE Confidence: 0.91642792875

00:33:47.752 --> 00:33:51.288 be at at least two to four each month
NOTE Confidence: 0.91642792875

00:33:51.288 --> 00:33:54.119 who will undergo the training as well.
NOTE Confidence: 0.91642792875

00:33:54.120 --> 00:33:57.656 So I mean the goal is one day
NOTE Confidence: 0.91642792875

00:33:57.656 --> 00:34:00.284 everyone who has the the skills
NOTE Confidence: 0.91642792875

00:34:00.284 --> 00:34:05.095 to to do SQL queries plus R or or
NOTE Confidence: 0.91642792875

00:34:05.095 --> 00:34:08.773 Python as a programming language
NOTE Confidence: 0.91642792875

00:34:08.773 --> 00:34:12.216 would be would have access.
NOTE Confidence: 0.91642792875

00:34:12.216 --> 00:34:14.960 It just takes some time because the
NOTE Confidence: 0.91642792875

00:34:15.039 --> 00:34:17.531 epic does require the training and in
NOTE Confidence: 0.91642792875

00:34:17.531 --> 00:34:20.334 fact I like that because it it becomes

NOTE Confidence: 0.91642792875
00:34:20.334 --> 00:34:22.758 not a completely open environment
NOTE Confidence: 0.91642792875
00:34:22.758 --> 00:34:26.274 for everyone who would because we
NOTE Confidence: 0.91642792875
00:34:26.274 --> 00:34:29.313 all know that even de identified
NOTE Confidence: 0.91642792875
00:34:29.313 --> 00:34:32.250 data can be easily DE identified.
NOTE Confidence: 0.91642792875
00:34:32.250 --> 00:34:36.731 So there is this filtering of of
NOTE Confidence: 0.91642792875
00:34:36.731 --> 00:34:39.197 people's not everyone in it also
NOTE Confidence: 0.91642792875
00:34:39.197 --> 00:34:41.515 it's only individuals from the
NOTE Confidence: 0.91642792875
00:34:41.515 --> 00:34:44.040 institutions that are contributing data.
NOTE Confidence: 0.91642792875
00:34:44.040 --> 00:34:46.280 So there is control over,
NOTE Confidence: 0.91642792875
00:34:46.280 --> 00:34:48.320 they are employed in this institution.
NOTE Confidence: 0.91642792875
00:34:48.320 --> 00:34:51.320 If something is done wrong,
NOTE Confidence: 0.91642792875
00:34:51.320 --> 00:34:54.710 wrong way to try to re identify and so on
NOTE Confidence: 0.91642792875
00:34:54.799 --> 00:34:58.359 then there could be consequences and so on.
NOTE Confidence: 0.91642792875
00:34:58.360 --> 00:35:00.160 So I think it's the,
NOTE Confidence: 0.91642792875
00:35:00.160 --> 00:35:03.480 it's the first step towards I'll say
NOTE Confidence: 0.91642792875

00:35:03.480 --> 00:35:06.954 opening the data a little bit and if
NOTE Confidence: 0.91642792875

00:35:06.954 --> 00:35:09.033 that works then there will be other
NOTE Confidence: 0.866785055714286

00:35:11.200 --> 00:35:13.630 offerings at the same time as
NOTE Confidence: 0.866785055714286

00:35:13.630 --> 00:35:15.250 we develop the computational
NOTE Confidence: 0.866785055714286

00:35:15.323 --> 00:35:17.520 infrastructure that we need. No,
NOTE Confidence: 0.730933586666667

00:35:17.520 --> 00:35:18.558 I I totally agree with that.
NOTE Confidence: 0.730933586666667

00:35:18.560 --> 00:35:20.396 You know how you're you're opening
NOTE Confidence: 0.730933586666667

00:35:20.396 --> 00:35:22.604 this up in terms of you know
NOTE Confidence: 0.730933586666667

00:35:22.604 --> 00:35:24.506 individuals who would be really to
NOTE Confidence: 0.730933586666667

00:35:24.506 --> 00:35:27.040 serve as that that that core role you
NOTE Confidence: 0.730933586666667

00:35:27.040 --> 00:35:28.240 know where they have the bandwidth.
NOTE Confidence: 0.730933586666667

00:35:28.240 --> 00:35:29.744 And yeah I agree that it wouldn't be
NOTE Confidence: 0.730933586666667

00:35:29.744 --> 00:35:31.213 you know as appropriate to have the
NOTE Confidence: 0.730933586666667

00:35:31.213 --> 00:35:32.716 faculty do that but are there you
NOTE Confidence: 0.730933586666667

00:35:32.716 --> 00:35:33.946 know so you mentioned that you're
NOTE Confidence: 0.730933586666667

00:35:33.946 --> 00:35:36.515 the J dad has is being restructured

NOTE Confidence: 0.730933586666667
00:35:36.515 --> 00:35:39.040 and that you know could you and you
NOTE Confidence: 0.730933586666667
00:35:39.040 --> 00:35:40.501 spoke a little bit about you know
NOTE Confidence: 0.730933586666667
00:35:40.501 --> 00:35:41.992 you know the offerings you know that
NOTE Confidence: 0.730933586666667
00:35:41.992 --> 00:35:43.597 it will have as is moving forward.
NOTE Confidence: 0.730933586666667
00:35:43.600 --> 00:35:45.967 Do you have a thought in terms of when
NOTE Confidence: 0.730933586666667
00:35:45.967 --> 00:35:48.440 that will be rolled out and when we can,
NOTE Confidence: 0.730933586666667
00:35:48.440 --> 00:35:50.712 you know, start to connect with J Dad
NOTE Confidence: 0.730933586666667
00:35:50.712 --> 00:35:52.532 again about, you know, pulling out,
NOTE Confidence: 0.730933586666667
00:35:52.532 --> 00:35:54.084 you know, information and things
NOTE Confidence: 0.730933586666667
00:35:54.084 --> 00:35:56.240 of that that nature that we can,
NOTE Confidence: 0.730933586666667
00:35:56.240 --> 00:35:58.074 you know, get get things moving again?
NOTE Confidence: 0.93471007
00:35:59.000 --> 00:36:03.204 Yeah, it hasn't stopped this way.
NOTE Confidence: 0.93471007
00:36:03.204 --> 00:36:06.750 But what happens is it's, you know,
NOTE Confidence: 0.93471007
00:36:06.750 --> 00:36:09.840 because the volume is so high,
NOTE Confidence: 0.93471007
00:36:09.840 --> 00:36:12.436 too long and maybe even when it
NOTE Confidence: 0.93471007

00:36:12.436 --> 00:36:14.920 comes then the people don't need
NOTE Confidence: 0.93471007

00:36:14.920 --> 00:36:18.004 the data anymore so that it causes
NOTE Confidence: 0.93471007

00:36:18.004 --> 00:36:20.150 even more waste of resources.
NOTE Confidence: 0.93471007

00:36:20.150 --> 00:36:24.260 So what we're trying to do is to the,
NOTE Confidence: 0.93471007

00:36:24.260 --> 00:36:27.113 the one upfront moving forward when
NOTE Confidence: 0.93471007

00:36:27.113 --> 00:36:30.208 when we launched this, this new era,
NOTE Confidence: 0.93471007

00:36:30.208 --> 00:36:33.424 right, do a feasibility analysis and
NOTE Confidence: 0.93471007

00:36:33.424 --> 00:36:37.230 and are this data really you know,
NOTE Confidence: 0.93471007

00:36:37.230 --> 00:36:39.000 can we even solve that problem?
NOTE Confidence: 0.93471007

00:36:39.000 --> 00:36:41.520 There are several trainee questions right?
NOTE Confidence: 0.93471007

00:36:41.520 --> 00:36:44.238 Medical students, postdocs,
NOTE Confidence: 0.93471007

00:36:44.238 --> 00:36:48.044 graduate students who and currently
NOTE Confidence: 0.93471007

00:36:48.044 --> 00:36:50.754 there there isn't a prioritization.
NOTE Confidence: 0.93471007

00:36:50.760 --> 00:36:53.760 It's you know everyone enters the
NOTE Confidence: 0.93471007

00:36:53.760 --> 00:36:56.884 queue and I think that's another
NOTE Confidence: 0.93471007

00:36:56.884 --> 00:37:01.125 area in which we will have to think

NOTE Confidence: 0.93471007

00:37:01.125 --> 00:37:05.475 about more carefully in in other

NOTE Confidence: 0.93471007

00:37:05.475 --> 00:37:09.235 institutions the cost self selects who

NOTE Confidence: 0.93471007

00:37:09.235 --> 00:37:13.159 who is putting those requests or not.

NOTE Confidence: 0.93471007

00:37:13.160 --> 00:37:15.080 Of course we don't want that.

NOTE Confidence: 0.93471007

00:37:15.080 --> 00:37:17.896 We don't want to prevent good

NOTE Confidence: 0.93471007

00:37:17.896 --> 00:37:20.233 ideas to to move forward.

NOTE Confidence: 0.93471007

00:37:20.233 --> 00:37:23.908 But we can also not have any

NOTE Confidence: 0.93471007

00:37:23.908 --> 00:37:26.678 mechanism to to determine that.

NOTE Confidence: 0.93471007

00:37:26.680 --> 00:37:31.564 This particular research question is not

NOTE Confidence: 0.93471007

00:37:31.564 --> 00:37:36.759 well answered with one single system,

NOTE Confidence: 0.93471007

00:37:36.760 --> 00:37:40.040 you know observational or

NOTE Confidence: 0.93471007

00:37:40.040 --> 00:37:41.680 retrospective analysis.

NOTE Confidence: 0.93471007

00:37:41.680 --> 00:37:44.998 It's it just would require much more

NOTE Confidence: 0.93471007

00:37:44.998 --> 00:37:47.367 which then again having opportunity

NOTE Confidence: 0.93471007

00:37:47.367 --> 00:37:51.070 to use all of us is an opportunity

NOTE Confidence: 0.93471007

00:37:51.070 --> 00:37:54.520 to use Epic Cosmos as well.
NOTE Confidence: 0.93471007

00:37:54.520 --> 00:37:54.904 So.
NOTE Confidence: 0.93471007

00:37:54.904 --> 00:37:59.000 So we want to move towards a point
NOTE Confidence: 0.93471007

00:37:59.000 --> 00:38:02.200 that we can decentralize somewhat
NOTE Confidence: 0.93471007

00:38:02.200 --> 00:38:04.800 this request because at least
NOTE Confidence: 0.93471007

00:38:04.800 --> 00:38:07.400 the feasible feasibility we no,
NOTE Confidence: 0.93471007

00:38:07.400 --> 00:38:10.235 we don't have enough patience with this,
NOTE Confidence: 0.93471007

00:38:10.240 --> 00:38:12.280 this and this.
NOTE Confidence: 0.93471007

00:38:12.280 --> 00:38:15.328 We're not going for that trial
NOTE Confidence: 0.93471007

00:38:15.328 --> 00:38:17.880 because it's not feasible.
NOTE Confidence: 0.93471007

00:38:17.880 --> 00:38:21.972 But that all requires a lot of work
NOTE Confidence: 0.93471007

00:38:21.972 --> 00:38:24.924 because since the data haven't been
NOTE Confidence: 0.93471007

00:38:24.924 --> 00:38:28.464 used as much and you only encounter
NOTE Confidence: 0.93471007

00:38:28.464 --> 00:38:32.680 data issues as you use the data, right?
NOTE Confidence: 0.93471007

00:38:32.680 --> 00:38:33.600 Absolutely.
NOTE Confidence: 0.93471007

00:38:33.600 --> 00:38:36.211 There will be a lot that we'll

NOTE Confidence: 0.93471007

00:38:36.211 --> 00:38:39.160 have to do as we start opening

NOTE Confidence: 0.93471007

00:38:39.160 --> 00:38:42.280 this new possibilities.

NOTE Confidence: 0.831922516923077

00:38:43.240 --> 00:38:44.266 Now, what was the what was

NOTE Confidence: 0.831922516923077

00:38:44.266 --> 00:38:45.400 the new name of the J dot?

NOTE Confidence: 0.831922516923077

00:38:45.400 --> 00:38:47.160 You said that it's changed names as well.

NOTE Confidence: 0.7205585483333333

00:38:47.960 --> 00:38:52.960 Oh, it's still under the bait. OK All

NOTE Confidence: 0.766873738

00:38:52.960 --> 00:38:54.320 right. Thank you so much.

NOTE Confidence: 0.766873738

00:38:54.320 --> 00:38:56.480 This is fantastic. I, I really,

NOTE Confidence: 0.766873738

00:38:56.480 --> 00:38:57.280 you know, love what you're,

NOTE Confidence: 0.766873738

00:38:57.280 --> 00:38:59.200 what you're doing and how you're

NOTE Confidence: 0.766873738

00:38:59.200 --> 00:39:00.486 reorganizing it, you know,

NOTE Confidence: 0.766873738

00:39:00.486 --> 00:39:02.101 to make it more streamlined

NOTE Confidence: 0.766873738

00:39:02.101 --> 00:39:03.486 and more accessible to people

NOTE Confidence: 0.766873738

00:39:03.486 --> 00:39:04.716 who who don't have that,

NOTE Confidence: 0.766873738

00:39:04.720 --> 00:39:05.616 that background and skill.

NOTE Confidence: 0.766873738

00:39:05.616 --> 00:39:07.217 And I hope that those of us
NOTE Confidence: 0.766873738

00:39:07.217 --> 00:39:08.694 such as myself who do have the
NOTE Confidence: 0.766873738

00:39:08.694 --> 00:39:09.920 background and skill can, you know,
NOTE Confidence: 0.766873738

00:39:09.920 --> 00:39:11.200 be a part of this movement as well.
NOTE Confidence: 0.827459040714286

00:39:11.880 --> 00:39:13.920 Oh, exactly. And I I want to thank
NOTE Confidence: 0.827459040714286

00:39:13.920 --> 00:39:15.840 everyone for the patience because yes,
NOTE Confidence: 0.827459040714286

00:39:15.840 --> 00:39:21.080 we've been here a year in two months now and
NOTE Confidence: 0.83258146

00:39:23.200 --> 00:39:25.640 it is not as simple,
NOTE Confidence: 0.694019512

00:39:29.120 --> 00:39:30.960 yeah, but but it's doable.
NOTE Confidence: 0.694019512

00:39:30.960 --> 00:39:32.163 Others done it.
NOTE Confidence: 0.694019512

00:39:32.163 --> 00:39:36.336 We can do it to edit it at UCSD many,
NOTE Confidence: 0.694019512

00:39:36.336 --> 00:39:41.100 many years ago. And so again,
NOTE Confidence: 0.694019512

00:39:41.100 --> 00:39:46.026 if we can navigate the the aspect
NOTE Confidence: 0.694019512

00:39:46.026 --> 00:39:50.231 of the cultural aspect on on trust
NOTE Confidence: 0.694019512

00:39:50.231 --> 00:39:53.359 and and how we we move this along,
NOTE Confidence: 0.694019512

00:39:53.360 --> 00:39:55.768 I think we'll go, we go a long

NOTE Confidence: 0.694019512

00:39:55.768 --> 00:39:58.120 ways just taking a little long. Do

NOTE Confidence: 0.876963234

00:40:18.240 --> 00:40:19.520 you have any more questions?

NOTE Confidence: 0.965038922857143

00:40:25.710 --> 00:40:27.705 No, Thank you so much for coming.

NOTE Confidence: 0.965038922857143

00:40:27.710 --> 00:40:30.510 Oh, Eugenia, do you have another question?

NOTE Confidence: 0.965038922857143

00:40:30.510 --> 00:40:33.910 No, no. Thank you so much for

NOTE Confidence: 0.965038922857143

00:40:33.910 --> 00:40:34.962 coming and presenting about bids.

NOTE Confidence: 0.965038922857143

00:40:34.962 --> 00:40:36.470 I think everybody really enjoyed it and

NOTE Confidence: 0.965038922857143

00:40:36.470 --> 00:40:39.870 it's exciting to see what there is to come.

NOTE Confidence: 0.965038922857143

00:40:39.870 --> 00:40:42.590 Thank you so much. Bye, bye.