

WEBVTT

NOTE duration: "01:00:39.920"

NOTE Confidence: 0.9241768

00:00:00.000 --> 00:00:00.500 It's

NOTE Confidence: 0.9284261

00:00:01.839 --> 00:00:02.340 good.

NOTE Confidence: 0.83708215

00:00:04.960 --> 00:00:05.460 Okay.

NOTE Confidence: 0.9836166

00:00:06.000 --> 00:00:07.040 Hi, everyone. I think we

NOTE Confidence: 0.9836166

00:00:07.040 --> 00:00:07.759 can go ahead and get

NOTE Confidence: 0.9836166

00:00:07.759 --> 00:00:09.679 started. Thanks for joining today,

NOTE Confidence: 0.9836166

00:00:09.679 --> 00:00:10.639 and welcome to the fourth

NOTE Confidence: 0.9836166

00:00:10.639 --> 00:00:11.920 and final presentation this year

NOTE Confidence: 0.9836166

00:00:11.920 --> 00:00:12.880 that we're hosting as part

NOTE Confidence: 0.9836166

00:00:12.880 --> 00:00:14.405 of the medical student council

NOTE Confidence: 0.9836166

00:00:14.405 --> 00:00:15.224 lecture series.

NOTE Confidence: 0.9347851

00:00:16.005 --> 00:00:17.465 Today, I'm excited to introduce

NOTE Confidence: 0.9347851

00:00:17.605 --> 00:00:19.605 our last, lecture series speaker,

NOTE Confidence: 0.9347851

00:00:19.605 --> 00:00:21.125 doctor John Meyer. He is

NOTE Confidence: 0.9347851

00:00:21.125 --> 00:00:22.645 a leader in congenital cardiac
NOTE Confidence: 0.9347851

00:00:22.645 --> 00:00:24.185 surgery and cardiac research.
NOTE Confidence: 0.97091484

00:00:24.724 --> 00:00:25.925 Doctor Meyer earned his BA
NOTE Confidence: 0.97091484

00:00:25.925 --> 00:00:27.060 from Yale College and his
NOTE Confidence: 0.97091484

00:00:27.140 --> 00:00:28.420 MD from here at Yale
NOTE Confidence: 0.97091484

00:00:28.420 --> 00:00:29.880 School of Medicine before completing
NOTE Confidence: 0.97091484

00:00:30.099 --> 00:00:31.859 surgical training at, University of
NOTE Confidence: 0.97091484

00:00:31.859 --> 00:00:32.360 Minnesota.
NOTE Confidence: 0.9855713

00:00:32.899 --> 00:00:33.940 Since nineteen eighty four, he's
NOTE Confidence: 0.9855713

00:00:33.940 --> 00:00:35.300 been an important contributor over
NOTE Confidence: 0.9855713

00:00:35.300 --> 00:00:36.500 the last forty years to
NOTE Confidence: 0.9855713

00:00:36.500 --> 00:00:38.579 Boston Children's Hospital and Harvard
NOTE Confidence: 0.9855713

00:00:38.579 --> 00:00:40.065 Medical School, where he served
NOTE Confidence: 0.9855713

00:00:40.065 --> 00:00:41.344 as professor of surgery and
NOTE Confidence: 0.9855713

00:00:41.344 --> 00:00:42.784 a senior associate in cardiac
NOTE Confidence: 0.9855713

00:00:42.784 --> 00:00:43.284 surgery.

NOTE Confidence: 0.98302376

00:00:43.985 --> 00:00:45.604 With over seven thousand congenital

NOTE Confidence: 0.98302376

00:00:45.665 --> 00:00:47.344 heart surgeries performed, doctor Meyer

NOTE Confidence: 0.98302376

00:00:47.344 --> 00:00:49.284 has pioneered advancements in myocardial

NOTE Confidence: 0.98302376

00:00:49.425 --> 00:00:51.585 preservation, tissue engineering, and health

NOTE Confidence: 0.98302376

00:00:51.585 --> 00:00:52.085 policy.

NOTE Confidence: 0.95895904

00:00:52.760 --> 00:00:53.800 Beyond the operating room, he

NOTE Confidence: 0.95895904

00:00:53.800 --> 00:00:55.240 has deeply committed to surgical

NOTE Confidence: 0.95895904

00:00:55.240 --> 00:00:57.400 education, including support supporting Yale's

NOTE Confidence: 0.95895904

00:00:57.400 --> 00:00:59.080 advanced anatomy and surgical training

NOTE Confidence: 0.95895904

00:00:59.080 --> 00:01:01.260 initiatives to inspire future surgeons.

NOTE Confidence: 0.93783474

00:01:01.880 --> 00:01:03.720 Today, doctor Meyer will provide

NOTE Confidence: 0.93783474

00:01:03.720 --> 00:01:05.100 his talk titled the continuing

NOTE Confidence: 0.93783474

00:01:05.160 --> 00:01:06.920 education of an academic surgeon,

NOTE Confidence: 0.93783474

00:01:06.920 --> 00:01:07.785 and we'll have some time

NOTE Confidence: 0.93783474

00:01:07.785 --> 00:01:09.305 for questions at the end.

NOTE Confidence: 0.93783474

00:01:09.465 --> 00:01:10.905 Please welcome me in joining
NOTE Confidence: 0.93783474

00:01:11.145 --> 00:01:11.944 and please join me in
NOTE Confidence: 0.93783474

00:01:11.944 --> 00:01:13.165 welcoming doctor John Meyer.
NOTE Confidence: 0.9972207

00:01:17.785 --> 00:01:19.465 Well, thank you very much.
NOTE Confidence: 0.9697977

00:01:20.425 --> 00:01:21.465 It's a pleasure to be
NOTE Confidence: 0.9697977

00:01:21.465 --> 00:01:21.965 back.
NOTE Confidence: 0.97305894

00:01:24.080 --> 00:01:24.959 And been a long time
NOTE Confidence: 0.97305894

00:01:24.959 --> 00:01:26.400 since I graduated from medical
NOTE Confidence: 0.97305894

00:01:26.400 --> 00:01:28.080 school as you'll see in
NOTE Confidence: 0.97305894

00:01:28.080 --> 00:01:29.540 the slides. But,
NOTE Confidence: 0.9852943

00:01:30.560 --> 00:01:31.620 you know, it's a
NOTE Confidence: 0.9861519

00:01:32.000 --> 00:01:32.819 very fond
NOTE Confidence: 0.99118865

00:01:33.280 --> 00:01:34.980 part of my life's history
NOTE Confidence: 0.99118865

00:01:35.040 --> 00:01:37.060 that, time I spent here.
NOTE Confidence: 0.97742087

00:01:38.675 --> 00:01:39.715 I can't I'll tell a
NOTE Confidence: 0.97742087

00:01:39.715 --> 00:01:41.075 funny story to start with.

NOTE Confidence: 0.97742087

00:01:41.075 --> 00:01:42.755 I I now interview for

NOTE Confidence: 0.97742087

00:01:42.755 --> 00:01:43.235 the,

NOTE Confidence: 0.9402665

00:01:44.115 --> 00:01:46.615 Harvard Medical School admissions committee.

NOTE Confidence: 0.9649888

00:01:47.555 --> 00:01:49.335 And one of the students

NOTE Confidence: 0.9649888

00:01:49.395 --> 00:01:50.935 or applicants I was

NOTE Confidence: 0.988338

00:01:51.329 --> 00:01:52.630 interviewing last year,

NOTE Confidence: 0.98223406

00:01:53.250 --> 00:01:55.729 actually was the captain of

NOTE Confidence: 0.98223406

00:01:55.729 --> 00:01:58.210 the Harvard women's field hockey

NOTE Confidence: 0.98223406

00:01:58.210 --> 00:01:58.710 team.

NOTE Confidence: 0.9692917

00:01:59.569 --> 00:02:00.770 So we get through the

NOTE Confidence: 0.9692917

00:02:00.770 --> 00:02:02.210 interview, and we're at the

NOTE Confidence: 0.9692917

00:02:02.210 --> 00:02:04.049 end, and I offer the

NOTE Confidence: 0.9692917

00:02:04.049 --> 00:02:05.810 opportunity to ask any questions.

NOTE Confidence: 0.9692917

00:02:05.810 --> 00:02:06.549 And she

NOTE Confidence: 0.9774191

00:02:07.854 --> 00:02:09.375 asked who I rooted for

NOTE Confidence: 0.9774191

00:02:09.375 --> 00:02:10.834 at the Yale Harvard game.

NOTE Confidence: 0.97865826

00:02:12.655 --> 00:02:13.775 And I told her I

NOTE Confidence: 0.97865826

00:02:13.775 --> 00:02:14.495 still had a lot of

NOTE Confidence: 0.97865826

00:02:14.495 --> 00:02:15.694 blue blood in my veins,

NOTE Confidence: 0.97865826

00:02:15.694 --> 00:02:17.155 so it was mostly,

NOTE Confidence: 0.9005115

00:02:18.014 --> 00:02:19.715 rooting for Yale. So,

NOTE Confidence: 0.9925228

00:02:22.740 --> 00:02:23.240 okay.

NOTE Confidence: 0.998775

00:02:23.780 --> 00:02:25.000 These are my disclosures.

NOTE Confidence: 0.996144

00:02:25.860 --> 00:02:27.860 I'm still working in the

NOTE Confidence: 0.996144

00:02:27.860 --> 00:02:28.360 laboratory,

NOTE Confidence: 0.9909272

00:02:29.220 --> 00:02:31.160 as well as teaching at,

NOTE Confidence: 0.95746684

00:02:32.340 --> 00:02:33.735 Harvard Medical School.

NOTE Confidence: 0.9090586

00:02:35.175 --> 00:02:36.615 And these are some of

NOTE Confidence: 0.9090586

00:02:36.615 --> 00:02:37.255 the things,

NOTE Confidence: 0.918854

00:02:37.575 --> 00:02:39.495 that we have external support

NOTE Confidence: 0.918854

00:02:39.495 --> 00:02:41.255 from as well as art

NOTE Confidence: 0.918854
00:02:41.255 --> 00:02:42.794 association and NIH.
NOTE Confidence: 0.999188
00:02:43.895 --> 00:02:44.395 So
NOTE Confidence: 0.99893147
00:02:44.855 --> 00:02:46.375 my story starts in Tampa,
NOTE Confidence: 0.99893147
00:02:46.375 --> 00:02:47.490 Florida. I
NOTE Confidence: 0.9307564
00:02:48.450 --> 00:02:50.070 was, born and raised there,
NOTE Confidence: 0.9963236
00:02:52.050 --> 00:02:53.169 went to a public high
NOTE Confidence: 0.9963236
00:02:53.169 --> 00:02:53.669 school.
NOTE Confidence: 0.99727046
00:02:53.970 --> 00:02:55.330 That's the picture from the
NOTE Confidence: 0.99727046
00:02:55.330 --> 00:02:56.870 yearbook, believe it or not.
NOTE Confidence: 0.99189883
00:02:59.010 --> 00:03:00.050 You know, when I was
NOTE Confidence: 0.99189883
00:03:00.050 --> 00:03:01.510 in high school, I
NOTE Confidence: 0.92691875
00:03:03.844 --> 00:03:05.204 had a few trips to
NOTE Confidence: 0.92691875
00:03:05.204 --> 00:03:06.905 the orthopedic surgeon's office.
NOTE Confidence: 0.94582903
00:03:07.764 --> 00:03:08.264 And,
NOTE Confidence: 0.9983627
00:03:08.965 --> 00:03:09.465 my
NOTE Confidence: 0.9420885

00:03:10.724 --> 00:03:12.984 football career was somewhat limited
NOTE Confidence: 0.9420885

00:03:13.044 --> 00:03:14.965 as a consequence, but I
NOTE Confidence: 0.9420885

00:03:14.965 --> 00:03:16.325 thought this was pretty neat
NOTE Confidence: 0.9420885

00:03:16.325 --> 00:03:17.525 that it would be nice
NOTE Confidence: 0.9420885

00:03:17.525 --> 00:03:18.264 to be a
NOTE Confidence: 0.9677229

00:03:19.610 --> 00:03:20.830 physician, probably
NOTE Confidence: 0.9379989

00:03:21.130 --> 00:03:23.230 a sports medicine orthopedic surgeon.
NOTE Confidence: 0.9982118

00:03:23.610 --> 00:03:25.770 And so that's that's where
NOTE Confidence: 0.9982118

00:03:25.770 --> 00:03:26.750 this all started.
NOTE Confidence: 0.95829433

00:03:28.250 --> 00:03:29.450 So this is kind of
NOTE Confidence: 0.95829433

00:03:29.450 --> 00:03:30.430 my autobiography,
NOTE Confidence: 0.99949664

00:03:30.890 --> 00:03:31.630 and what
NOTE Confidence: 0.9811287

00:03:32.045 --> 00:03:33.585 I hope to do is
NOTE Confidence: 0.9811287

00:03:33.645 --> 00:03:35.585 by just providing a few
NOTE Confidence: 0.9967234

00:03:36.125 --> 00:03:36.625 autobiographical
NOTE Confidence: 0.96306676

00:03:37.245 --> 00:03:38.625 vignettes, if you will,

NOTE Confidence: 0.9974176
00:03:39.885 --> 00:03:41.985 give you some idea about
NOTE Confidence: 0.9992729
00:03:42.685 --> 00:03:43.185 how
NOTE Confidence: 0.9975597
00:03:43.980 --> 00:03:46.320 I have continued to educate,
NOTE Confidence: 0.9977195
00:03:46.940 --> 00:03:48.540 and how important I think
NOTE Confidence: 0.9977195
00:03:48.540 --> 00:03:49.520 it is that
NOTE Confidence: 0.99946195
00:03:50.060 --> 00:03:51.920 we educate the next generation.
NOTE Confidence: 0.9920218
00:03:53.020 --> 00:03:53.520 So
NOTE Confidence: 0.9528035
00:03:54.220 --> 00:03:54.620 I,
NOTE Confidence: 0.9867792
00:03:55.100 --> 00:03:56.700 had never seen snow until
NOTE Confidence: 0.9867792
00:03:56.700 --> 00:03:57.995 my senior year in high
NOTE Confidence: 0.9867792
00:03:57.995 --> 00:03:58.795 school when I,
NOTE Confidence: 0.9989548
00:03:59.355 --> 00:03:59.855 was
NOTE Confidence: 0.93806165
00:04:00.635 --> 00:04:02.635 encouraged by my uncle who
NOTE Confidence: 0.93806165
00:04:02.635 --> 00:04:04.075 has lived in New Jersey
NOTE Confidence: 0.93806165
00:04:04.075 --> 00:04:05.195 that I should apply to
NOTE Confidence: 0.93806165

00:04:05.195 --> 00:04:06.415 an Ivy League school.
NOTE Confidence: 0.9947015

00:04:06.875 --> 00:04:08.315 And so that's how I
NOTE Confidence: 0.9947015

00:04:08.315 --> 00:04:10.015 wound up here at Yale,
NOTE Confidence: 0.9625353

00:04:10.635 --> 00:04:11.615 for my undergraduate.
NOTE Confidence: 0.8566705

00:04:13.050 --> 00:04:13.550 My,
NOTE Confidence: 0.9379891

00:04:14.970 --> 00:04:17.050 counselor, freshman counselor, when I
NOTE Confidence: 0.9379891

00:04:17.050 --> 00:04:18.190 was there,
NOTE Confidence: 0.9535198

00:04:18.970 --> 00:04:21.050 was actually a first year
NOTE Confidence: 0.9535198

00:04:21.050 --> 00:04:22.650 Yale medical student, and his
NOTE Confidence: 0.9535198

00:04:22.650 --> 00:04:23.630 advice was
NOTE Confidence: 0.9544944

00:04:24.490 --> 00:04:25.610 you're gonna be doing science
NOTE Confidence: 0.9544944

00:04:25.610 --> 00:04:26.650 and medicine the rest of
NOTE Confidence: 0.9544944

00:04:26.650 --> 00:04:27.390 your life,
NOTE Confidence: 0.98413867

00:04:28.025 --> 00:04:29.544 do something different when you're
NOTE Confidence: 0.98413867

00:04:29.544 --> 00:04:31.464 here. So I was a
NOTE Confidence: 0.98413867

00:04:31.464 --> 00:04:32.365 history major,

NOTE Confidence: 0.96988
00:04:33.464 --> 00:04:34.985 and did all my pre
NOTE Confidence: 0.96988
00:04:34.985 --> 00:04:36.764 med requirements as electives.
NOTE Confidence: 0.96373993
00:04:38.104 --> 00:04:39.625 That, as you will see
NOTE Confidence: 0.96373993
00:04:39.625 --> 00:04:41.004 in subsequent slides,
NOTE Confidence: 0.9586258
00:04:41.330 --> 00:04:42.930 actually had a non trivial
NOTE Confidence: 0.9586258
00:04:42.930 --> 00:04:45.010 impact on me and my
NOTE Confidence: 0.9586258
00:04:45.010 --> 00:04:45.910 future life.
NOTE Confidence: 0.97669506
00:04:46.529 --> 00:04:47.970 So I stayed for medical
NOTE Confidence: 0.97669506
00:04:47.970 --> 00:04:48.470 school,
NOTE Confidence: 0.96902525
00:04:49.490 --> 00:04:51.010 and I think it's still
NOTE Confidence: 0.96902525
00:04:51.010 --> 00:04:52.770 the case everybody's required to
NOTE Confidence: 0.96902525
00:04:52.770 --> 00:04:54.070 do a thesis.
NOTE Confidence: 0.98936903
00:04:54.610 --> 00:04:55.430 And so
NOTE Confidence: 0.80032146
00:04:57.255 --> 00:04:57.995 I approached,
NOTE Confidence: 0.9898632
00:04:59.095 --> 00:05:01.195 one of the cardiac surgeons,
NOTE Confidence: 0.97737384

00:05:01.975 --> 00:05:02.875 Graham Hammond,
NOTE Confidence: 0.9726708

00:05:03.654 --> 00:05:05.975 who, unfortunately, has just passed
NOTE Confidence: 0.9726708

00:05:05.975 --> 00:05:07.175 away over the last few
NOTE Confidence: 0.9726708

00:05:07.175 --> 00:05:07.675 years.
NOTE Confidence: 0.9855661

00:05:08.535 --> 00:05:09.035 And
NOTE Confidence: 0.82734513

00:05:09.495 --> 00:05:09.995 he,
NOTE Confidence: 0.93162745

00:05:12.120 --> 00:05:13.420 had sort of gotten interested
NOTE Confidence: 0.93162745

00:05:13.560 --> 00:05:14.760 for some reason. I can't
NOTE Confidence: 0.93162745

00:05:14.760 --> 00:05:17.080 even remember in platelet function
NOTE Confidence: 0.93162745

00:05:17.080 --> 00:05:17.900 and thrombosis
NOTE Confidence: 0.9569317

00:05:18.360 --> 00:05:19.400 and how that was a
NOTE Confidence: 0.9569317

00:05:19.400 --> 00:05:20.940 problem in arterial
NOTE Confidence: 0.96656334

00:05:21.960 --> 00:05:22.460 and,
NOTE Confidence: 0.9019515

00:05:22.840 --> 00:05:24.540 venous systems, in particular,
NOTE Confidence: 0.9643184

00:05:25.085 --> 00:05:26.065 arterial reconstructive
NOTE Confidence: 0.93720233

00:05:26.605 --> 00:05:27.105 surgery.

NOTE Confidence: 0.9668908

00:05:28.125 --> 00:05:29.105 And so

NOTE Confidence: 0.9723252

00:05:29.725 --> 00:05:31.325 it was new knowledge that

NOTE Confidence: 0.9723252

00:05:31.325 --> 00:05:32.525 had come out about how

NOTE Confidence: 0.9723252

00:05:32.525 --> 00:05:33.985 to inhibit platelets.

NOTE Confidence: 0.9598159

00:05:35.085 --> 00:05:36.225 And so literally,

NOTE Confidence: 0.9752222

00:05:37.085 --> 00:05:38.545 the experiment I did,

NOTE Confidence: 0.7969648

00:05:39.005 --> 00:05:39.505 was,

NOTE Confidence: 0.9985505

00:05:40.125 --> 00:05:40.625 to

NOTE Confidence: 0.9798859

00:05:41.580 --> 00:05:43.520 have an arterial injury model.

NOTE Confidence: 0.8989086

00:05:44.219 --> 00:05:45.120 Did a femoral,

NOTE Confidence: 0.95118237

00:05:46.060 --> 00:05:48.000 artery injury model in dogs,

NOTE Confidence: 0.9091443

00:05:48.379 --> 00:05:48.879 pretreated

NOTE Confidence: 0.9785179

00:05:49.180 --> 00:05:50.159 some of them with

NOTE Confidence: 0.9010311

00:05:50.539 --> 00:05:51.900 aspirin, some of them with

NOTE Confidence: 0.9010311

00:05:51.900 --> 00:05:54.000 another poignantly inhibitor called diapritamole

NOTE Confidence: 0.9010311

00:05:54.300 --> 00:05:55.039 or persantin,
NOTE Confidence: 0.9955465

00:05:56.245 --> 00:05:58.005 and demonstrated that we could
NOTE Confidence: 0.9955465

00:05:58.005 --> 00:06:00.085 actually keep the vessels open
NOTE Confidence: 0.9955465

00:06:00.085 --> 00:06:01.765 if we inhibited the platelets
NOTE Confidence: 0.9955465

00:06:01.765 --> 00:06:03.785 in that arterial injury model.
NOTE Confidence: 0.9787216

00:06:05.525 --> 00:06:07.385 Actually wound up getting published
NOTE Confidence: 0.778565

00:06:07.925 --> 00:06:08.425 in
NOTE Confidence: 0.8691728

00:06:09.045 --> 00:06:10.745 a pretty reputable journal.
NOTE Confidence: 0.9402302

00:06:11.670 --> 00:06:13.110 And that was the launch
NOTE Confidence: 0.9402302

00:06:13.110 --> 00:06:14.250 of my career,
NOTE Confidence: 0.99290705

00:06:15.430 --> 00:06:17.270 in experimental surgery. When I
NOTE Confidence: 0.99290705

00:06:17.270 --> 00:06:18.630 was in doctor Hammond's lab,
NOTE Confidence: 0.99290705

00:06:18.630 --> 00:06:19.770 he was also interested
NOTE Confidence: 0.9527144

00:06:20.470 --> 00:06:22.230 in heart valves and tissue
NOTE Confidence: 0.9527144

00:06:22.230 --> 00:06:23.670 valves in particular, trying to
NOTE Confidence: 0.9527144

00:06:23.670 --> 00:06:24.710 figure out how to make

NOTE Confidence: 0.9527144
00:06:24.710 --> 00:06:25.529 tissue valves.
NOTE Confidence: 0.9940044
00:06:26.150 --> 00:06:26.650 And
NOTE Confidence: 0.9985078
00:06:27.365 --> 00:06:29.125 as a fourth year medical
NOTE Confidence: 0.9985078
00:06:29.125 --> 00:06:30.745 student, I actually put some
NOTE Confidence: 0.9629226
00:06:31.205 --> 00:06:32.645 heart valves in dogs on
NOTE Confidence: 0.9629226
00:06:32.645 --> 00:06:34.185 bypass. So pretty,
NOTE Confidence: 0.99193573
00:06:35.925 --> 00:06:36.665 in retrospect,
NOTE Confidence: 0.9793066
00:06:37.125 --> 00:06:38.485 pretty amazing that they even
NOTE Confidence: 0.9793066
00:06:38.485 --> 00:06:39.785 let me do that. But
NOTE Confidence: 0.9409272
00:06:40.085 --> 00:06:42.165 I had good, postdoc fellows
NOTE Confidence: 0.9409272
00:06:42.165 --> 00:06:42.665 there.
NOTE Confidence: 0.99142283
00:06:43.089 --> 00:06:43.910 So from,
NOTE Confidence: 0.99638736
00:06:45.009 --> 00:06:46.210 from Yale, I went to
NOTE Confidence: 0.99638736
00:06:46.210 --> 00:06:47.970 the University of Minnesota for
NOTE Confidence: 0.99638736
00:06:47.970 --> 00:06:49.490 both my general surgery training
NOTE Confidence: 0.99638736

00:06:49.490 --> 00:06:51.029 and CT surgery training.
NOTE Confidence: 0.97496974

00:06:51.570 --> 00:06:52.930 In those days, you couldn't
NOTE Confidence: 0.97496974

00:06:52.930 --> 00:06:53.810 get to be a CT
NOTE Confidence: 0.97496974

00:06:53.810 --> 00:06:55.810 surgeon unless you had general
NOTE Confidence: 0.97496974

00:06:55.810 --> 00:06:56.789 surgery first.
NOTE Confidence: 0.9956955

00:06:57.445 --> 00:06:57.945 That's
NOTE Confidence: 0.85841197

00:06:58.245 --> 00:06:59.625 somewhat different now.
NOTE Confidence: 0.97257197

00:07:00.645 --> 00:07:01.285 And then,
NOTE Confidence: 0.9883659

00:07:01.685 --> 00:07:02.805 because when I was in
NOTE Confidence: 0.9883659

00:07:02.805 --> 00:07:04.165 medical school, there was still
NOTE Confidence: 0.9883659

00:07:04.165 --> 00:07:05.145 a doctor draft,
NOTE Confidence: 0.9685287

00:07:05.925 --> 00:07:07.045 and I had signed up
NOTE Confidence: 0.9685287

00:07:07.045 --> 00:07:08.165 for something called the Berry
NOTE Confidence: 0.9685287

00:07:08.165 --> 00:07:09.385 plan. I
NOTE Confidence: 0.9721739

00:07:11.160 --> 00:07:12.440 got to salute the flag
NOTE Confidence: 0.9721739

00:07:12.440 --> 00:07:13.419 for a few years,

NOTE Confidence: 0.9837392
00:07:14.600 --> 00:07:15.979 as a cardiothoracic
NOTE Confidence: 0.96749544
00:07:16.280 --> 00:07:17.479 surgeon. At least I had
NOTE Confidence: 0.96749544
00:07:17.479 --> 00:07:18.620 finished all my
NOTE Confidence: 0.9997921
00:07:19.160 --> 00:07:19.660 cardiothoracic
NOTE Confidence: 0.9830798
00:07:20.039 --> 00:07:22.039 and general surgery training. And
NOTE Confidence: 0.9830798
00:07:22.039 --> 00:07:23.660 where I was stationed initially,
NOTE Confidence: 0.9830798
00:07:23.720 --> 00:07:24.840 they didn't have a heart
NOTE Confidence: 0.9830798
00:07:24.840 --> 00:07:25.340 program.
NOTE Confidence: 0.94723445
00:07:25.875 --> 00:07:26.375 And,
NOTE Confidence: 0.9841996
00:07:28.675 --> 00:07:29.495 being somewhat,
NOTE Confidence: 0.9970557
00:07:30.275 --> 00:07:30.775 impetuous,
NOTE Confidence: 0.98074526
00:07:31.395 --> 00:07:32.995 I, thought it would really
NOTE Confidence: 0.98074526
00:07:32.995 --> 00:07:34.035 be a good thing to
NOTE Confidence: 0.98074526
00:07:34.035 --> 00:07:34.775 do to
NOTE Confidence: 0.98870087
00:07:35.155 --> 00:07:37.015 to try to do that
NOTE Confidence: 0.95568556

00:07:37.395 --> 00:07:38.535 so that I didn't
NOTE Confidence: 0.90790397

00:07:38.979 --> 00:07:41.479 go few years without operating
NOTE Confidence: 0.91263574

00:07:41.939 --> 00:07:42.759 on the heart.
NOTE Confidence: 0.88607323

00:07:43.699 --> 00:07:44.199 And,
NOTE Confidence: 0.94638693

00:07:44.659 --> 00:07:45.879 there's a whole story,
NOTE Confidence: 0.99033546

00:07:46.340 --> 00:07:48.340 behind that about how I
NOTE Confidence: 0.99033546

00:07:48.340 --> 00:07:50.280 managed to get that accomplished.
NOTE Confidence: 0.9824252

00:07:51.379 --> 00:07:52.199 That's probably
NOTE Confidence: 0.9638745

00:07:52.655 --> 00:07:53.695 not worth telling,
NOTE Confidence: 0.99587905

00:07:54.175 --> 00:07:55.935 but I'm happy to spend
NOTE Confidence: 0.99587905

00:07:55.935 --> 00:07:56.995 a little more time.
NOTE Confidence: 0.99570155

00:07:57.455 --> 00:07:58.414 But I did learn a
NOTE Confidence: 0.99570155

00:07:58.414 --> 00:07:59.854 lot about how the government
NOTE Confidence: 0.99570155

00:07:59.854 --> 00:08:00.335 worked,
NOTE Confidence: 0.92127615

00:08:00.735 --> 00:08:01.794 in that experience,
NOTE Confidence: 0.99912983

00:08:02.414 --> 00:08:02.914 and

NOTE Confidence: 0.98978424

00:08:03.294 --> 00:08:04.895 that also comes back,

NOTE Confidence: 0.9482627

00:08:05.215 --> 00:08:06.035 in subsequent,

NOTE Confidence: 0.9991784

00:08:06.735 --> 00:08:07.235 years.

NOTE Confidence: 0.9524051

00:08:08.300 --> 00:08:10.539 So when I finished my

NOTE Confidence: 0.9524051

00:08:10.539 --> 00:08:12.319 Air Force commitment, I

NOTE Confidence: 0.82745844

00:08:12.780 --> 00:08:13.280 was

NOTE Confidence: 0.9628486

00:08:14.300 --> 00:08:15.979 offered a position at Boston

NOTE Confidence: 0.9628486

00:08:15.979 --> 00:08:17.039 Children's and

NOTE Confidence: 0.822296

00:08:18.300 --> 00:08:19.440 been there ever since.

NOTE Confidence: 0.9754879

00:08:20.139 --> 00:08:22.080 So since nineteen eighty four.

NOTE Confidence: 0.9891532

00:08:22.865 --> 00:08:24.085 And more recently,

NOTE Confidence: 0.9770766

00:08:25.105 --> 00:08:27.125 I've been much more involved

NOTE Confidence: 0.9770766

00:08:27.265 --> 00:08:27.765 in,

NOTE Confidence: 0.92559355

00:08:28.145 --> 00:08:30.725 the undergraduate medical school education,

NOTE Confidence: 0.92559355

00:08:30.785 --> 00:08:32.625 and we'll talk about that

NOTE Confidence: 0.92559355

00:08:32.625 --> 00:08:33.585 and when we get to
NOTE Confidence: 0.92559355

00:08:33.585 --> 00:08:34.085 it.
NOTE Confidence: 0.9295271

00:08:34.830 --> 00:08:36.610 So that's kinda the chronology
NOTE Confidence: 0.9295271

00:08:36.830 --> 00:08:37.330 of
NOTE Confidence: 0.9982286

00:08:37.790 --> 00:08:38.530 what I've
NOTE Confidence: 0.7841506

00:08:38.910 --> 00:08:40.050 done. So a little
NOTE Confidence: 0.97260493

00:08:40.670 --> 00:08:42.990 side detour here for one
NOTE Confidence: 0.97260493

00:08:42.990 --> 00:08:44.110 day a week in a
NOTE Confidence: 0.97260493

00:08:44.110 --> 00:08:45.330 bioethics fellowship,
NOTE Confidence: 0.99787855

00:08:45.710 --> 00:08:47.650 that I did relatively recently
NOTE Confidence: 0.99787855

00:08:47.710 --> 00:08:48.450 as well.
NOTE Confidence: 0.9909566

00:08:50.245 --> 00:08:50.745 So
NOTE Confidence: 0.95249104

00:08:51.445 --> 00:08:52.965 this is the career path
NOTE Confidence: 0.95249104

00:08:52.965 --> 00:08:54.585 or lack of path,
NOTE Confidence: 0.96409404

00:08:54.965 --> 00:08:56.825 and I think it is
NOTE Confidence: 0.99965

00:08:57.205 --> 00:08:57.705 important

NOTE Confidence: 0.8548108
00:08:58.165 --> 00:08:58.665 that,
NOTE Confidence: 0.9989907
00:09:00.005 --> 00:09:00.905 one recognizes
NOTE Confidence: 0.9863072
00:09:01.285 --> 00:09:02.585 that this is not,
NOTE Confidence: 0.98987466
00:09:03.250 --> 00:09:04.530 at least for me, was
NOTE Confidence: 0.98987466
00:09:04.530 --> 00:09:06.150 never a straight line path.
NOTE Confidence: 0.99041605
00:09:07.010 --> 00:09:08.470 It was pretty important,
NOTE Confidence: 0.99983186
00:09:10.370 --> 00:09:11.590 to be able to
NOTE Confidence: 0.9843652
00:09:12.210 --> 00:09:14.450 explore new areas and new
NOTE Confidence: 0.9843652
00:09:14.450 --> 00:09:14.950 directions.
NOTE Confidence: 0.9979346
00:09:15.890 --> 00:09:16.390 And
NOTE Confidence: 0.84404635
00:09:17.365 --> 00:09:17.845 as,
NOTE Confidence: 0.9766067
00:09:19.445 --> 00:09:21.365 Gabe, mentioned, you know, I
NOTE Confidence: 0.9766067
00:09:21.365 --> 00:09:23.225 wound up getting pretty involved,
NOTE Confidence: 0.99817485
00:09:23.765 --> 00:09:25.865 in health policy type things,
NOTE Confidence: 0.9087534
00:09:27.205 --> 00:09:29.545 for our national professional society.
NOTE Confidence: 0.85789806

00:09:31.280 --> 00:09:31.780 And,
NOTE Confidence: 0.99019605

00:09:32.559 --> 00:09:33.940 I think, you know,
NOTE Confidence: 0.9992561

00:09:34.240 --> 00:09:34.740 the
NOTE Confidence: 0.9802889

00:09:36.240 --> 00:09:38.000 the history major, as you
NOTE Confidence: 0.9802889

00:09:38.000 --> 00:09:39.840 can see, you know, sort
NOTE Confidence: 0.9802889

00:09:39.840 --> 00:09:41.059 of comes back
NOTE Confidence: 0.99673086

00:09:41.520 --> 00:09:43.200 when I'm getting involved in
NOTE Confidence: 0.99673086

00:09:43.200 --> 00:09:44.020 health policy.
NOTE Confidence: 0.998694

00:09:44.960 --> 00:09:46.179 It comes back
NOTE Confidence: 0.976219

00:09:46.735 --> 00:09:48.335 when I got involved in
NOTE Confidence: 0.976219

00:09:48.335 --> 00:09:49.855 an executive course at the
NOTE Confidence: 0.976219

00:09:49.855 --> 00:09:51.295 Kennedy School of Government at
NOTE Confidence: 0.976219

00:09:51.295 --> 00:09:51.795 Harvard.
NOTE Confidence: 0.7331727

00:09:52.415 --> 00:09:52.915 And,
NOTE Confidence: 0.9841976

00:09:54.415 --> 00:09:55.715 in a lot of ways,
NOTE Confidence: 0.8046564

00:09:56.175 --> 00:09:56.675 these,

NOTE Confidence: 0.99983597
00:09:57.535 --> 00:09:58.035 various
NOTE Confidence: 0.98554957
00:09:58.815 --> 00:10:00.035 historical things,
NOTE Confidence: 0.97138494
00:10:01.170 --> 00:10:02.530 whether it was my thesis
NOTE Confidence: 0.97138494
00:10:02.530 --> 00:10:03.030 research,
NOTE Confidence: 0.8169679
00:10:03.490 --> 00:10:03.990 originally,
NOTE Confidence: 0.92098486
00:10:04.450 --> 00:10:04.950 starting,
NOTE Confidence: 0.750109
00:10:05.890 --> 00:10:06.390 here,
NOTE Confidence: 0.979304
00:10:07.010 --> 00:10:09.010 or whether it was my
NOTE Confidence: 0.979304
00:10:09.010 --> 00:10:11.350 laboratory research when I was
NOTE Confidence: 0.979304
00:10:11.490 --> 00:10:12.850 in the lab at the
NOTE Confidence: 0.979304
00:10:12.850 --> 00:10:14.070 University of Minnesota.
NOTE Confidence: 0.77941203
00:10:15.405 --> 00:10:16.225 All of those,
NOTE Confidence: 0.9993431
00:10:19.085 --> 00:10:19.585 experiences
NOTE Confidence: 0.9940016
00:10:20.205 --> 00:10:21.345 and undertakings,
NOTE Confidence: 0.9377175
00:10:22.045 --> 00:10:23.965 you know, really came back
NOTE Confidence: 0.9377175

00:10:23.965 --> 00:10:26.225 and put had important influences

NOTE Confidence: 0.9377175

00:10:26.525 --> 00:10:27.965 on the rest of my

NOTE Confidence: 0.9377175

00:10:27.965 --> 00:10:28.465 career.

NOTE Confidence: 0.95241785

00:10:29.130 --> 00:10:31.230 I, am quite certain I

NOTE Confidence: 0.9923838

00:10:32.330 --> 00:10:33.390 might not have

NOTE Confidence: 0.9825726

00:10:34.250 --> 00:10:35.690 pretty certain I wouldn't have

NOTE Confidence: 0.9825726

00:10:35.690 --> 00:10:37.370 necessarily wound up where I

NOTE Confidence: 0.9825726

00:10:37.370 --> 00:10:39.390 did at Boston Children's Hospital,

NOTE Confidence: 0.9985108

00:10:40.730 --> 00:10:42.490 but I'll explain a little

NOTE Confidence: 0.9985108

00:10:42.490 --> 00:10:43.929 bit more about how that

NOTE Confidence: 0.9985108

00:10:43.929 --> 00:10:45.514 happened in a minute.

NOTE Confidence: 0.9561126

00:10:46.694 --> 00:10:47.975 And all of this has

NOTE Confidence: 0.9561126

00:10:47.975 --> 00:10:49.415 led to what I'm doing

NOTE Confidence: 0.9561126

00:10:49.415 --> 00:10:52.154 now, which is being involved

NOTE Confidence: 0.9561126

00:10:52.295 --> 00:10:53.894 with the teaching in the

NOTE Confidence: 0.9561126

00:10:53.894 --> 00:10:55.654 first year curriculum at Harvard

NOTE Confidence: 0.9561126
00:10:55.654 --> 00:10:56.550 Medical School
NOTE Confidence: 0.7306069
00:10:57.750 --> 00:10:58.410 and also
NOTE Confidence: 0.937409
00:10:58.950 --> 00:11:01.190 involved in an advanced surgical
NOTE Confidence: 0.937409
00:11:01.190 --> 00:11:02.250 anatomy course.
NOTE Confidence: 0.55951464
00:11:03.110 --> 00:11:03.610 And
NOTE Confidence: 0.9693275
00:11:03.990 --> 00:11:06.070 that's the parallel to that
NOTE Confidence: 0.9693275
00:11:06.070 --> 00:11:06.809 is what
NOTE Confidence: 0.9755494
00:11:07.190 --> 00:11:08.870 we've been able to support
NOTE Confidence: 0.9755494
00:11:08.870 --> 00:11:09.370 here
NOTE Confidence: 0.98096323
00:11:09.975 --> 00:11:11.495 over the last few years.
NOTE Confidence: 0.98096323
00:11:11.495 --> 00:11:12.695 I'm told it's a pretty
NOTE Confidence: 0.98096323
00:11:12.695 --> 00:11:13.995 popular course,
NOTE Confidence: 0.9817456
00:11:14.455 --> 00:11:16.214 and even a few of
NOTE Confidence: 0.9817456
00:11:16.214 --> 00:11:18.214 the people who participated here
NOTE Confidence: 0.9817456
00:11:18.214 --> 00:11:20.235 are actually contributing back,
NOTE Confidence: 0.91732013

00:11:20.934 --> 00:11:23.255 as well. Pretty remarkable I
NOTE Confidence: 0.91732013

00:11:23.255 --> 00:11:23.995 would say.
NOTE Confidence: 0.9491132

00:11:25.639 --> 00:11:27.980 So lots of great experiences
NOTE Confidence: 0.9491132

00:11:28.199 --> 00:11:29.880 here. This starting this open
NOTE Confidence: 0.9491132

00:11:29.880 --> 00:11:32.199 heart surgery program at an
NOTE Confidence: 0.9491132

00:11:32.199 --> 00:11:34.139 Air Force Medical Center was
NOTE Confidence: 0.9678647

00:11:34.440 --> 00:11:35.660 among the more,
NOTE Confidence: 0.91491395

00:11:36.360 --> 00:11:38.199 remarkable as I think back
NOTE Confidence: 0.91491395

00:11:38.199 --> 00:11:38.839 on it.
NOTE Confidence: 0.9963696

00:11:39.639 --> 00:11:41.135 Sometimes it's better to be
NOTE Confidence: 0.9963696

00:11:41.135 --> 00:11:42.355 a little impertinent,
NOTE Confidence: 0.93922913

00:11:43.375 --> 00:11:45.135 to get things done, but,
NOTE Confidence: 0.93922913

00:11:45.455 --> 00:11:47.235 that that's really what happened.
NOTE Confidence: 0.98806137

00:11:48.095 --> 00:11:49.455 So let's take this apart
NOTE Confidence: 0.98806137

00:11:49.455 --> 00:11:50.415 a little bit, and let
NOTE Confidence: 0.98806137

00:11:50.415 --> 00:11:51.615 me give you a few

NOTE Confidence: 0.98806137
00:11:51.615 --> 00:11:53.054 vignettes. And I hope this
NOTE Confidence: 0.98806137
00:11:53.054 --> 00:11:54.434 will be at least somewhat
NOTE Confidence: 0.9999465
00:11:54.895 --> 00:11:55.395 demonstrative
NOTE Confidence: 0.9986255
00:11:55.855 --> 00:11:56.355 of
NOTE Confidence: 0.99711066
00:11:56.880 --> 00:11:58.960 how one gets from the
NOTE Confidence: 0.99711066
00:11:58.960 --> 00:11:59.460 starting
NOTE Confidence: 0.9227993
00:12:00.080 --> 00:12:01.380 point. You know, as
NOTE Confidence: 0.9948751
00:12:02.000 --> 00:12:03.220 a high school kid
NOTE Confidence: 0.9303592
00:12:03.600 --> 00:12:04.000 from,
NOTE Confidence: 0.99991524
00:12:04.800 --> 00:12:05.300 Florida
NOTE Confidence: 0.9632507
00:12:05.680 --> 00:12:06.660 coming to Yale,
NOTE Confidence: 0.96044594
00:12:07.840 --> 00:12:09.125 I think my class was
NOTE Confidence: 0.96044594
00:12:09.125 --> 00:12:10.325 either the first or second
NOTE Confidence: 0.96044594
00:12:10.325 --> 00:12:11.365 one where there were more
NOTE Confidence: 0.96044594
00:12:11.365 --> 00:12:12.485 high school kids than there
NOTE Confidence: 0.96044594

00:12:12.485 --> 00:12:13.625 were prep school kids,
NOTE Confidence: 0.9981839

00:12:14.485 --> 00:12:15.684 to give you a little
NOTE Confidence: 0.9981839

00:12:15.684 --> 00:12:17.385 more historical perspective.
NOTE Confidence: 0.8827131

00:12:20.165 --> 00:12:20.665 So
NOTE Confidence: 0.9862783

00:12:21.759 --> 00:12:22.959 I mentioned this,
NOTE Confidence: 0.9281994

00:12:23.440 --> 00:12:25.279 thesis that I wrote actually
NOTE Confidence: 0.9281994

00:12:25.279 --> 00:12:26.880 got published in the analysis
NOTE Confidence: 0.9281994

00:12:26.880 --> 00:12:28.480 of surgery based on those
NOTE Confidence: 0.9281994

00:12:28.480 --> 00:12:30.179 experiments that I had done,
NOTE Confidence: 0.9697645

00:12:30.880 --> 00:12:32.579 in doctor Hammond's lab,
NOTE Confidence: 0.9446502

00:12:33.519 --> 00:12:35.139 which he completely supported.
NOTE Confidence: 0.96809566

00:12:35.675 --> 00:12:37.434 You know, never you know,
NOTE Confidence: 0.96809566

00:12:37.434 --> 00:12:38.795 I guess he had funds
NOTE Confidence: 0.96809566

00:12:38.795 --> 00:12:39.615 that he could,
NOTE Confidence: 0.6795056

00:12:41.514 --> 00:12:41.995 he could,
NOTE Confidence: 0.9300194

00:12:43.115 --> 00:12:44.014 gamble with.

NOTE Confidence: 0.9710416

00:12:44.634 --> 00:12:45.675 And I would say he

NOTE Confidence: 0.9710416

00:12:45.675 --> 00:12:48.014 gambled with me, but, fortunately,

NOTE Confidence: 0.9710416

00:12:48.235 --> 00:12:50.040 this actually worked out. Actually

NOTE Confidence: 0.9710416

00:12:50.040 --> 00:12:50.700 two publications

NOTE Confidence: 0.9675632

00:12:51.080 --> 00:12:52.440 came out of that research

NOTE Confidence: 0.9675632

00:12:52.440 --> 00:12:52.940 work,

NOTE Confidence: 0.9732263

00:12:53.720 --> 00:12:55.080 but that really set the

NOTE Confidence: 0.9732263

00:12:55.080 --> 00:12:56.600 stage for me to wind

NOTE Confidence: 0.9732263

00:12:56.600 --> 00:12:57.720 up at the University of

NOTE Confidence: 0.9732263

00:12:57.720 --> 00:12:59.400 Minnesota. And so the University

NOTE Confidence: 0.9732263

00:12:59.400 --> 00:13:00.700 of Minnesota has

NOTE Confidence: 0.9964784

00:13:01.880 --> 00:13:02.380 historically

NOTE Confidence: 0.99966097

00:13:02.760 --> 00:13:03.260 been

NOTE Confidence: 0.9332247

00:13:03.640 --> 00:13:05.644 a place that has dedicated

NOTE Confidence: 0.9332247

00:13:05.705 --> 00:13:07.485 to training academic surgeons.

NOTE Confidence: 0.995336

00:13:08.105 --> 00:13:09.644 And most of that
NOTE Confidence: 0.9963916

00:13:10.184 --> 00:13:11.485 emphasis and
NOTE Confidence: 0.9979108

00:13:11.945 --> 00:13:12.445 direction
NOTE Confidence: 0.94213635

00:13:12.904 --> 00:13:14.605 was set by doctor Longenstein.
NOTE Confidence: 0.94213635

00:13:14.825 --> 00:13:15.644 Owen Longenstein,
NOTE Confidence: 0.9600083

00:13:17.800 --> 00:13:19.240 who was the chair of
NOTE Confidence: 0.9600083

00:13:19.240 --> 00:13:20.679 the department of surgery there
NOTE Confidence: 0.9600083

00:13:20.679 --> 00:13:22.040 for quite a number of
NOTE Confidence: 0.9600083

00:13:22.040 --> 00:13:23.420 years, thirty four years.
NOTE Confidence: 0.9759746

00:13:25.800 --> 00:13:27.000 Those of you who have
NOTE Confidence: 0.9759746

00:13:27.000 --> 00:13:28.679 ever sent anything to the
NOTE Confidence: 0.9759746

00:13:28.679 --> 00:13:30.440 American College of Surgeons annual
NOTE Confidence: 0.9759746

00:13:30.440 --> 00:13:30.940 meeting,
NOTE Confidence: 0.9005954

00:13:31.365 --> 00:13:32.965 The surgical forum is known
NOTE Confidence: 0.9005954

00:13:32.965 --> 00:13:33.785 as the Wangenstein
NOTE Confidence: 0.890668

00:13:34.325 --> 00:13:35.304 Surgical Forum,

NOTE Confidence: 0.99973744

00:13:36.005 --> 00:13:38.405 in recognition of the fact

NOTE Confidence: 0.99973744

00:13:38.405 --> 00:13:39.945 that he was so

NOTE Confidence: 0.9997495

00:13:40.485 --> 00:13:42.025 interested in having

NOTE Confidence: 0.89460313

00:13:42.405 --> 00:13:42.905 surgeons,

NOTE Confidence: 0.9385123

00:13:44.440 --> 00:13:45.500 be carrying out

NOTE Confidence: 0.9680124

00:13:45.800 --> 00:13:47.340 actually basic research.

NOTE Confidence: 0.93520623

00:13:49.080 --> 00:13:50.040 I put in here a

NOTE Confidence: 0.93520623

00:13:50.040 --> 00:13:52.040 little quote from a forward

NOTE Confidence: 0.93520623

00:13:52.040 --> 00:13:53.400 that he wrote to a

NOTE Confidence: 0.93520623

00:13:53.400 --> 00:13:53.900 book

NOTE Confidence: 0.9172104

00:13:54.840 --> 00:13:56.840 called Congenital Malformations of the

NOTE Confidence: 0.9172104

00:13:56.840 --> 00:13:58.425 Heart which sort of was

NOTE Confidence: 0.9172104

00:13:58.425 --> 00:14:00.425 written by Walt Loaheye and

NOTE Confidence: 0.9172104

00:14:00.425 --> 00:14:01.325 Danny Gore,

NOTE Confidence: 0.999263

00:14:02.345 --> 00:14:02.845 about

NOTE Confidence: 0.96539414

00:14:03.545 --> 00:14:05.485 congenital heart disease, obviously.

NOTE Confidence: 0.9433967

00:14:06.265 --> 00:14:06.765 But,

NOTE Confidence: 0.9819575

00:14:08.425 --> 00:14:09.385 for those of you who

NOTE Confidence: 0.9819575

00:14:09.385 --> 00:14:10.825 don't know this history about

NOTE Confidence: 0.9819575

00:14:10.825 --> 00:14:11.565 heart surgery,

NOTE Confidence: 0.9690803

00:14:12.330 --> 00:14:13.770 you know, the first open

NOTE Confidence: 0.9690803

00:14:13.770 --> 00:14:14.670 heart operations

NOTE Confidence: 0.99028385

00:14:15.610 --> 00:14:17.850 for repair of anything more

NOTE Confidence: 0.99028385

00:14:17.850 --> 00:14:19.850 complicated than an atrial septal

NOTE Confidence: 0.99028385

00:14:19.850 --> 00:14:21.450 defect were carried out at

NOTE Confidence: 0.99028385

00:14:21.450 --> 00:14:22.750 the University of Minnesota.

NOTE Confidence: 0.9984945

00:14:23.530 --> 00:14:24.030 And

NOTE Confidence: 0.997957

00:14:24.410 --> 00:14:25.710 it was the

NOTE Confidence: 0.999686

00:14:26.825 --> 00:14:27.325 emphasis

NOTE Confidence: 0.9813806

00:14:27.945 --> 00:14:29.805 on academics, on research,

NOTE Confidence: 0.9981035

00:14:30.505 --> 00:14:31.005 on

NOTE Confidence: 0.987126
00:14:31.385 --> 00:14:33.225 having experience in the basic
NOTE Confidence: 0.987126
00:14:33.225 --> 00:14:35.385 science labs that were all
NOTE Confidence: 0.987126
00:14:35.385 --> 00:14:35.885 part
NOTE Confidence: 0.9942408
00:14:36.345 --> 00:14:37.945 of the substrate that led
NOTE Confidence: 0.9942408
00:14:37.945 --> 00:14:39.465 to the ability of the
NOTE Confidence: 0.9942408
00:14:39.465 --> 00:14:40.925 group at that time
NOTE Confidence: 0.9631319
00:14:41.459 --> 00:14:43.060 to actually carry out the
NOTE Confidence: 0.9631319
00:14:43.060 --> 00:14:45.000 first successful open heart surgeries.
NOTE Confidence: 0.9631319
00:14:45.060 --> 00:14:45.800 And literally,
NOTE Confidence: 0.99265057
00:14:46.660 --> 00:14:48.500 that opened the door to
NOTE Confidence: 0.99265057
00:14:48.500 --> 00:14:49.959 all of cardiac surgery.
NOTE Confidence: 0.9132078
00:14:50.819 --> 00:14:52.040 There had been a few
NOTE Confidence: 0.9670845
00:14:52.660 --> 00:14:54.420 attempts prior to that in
NOTE Confidence: 0.9670845
00:14:54.420 --> 00:14:55.160 other places,
NOTE Confidence: 0.94803494
00:14:56.845 --> 00:14:58.205 that had sort of started
NOTE Confidence: 0.94803494

00:14:58.205 --> 00:15:00.045 and stopped because the results
NOTE Confidence: 0.94803494

00:15:00.045 --> 00:15:01.025 weren't very good.
NOTE Confidence: 0.9871776

00:15:01.965 --> 00:15:02.465 And
NOTE Confidence: 0.89719653

00:15:03.485 --> 00:15:05.345 with doctor Wongenstein's support,
NOTE Confidence: 0.84242916

00:15:05.965 --> 00:15:07.405 Walt Lulla Hai and Richard
NOTE Confidence: 0.84242916

00:15:07.405 --> 00:15:09.025 Varko were the two,
NOTE Confidence: 0.9809381

00:15:09.485 --> 00:15:11.425 senior surgeons at that point,
NOTE Confidence: 0.9809381

00:15:11.510 --> 00:15:12.950 you know, actually started all
NOTE Confidence: 0.9809381

00:15:12.950 --> 00:15:14.089 of cardiac surgery.
NOTE Confidence: 0.94173586

00:15:14.790 --> 00:15:16.710 And the mission was to
NOTE Confidence: 0.94173586

00:15:16.710 --> 00:15:18.790 train academic surgeons, and that
NOTE Confidence: 0.94173586

00:15:18.790 --> 00:15:20.390 was what attracted me to
NOTE Confidence: 0.94173586

00:15:20.390 --> 00:15:22.390 the program. That's why I
NOTE Confidence: 0.94173586

00:15:22.390 --> 00:15:23.910 went, even though by that
NOTE Confidence: 0.94173586

00:15:23.910 --> 00:15:25.430 time both Doctor. Lojai and
NOTE Confidence: 0.94173586

00:15:25.430 --> 00:15:26.970 Doctor. Wangenstein had

NOTE Confidence: 0.94500303

00:15:27.644 --> 00:15:28.845 moved on, but,

NOTE Confidence: 0.9410019

00:15:29.324 --> 00:15:31.245 doctor Wongenstein was still around

NOTE Confidence: 0.9410019

00:15:31.245 --> 00:15:32.144 actually as

NOTE Confidence: 0.87253857

00:15:32.445 --> 00:15:34.305 a Emeritus professor. But,

NOTE Confidence: 0.97262967

00:15:36.125 --> 00:15:37.565 suffice it to say, the

NOTE Confidence: 0.97262967

00:15:37.565 --> 00:15:39.425 atmosphere that had been created,

NOTE Confidence: 0.99931055

00:15:39.964 --> 00:15:41.805 was really important for training

NOTE Confidence: 0.99931055

00:15:41.805 --> 00:15:42.945 academic surgeons.

NOTE Confidence: 0.9933433

00:15:46.580 --> 00:15:47.860 So how did I get

NOTE Confidence: 0.9933433

00:15:47.860 --> 00:15:49.300 from the University of Minnesota

NOTE Confidence: 0.9933433

00:15:49.300 --> 00:15:51.240 to Boston Children's? Well,

NOTE Confidence: 0.95936954

00:15:52.100 --> 00:15:53.540 back in the lab again.

NOTE Confidence: 0.95936954

00:15:53.780 --> 00:15:55.380 This time, I worked in

NOTE Confidence: 0.95936954

00:15:55.380 --> 00:15:56.680 Ed Humphrey's lab,

NOTE Confidence: 0.9797003

00:15:57.625 --> 00:15:58.605 who was

NOTE Confidence: 0.9620201

00:15:59.225 --> 00:16:00.524 a thoracic surgeon,
NOTE Confidence: 0.97566026

00:16:01.305 --> 00:16:02.745 and who but who had
NOTE Confidence: 0.97566026

00:16:02.745 --> 00:16:04.185 a sort of basic science
NOTE Confidence: 0.97566026

00:16:04.185 --> 00:16:04.685 tilt.
NOTE Confidence: 0.99452096

00:16:05.385 --> 00:16:07.725 And so we were working
NOTE Confidence: 0.99452096

00:16:07.785 --> 00:16:08.285 on
NOTE Confidence: 0.9675229

00:16:08.904 --> 00:16:10.985 pulmonary capillary permeability and the
NOTE Confidence: 0.9675229

00:16:10.985 --> 00:16:12.750 factors that would affect how
NOTE Confidence: 0.9675229

00:16:12.750 --> 00:16:14.770 leaky the pulmonary capillaries were.
NOTE Confidence: 0.97436893

00:16:16.030 --> 00:16:16.530 And
NOTE Confidence: 0.98895586

00:16:17.790 --> 00:16:19.010 as part of that,
NOTE Confidence: 0.99958324

00:16:19.710 --> 00:16:20.450 we also
NOTE Confidence: 0.9959547

00:16:21.550 --> 00:16:23.170 took the whole graduate sequence
NOTE Confidence: 0.9959547

00:16:23.230 --> 00:16:23.970 in physiology.
NOTE Confidence: 0.89413476

00:16:26.125 --> 00:16:28.205 So I took alongside the
NOTE Confidence: 0.89413476

00:16:28.205 --> 00:16:30.145 PhD physiology students.

NOTE Confidence: 0.9832616
00:16:30.845 --> 00:16:32.845 I took renal physiology and
NOTE Confidence: 0.9832616
00:16:32.845 --> 00:16:33.345 cardiovascular
NOTE Confidence: 0.9623833
00:16:34.525 --> 00:16:37.025 and pulmonary and endocrine, and
NOTE Confidence: 0.9869731
00:16:37.890 --> 00:16:39.330 you'll see why that comes
NOTE Confidence: 0.9869731
00:16:39.330 --> 00:16:41.110 back to be, useful,
NOTE Confidence: 0.99909085
00:16:41.730 --> 00:16:43.250 at a subsequent point in
NOTE Confidence: 0.99909085
00:16:43.250 --> 00:16:44.390 a couple of slides.
NOTE Confidence: 0.99880254
00:16:45.650 --> 00:16:46.150 So
NOTE Confidence: 0.96525794
00:16:46.850 --> 00:16:48.930 all of this background here,
NOTE Confidence: 0.96525794
00:16:48.930 --> 00:16:51.250 this background with research that
NOTE Confidence: 0.96525794
00:16:51.250 --> 00:16:52.230 started here,
NOTE Confidence: 0.9830958
00:16:53.755 --> 00:16:56.715 as well as the work
NOTE Confidence: 0.9830958
00:16:56.715 --> 00:16:57.775 that we did,
NOTE Confidence: 0.9520728
00:16:58.235 --> 00:16:59.695 in the research laboratory,
NOTE Confidence: 0.84347814
00:17:00.795 --> 00:17:02.255 Doctor. Humphrey's lab.
NOTE Confidence: 0.9959203

00:17:03.115 --> 00:17:03.615 We
NOTE Confidence: 0.92411786

00:17:04.395 --> 00:17:06.494 brought a new animal model
NOTE Confidence: 0.92411786

00:17:06.555 --> 00:17:07.535 into the lab
NOTE Confidence: 0.9826645

00:17:08.070 --> 00:17:09.269 as a way to study
NOTE Confidence: 0.9826645

00:17:09.269 --> 00:17:10.649 pulmonary capillary permeability.
NOTE Confidence: 0.68791306

00:17:12.070 --> 00:17:12.570 And
NOTE Confidence: 0.91041243

00:17:13.830 --> 00:17:15.350 that led not only to
NOTE Confidence: 0.91041243

00:17:15.350 --> 00:17:18.009 some publications but obviously some
NOTE Confidence: 0.91041243

00:17:18.070 --> 00:17:18.570 reputational
NOTE Confidence: 0.5700112

00:17:20.149 --> 00:17:20.649 benefits
NOTE Confidence: 0.9311298

00:17:21.029 --> 00:17:21.690 as well.
NOTE Confidence: 0.9809605

00:17:22.375 --> 00:17:24.054 And I list here in
NOTE Confidence: 0.9809605

00:17:24.054 --> 00:17:24.875 the middle,
NOTE Confidence: 0.8987269

00:17:26.455 --> 00:17:26.955 box
NOTE Confidence: 0.83424765

00:17:27.815 --> 00:17:28.315 the,
NOTE Confidence: 0.97908556

00:17:29.095 --> 00:17:30.794 people that I worked with.

NOTE Confidence: 0.9714588
00:17:31.494 --> 00:17:31.994 So,
NOTE Confidence: 0.9951067
00:17:32.695 --> 00:17:34.395 in the congenital heart world,
NOTE Confidence: 0.9951067
00:17:34.695 --> 00:17:35.674 doctor Castaneda
NOTE Confidence: 0.9531868
00:17:36.215 --> 00:17:36.600 is,
NOTE Confidence: 0.9959552
00:17:37.160 --> 00:17:38.359 you know, one of the
NOTE Confidence: 0.9959552
00:17:38.359 --> 00:17:38.859 real,
NOTE Confidence: 0.9770786
00:17:40.280 --> 00:17:42.359 pioneers, I guess, particularly for
NOTE Confidence: 0.9770786
00:17:42.359 --> 00:17:43.660 neonatal heart surgery.
NOTE Confidence: 0.78490305
00:17:45.880 --> 00:17:47.580 And I was,
NOTE Confidence: 0.98705375
00:17:48.679 --> 00:17:50.780 exposed to him during my
NOTE Confidence: 0.98705375
00:17:51.000 --> 00:17:53.234 initial years at, the University
NOTE Confidence: 0.98705375
00:17:53.234 --> 00:17:54.515 of Minnesota, and then he
NOTE Confidence: 0.98705375
00:17:54.515 --> 00:17:55.795 left and moved to Boston
NOTE Confidence: 0.98705375
00:17:55.795 --> 00:17:56.295 Children's.
NOTE Confidence: 0.9578701
00:17:57.395 --> 00:17:59.234 And then doctor Barkow, as
NOTE Confidence: 0.9578701

00:17:59.234 --> 00:18:00.675 I mentioned earlier, was one
NOTE Confidence: 0.9578701

00:18:00.675 --> 00:18:01.494 of the first,
NOTE Confidence: 0.9539588

00:18:03.555 --> 00:18:05.494 open heart surgeons at Minnesota.
NOTE Confidence: 0.9617265

00:18:06.160 --> 00:18:07.920 Doctor Lillehei being the one
NOTE Confidence: 0.9617265

00:18:07.920 --> 00:18:09.119 who's got a lot more
NOTE Confidence: 0.9617265

00:18:09.119 --> 00:18:11.300 notoriety, but doctor Varko was
NOTE Confidence: 0.9617265

00:18:11.359 --> 00:18:12.180 really the
NOTE Confidence: 0.99548775

00:18:14.000 --> 00:18:16.160 world class technical surgeon who
NOTE Confidence: 0.99548775

00:18:16.160 --> 00:18:17.920 was involved in making that
NOTE Confidence: 0.99548775

00:18:17.920 --> 00:18:18.420 work.
NOTE Confidence: 0.9464992

00:18:18.865 --> 00:18:20.544 And then doctor Humphrey, but
NOTE Confidence: 0.9464992

00:18:20.544 --> 00:18:22.625 also the last name listed
NOTE Confidence: 0.9464992

00:18:22.625 --> 00:18:24.544 there is doctor Norwood, Bill
NOTE Confidence: 0.9464992

00:18:24.544 --> 00:18:25.044 Norwood.
NOTE Confidence: 0.95384645

00:18:25.424 --> 00:18:26.404 So Bill Norwood,
NOTE Confidence: 0.97533625

00:18:26.945 --> 00:18:28.565 who's now famous

NOTE Confidence: 0.9644402
00:18:28.865 --> 00:18:29.765 as a
NOTE Confidence: 0.9572437
00:18:30.625 --> 00:18:31.684 no longer alive,
NOTE Confidence: 0.88928634
00:18:32.029 --> 00:18:33.630 unfortunately, but neither he nor
NOTE Confidence: 0.88928634
00:18:33.630 --> 00:18:35.649 doctor Kastenade are alive. But
NOTE Confidence: 0.88928634
00:18:35.710 --> 00:18:36.529 doctor Lloyd's
NOTE Confidence: 0.99418193
00:18:37.309 --> 00:18:39.309 famous for having devised an
NOTE Confidence: 0.99418193
00:18:39.309 --> 00:18:40.690 operation for an otherwise
NOTE Confidence: 0.98309064
00:18:41.070 --> 00:18:42.909 hundred percent fatal lesion called
NOTE Confidence: 0.98309064
00:18:42.909 --> 00:18:43.409 hypoplastic
NOTE Confidence: 0.99466944
00:18:43.710 --> 00:18:44.450 left heart.
NOTE Confidence: 0.98366344
00:18:45.154 --> 00:18:46.595 So Bill was my senior
NOTE Confidence: 0.98366344
00:18:46.595 --> 00:18:47.635 resident when I was a
NOTE Confidence: 0.98366344
00:18:47.635 --> 00:18:49.794 junior resident, and so we
NOTE Confidence: 0.98366344
00:18:49.794 --> 00:18:51.414 had kept in touch.
NOTE Confidence: 0.9893159
00:18:52.115 --> 00:18:53.875 And so as I was
NOTE Confidence: 0.9893159

00:18:53.875 --> 00:18:55.255 coming out of the military
NOTE Confidence: 0.9893159

00:18:55.475 --> 00:18:56.994 and looking for a job
NOTE Confidence: 0.9893159

00:18:56.994 --> 00:18:57.494 and,
NOTE Confidence: 0.9667503

00:18:58.100 --> 00:18:59.300 you know, had written to
NOTE Confidence: 0.9667503

00:18:59.300 --> 00:18:59.800 Bill,
NOTE Confidence: 0.9682906

00:19:00.340 --> 00:19:01.380 because he at that time,
NOTE Confidence: 0.9682906

00:19:01.380 --> 00:19:02.119 he was
NOTE Confidence: 0.98012596

00:19:02.580 --> 00:19:04.100 at Boston Children's along with
NOTE Confidence: 0.98012596

00:19:04.100 --> 00:19:04.920 doctor Castaneda.
NOTE Confidence: 0.9976017

00:19:05.940 --> 00:19:06.440 And
NOTE Confidence: 0.93925965

00:19:08.500 --> 00:19:09.780 one day, I was sitting
NOTE Confidence: 0.93925965

00:19:09.780 --> 00:19:11.400 in my little air force
NOTE Confidence: 0.9159326

00:19:11.859 --> 00:19:12.840 medical office,
NOTE Confidence: 0.99317646

00:19:14.465 --> 00:19:15.585 And I got a call
NOTE Confidence: 0.99317646

00:19:15.585 --> 00:19:17.185 in the morning from doctor
NOTE Confidence: 0.99317646

00:19:17.185 --> 00:19:18.325 Norwood saying

NOTE Confidence: 0.95872694
00:19:19.425 --> 00:19:20.545 he was taking the job
NOTE Confidence: 0.95872694
00:19:20.545 --> 00:19:21.825 at the Children's Hospital of
NOTE Confidence: 0.95872694
00:19:21.825 --> 00:19:22.325 Philadelphia
NOTE Confidence: 0.9476183
00:19:25.105 --> 00:19:26.225 and was I interested in
NOTE Confidence: 0.9476183
00:19:26.225 --> 00:19:27.265 coming with him as his
NOTE Confidence: 0.9476183
00:19:27.265 --> 00:19:28.085 first fellow.
NOTE Confidence: 0.98973066
00:19:29.050 --> 00:19:30.490 And that afternoon, I got
NOTE Confidence: 0.98973066
00:19:30.490 --> 00:19:32.030 a call from doctor Castaneda
NOTE Confidence: 0.7717007
00:19:32.490 --> 00:19:32.990 saying,
NOTE Confidence: 0.95645314
00:19:33.770 --> 00:19:35.550 Bill's leaving to for Philadelphia.
NOTE Confidence: 0.95645314
00:19:35.770 --> 00:19:37.130 Are you interested in looking
NOTE Confidence: 0.95645314
00:19:37.130 --> 00:19:37.630 at
NOTE Confidence: 0.91500634
00:19:38.330 --> 00:19:40.270 considering a junior faculty job?
NOTE Confidence: 0.96735746
00:19:40.730 --> 00:19:41.770 So that's one of those
NOTE Confidence: 0.96735746
00:19:41.770 --> 00:19:43.405 days that's in the diary.
NOTE Confidence: 0.96735746

00:19:43.405 --> 00:19:44.605 Right? You know, you don't

NOTE Confidence: 0.96735746

00:19:44.605 --> 00:19:46.145 forget that kind of day.

NOTE Confidence: 0.99380875

00:19:47.165 --> 00:19:48.305 And so I

NOTE Confidence: 0.9677893

00:19:49.645 --> 00:19:51.244 looked at both positions. I

NOTE Confidence: 0.9677893

00:19:51.244 --> 00:19:52.365 thought the one in Boston

NOTE Confidence: 0.9677893

00:19:52.365 --> 00:19:53.585 was a little more secure

NOTE Confidence: 0.9677893

00:19:53.645 --> 00:19:54.845 because I wasn't going as

NOTE Confidence: 0.9677893

00:19:54.845 --> 00:19:56.125 a trainee. I was actually

NOTE Confidence: 0.9677893

00:19:56.125 --> 00:19:57.665 going on the faculty, and

NOTE Confidence: 0.99382323

00:19:58.580 --> 00:19:59.700 as they say, the rest

NOTE Confidence: 0.99382323

00:19:59.700 --> 00:20:01.240 is history. But

NOTE Confidence: 0.9676097

00:20:02.660 --> 00:20:03.640 doctor Castaneda,

NOTE Confidence: 0.9996008

00:20:04.340 --> 00:20:06.020 you know, had worked very

NOTE Confidence: 0.9996008

00:20:06.020 --> 00:20:06.520 closely

NOTE Confidence: 0.99964166

00:20:07.140 --> 00:20:07.640 with

NOTE Confidence: 0.8310945

00:20:07.940 --> 00:20:08.840 doctor Varco

NOTE Confidence: 0.98495483
00:20:09.300 --> 00:20:10.820 and doctor Humphrey when he
NOTE Confidence: 0.98495483
00:20:10.820 --> 00:20:12.420 was a junior faculty person
NOTE Confidence: 0.98495483
00:20:12.420 --> 00:20:13.160 at Minnesota.
NOTE Confidence: 0.99690205
00:20:13.595 --> 00:20:14.715 And so you can see
NOTE Confidence: 0.99690205
00:20:14.715 --> 00:20:15.695 how these connections
NOTE Confidence: 0.9988779
00:20:16.075 --> 00:20:17.535 all really make a difference.
NOTE Confidence: 0.9866689
00:20:22.155 --> 00:20:23.455 So let's change gears.
NOTE Confidence: 0.9733439
00:20:24.155 --> 00:20:25.935 So I'm here at Boston
NOTE Confidence: 0.9733439
00:20:25.994 --> 00:20:26.494 Children's,
NOTE Confidence: 0.98938036
00:20:27.289 --> 00:20:28.890 and I'm a junior faculty
NOTE Confidence: 0.98938036
00:20:28.890 --> 00:20:30.669 person. And in those days,
NOTE Confidence: 0.99950767
00:20:31.289 --> 00:20:32.109 we had
NOTE Confidence: 0.9764987
00:20:33.130 --> 00:20:33.869 to literally
NOTE Confidence: 0.9982463
00:20:34.570 --> 00:20:35.070 sign
NOTE Confidence: 0.99984217
00:20:35.369 --> 00:20:36.109 a form
NOTE Confidence: 0.99787265

00:20:38.090 --> 00:20:39.450 in order to submit a
NOTE Confidence: 0.99787265

00:20:39.450 --> 00:20:39.950 bill
NOTE Confidence: 0.9880628

00:20:40.635 --> 00:20:42.715 for the surgical services to
NOTE Confidence: 0.9880628

00:20:42.715 --> 00:20:43.855 get approved.
NOTE Confidence: 0.9788489

00:20:44.635 --> 00:20:46.335 And we had somebody who,
NOTE Confidence: 0.9788489

00:20:46.475 --> 00:20:48.395 in retrospect, was probably not
NOTE Confidence: 0.9788489

00:20:48.395 --> 00:20:48.895 very
NOTE Confidence: 0.9862155

00:20:49.515 --> 00:20:52.315 well informed or educated about
NOTE Confidence: 0.9862155

00:20:52.315 --> 00:20:53.455 this whole process.
NOTE Confidence: 0.98200345

00:20:54.555 --> 00:20:55.055 And,
NOTE Confidence: 0.99841344

00:20:56.380 --> 00:20:57.740 you know, I looked one
NOTE Confidence: 0.99841344

00:20:57.740 --> 00:20:59.419 morning when I was signing
NOTE Confidence: 0.99841344

00:20:59.419 --> 00:20:59.919 my
NOTE Confidence: 0.9183394

00:21:00.780 --> 00:21:02.460 so called HCFA, health care
NOTE Confidence: 0.9183394

00:21:02.460 --> 00:21:04.460 finance administration fifteen hundred. That's
NOTE Confidence: 0.9183394

00:21:04.460 --> 00:21:05.919 what the form was called.

NOTE Confidence: 0.9183394

00:21:06.140 --> 00:21:08.000 HCFA fifteen hundred form.

NOTE Confidence: 0.9936254

00:21:08.685 --> 00:21:09.565 And I said, well, that's

NOTE Confidence: 0.9936254

00:21:09.565 --> 00:21:10.625 not what I did.

NOTE Confidence: 0.9893405

00:21:11.005 --> 00:21:11.825 And so then

NOTE Confidence: 0.9075626

00:21:12.205 --> 00:21:13.745 I started self educating.

NOTE Confidence: 0.990642

00:21:14.125 --> 00:21:15.185 And so I

NOTE Confidence: 0.99936855

00:21:15.725 --> 00:21:16.625 got a

NOTE Confidence: 0.9996909

00:21:16.925 --> 00:21:17.425 book

NOTE Confidence: 0.9505247

00:21:17.965 --> 00:21:19.565 that's called published by the

NOTE Confidence: 0.9505247

00:21:19.565 --> 00:21:21.745 AMA called Current Procedural Terminology,

NOTE Confidence: 0.9822275

00:21:22.445 --> 00:21:24.170 CPT book. Right?

NOTE Confidence: 0.9987357

00:21:24.470 --> 00:21:24.970 CPT.

NOTE Confidence: 0.971206

00:21:25.430 --> 00:21:26.310 So I look in the

NOTE Confidence: 0.971206

00:21:26.310 --> 00:21:26.810 book,

NOTE Confidence: 0.9794041

00:21:27.670 --> 00:21:29.430 and I start learning about

NOTE Confidence: 0.9794041

00:21:29.430 --> 00:21:30.790 the codes and all that
NOTE Confidence: 0.9794041

00:21:30.790 --> 00:21:31.670 stuff. Then I have to
NOTE Confidence: 0.9794041

00:21:31.670 --> 00:21:33.350 learn about the diagnosis side,
NOTE Confidence: 0.9794041

00:21:33.350 --> 00:21:35.110 which was the ICD nine
NOTE Confidence: 0.9794041

00:21:35.110 --> 00:21:35.610 codes.
NOTE Confidence: 0.998095

00:21:36.150 --> 00:21:36.650 And
NOTE Confidence: 0.99848425

00:21:37.515 --> 00:21:38.015 after,
NOTE Confidence: 0.99650383

00:21:38.315 --> 00:21:39.675 you know, fooling around with
NOTE Confidence: 0.99650383

00:21:39.675 --> 00:21:40.875 that for a few months,
NOTE Confidence: 0.99650383

00:21:40.875 --> 00:21:42.635 I decided, well, you know,
NOTE Confidence: 0.99650383

00:21:42.635 --> 00:21:43.755 I should just take this
NOTE Confidence: 0.99650383

00:21:43.755 --> 00:21:44.255 over.
NOTE Confidence: 0.9997329

00:21:44.795 --> 00:21:45.295 So
NOTE Confidence: 0.9740461

00:21:45.755 --> 00:21:47.435 for our little practice, there
NOTE Confidence: 0.9740461

00:21:47.435 --> 00:21:48.395 were only three of us
NOTE Confidence: 0.9740461

00:21:48.395 --> 00:21:49.295 at that time,

NOTE Confidence: 0.9979506

00:21:51.109 --> 00:21:52.470 I did all the coding

NOTE Confidence: 0.9979506

00:21:52.470 --> 00:21:53.210 and billing.

NOTE Confidence: 0.94906

00:21:54.310 --> 00:21:56.470 And so one Saturday morning,

NOTE Confidence: 0.94906

00:21:56.470 --> 00:21:57.350 I used to do this

NOTE Confidence: 0.94906

00:21:57.350 --> 00:21:59.290 every Saturday right after mortality

NOTE Confidence: 0.94906

00:21:59.350 --> 00:22:01.670 morbidity conference, so I it's

NOTE Confidence: 0.94906

00:22:01.670 --> 00:22:02.710 all fresh in my mind.

NOTE Confidence: 0.94906

00:22:02.710 --> 00:22:03.590 I could code all the

NOTE Confidence: 0.94906

00:22:03.590 --> 00:22:04.410 cases, and

NOTE Confidence: 0.96649265

00:22:05.174 --> 00:22:06.455 numbers stuck with me pretty

NOTE Confidence: 0.96649265

00:22:06.455 --> 00:22:07.355 easily. So

NOTE Confidence: 0.91073245

00:22:07.815 --> 00:22:09.174 one Saturday morning, I sat

NOTE Confidence: 0.91073245

00:22:09.174 --> 00:22:10.855 down and to do the

NOTE Confidence: 0.91073245

00:22:10.855 --> 00:22:11.355 coding,

NOTE Confidence: 0.9624403

00:22:12.294 --> 00:22:13.414 half the cases we had

NOTE Confidence: 0.9624403

00:22:13.414 --> 00:22:14.855 done that week, there wasn't
NOTE Confidence: 0.9624403

00:22:14.855 --> 00:22:15.894 a code for. I was
NOTE Confidence: 0.9624403

00:22:15.894 --> 00:22:17.654 having issues pointed into something
NOTE Confidence: 0.9624403

00:22:17.654 --> 00:22:18.154 else.
NOTE Confidence: 0.9942856

00:22:18.649 --> 00:22:20.090 So this is, you know,
NOTE Confidence: 0.9942856

00:22:20.090 --> 00:22:21.769 pretty mundane stuff and, you
NOTE Confidence: 0.9942856

00:22:21.769 --> 00:22:22.509 know, whatever.
NOTE Confidence: 0.9800412

00:22:23.130 --> 00:22:24.889 So I was in a
NOTE Confidence: 0.9800412

00:22:24.889 --> 00:22:26.009 little bit of a fit
NOTE Confidence: 0.9800412

00:22:26.009 --> 00:22:27.210 of peak. I wrote a
NOTE Confidence: 0.9800412

00:22:27.210 --> 00:22:28.669 letter to this AMA,
NOTE Confidence: 0.98051745

00:22:28.970 --> 00:22:29.869 and I said,
NOTE Confidence: 0.999395

00:22:30.490 --> 00:22:31.950 there's nothing in your book
NOTE Confidence: 0.999395

00:22:32.090 --> 00:22:33.869 that describes what we're doing.
NOTE Confidence: 0.95460206

00:22:34.845 --> 00:22:36.045 So they got a polite
NOTE Confidence: 0.95460206

00:22:36.045 --> 00:22:37.405 letter back, you know, a

NOTE Confidence: 0.95460206

00:22:37.405 --> 00:22:38.145 week later.

NOTE Confidence: 0.88272977

00:22:38.684 --> 00:22:39.085 And,

NOTE Confidence: 0.97606695

00:22:40.605 --> 00:22:41.885 they said, well, usually that's

NOTE Confidence: 0.97606695

00:22:41.885 --> 00:22:43.744 handled through your professional society.

NOTE Confidence: 0.97606695

00:22:43.804 --> 00:22:45.325 So, you know, the chairman

NOTE Confidence: 0.97606695

00:22:45.325 --> 00:22:47.345 of that group for your

NOTE Confidence: 0.9081311

00:22:47.680 --> 00:22:49.440 National Professional Society called the

NOTE Confidence: 0.9081311

00:22:49.440 --> 00:22:51.140 Society of Thoracic Surgeons is

NOTE Confidence: 0.9737499

00:22:52.800 --> 00:22:53.619 doctor Levitsky.

NOTE Confidence: 0.9965668

00:22:54.240 --> 00:22:56.100 Doctor Levitsky was at

NOTE Confidence: 0.8994811

00:22:56.720 --> 00:22:58.480 the Beth Israel Deaconess two

NOTE Confidence: 0.8994811

00:22:58.480 --> 00:22:59.859 blocks away from me.

NOTE Confidence: 0.99208814

00:23:01.664 --> 00:23:03.105 Next thing I know, I'm

NOTE Confidence: 0.99208814

00:23:03.105 --> 00:23:03.605 rewriting

NOTE Confidence: 0.9572059

00:23:04.304 --> 00:23:05.905 the congenital codes for the

NOTE Confidence: 0.9572059

00:23:05.905 --> 00:23:06.885 CPT book,
NOTE Confidence: 0.96031106

00:23:07.744 --> 00:23:08.244 and
NOTE Confidence: 0.977422

00:23:08.625 --> 00:23:09.825 that all got through and
NOTE Confidence: 0.977422

00:23:09.825 --> 00:23:11.365 was approved and everything.
NOTE Confidence: 0.98940307

00:23:11.825 --> 00:23:13.205 And about this time,
NOTE Confidence: 0.9890662

00:23:15.020 --> 00:23:17.100 two big contextual things are
NOTE Confidence: 0.9890662

00:23:17.100 --> 00:23:17.600 important.
NOTE Confidence: 0.99755824

00:23:18.059 --> 00:23:18.559 One,
NOTE Confidence: 0.9992594

00:23:19.980 --> 00:23:21.280 we had a
NOTE Confidence: 0.9903338

00:23:21.980 --> 00:23:24.059 Medicare reimbursement system that was
NOTE Confidence: 0.9903338

00:23:24.059 --> 00:23:26.140 a pretty significant departure from
NOTE Confidence: 0.9903338

00:23:26.140 --> 00:23:27.520 what it had been before.
NOTE Confidence: 0.9983204

00:23:28.945 --> 00:23:30.164 So there was legislation
NOTE Confidence: 0.885554

00:23:31.184 --> 00:23:32.404 nineteen eighty nine
NOTE Confidence: 0.89153594

00:23:32.784 --> 00:23:34.384 that established something called the
NOTE Confidence: 0.89153594

00:23:34.384 --> 00:23:36.384 Resource Based Relative Value Scale,

NOTE Confidence: 0.89153594
00:23:36.384 --> 00:23:36.884 RBRBS.
NOTE Confidence: 0.99390864
00:23:37.904 --> 00:23:38.404 RBRBS
NOTE Confidence: 0.9978089
00:23:40.820 --> 00:23:41.320 became
NOTE Confidence: 0.9999167
00:23:41.700 --> 00:23:42.359 a whole
NOTE Confidence: 0.9645956
00:23:43.060 --> 00:23:44.680 industry unto itself.
NOTE Confidence: 0.99664986
00:23:45.140 --> 00:23:45.720 The AMA
NOTE Confidence: 0.9646111
00:23:46.500 --> 00:23:48.280 got into it and formed
NOTE Confidence: 0.9646111
00:23:48.340 --> 00:23:49.720 actually a committee
NOTE Confidence: 0.9774944
00:23:50.420 --> 00:23:51.960 that would consider
NOTE Confidence: 0.9986145
00:23:52.420 --> 00:23:54.180 codes and how they were
NOTE Confidence: 0.9986145
00:23:54.180 --> 00:23:54.680 valued
NOTE Confidence: 0.9996402
00:23:55.234 --> 00:23:55.975 so that
NOTE Confidence: 0.9600145
00:23:56.435 --> 00:23:56.935 then
NOTE Confidence: 0.99717367
00:23:57.315 --> 00:23:59.095 you would that would determine
NOTE Confidence: 0.99717367
00:23:59.155 --> 00:24:01.095 what the Medicare reimbursement was.
NOTE Confidence: 0.99717367

00:24:01.315 --> 00:24:02.215 And the important
NOTE Confidence: 0.98918957

00:24:02.595 --> 00:24:04.115 detail here is even though
NOTE Confidence: 0.98918957

00:24:04.115 --> 00:24:05.075 we weren't taking care of
NOTE Confidence: 0.98918957

00:24:05.075 --> 00:24:05.975 Medicare patients,
NOTE Confidence: 0.99358845

00:24:06.755 --> 00:24:08.195 about seventy or seventy five
NOTE Confidence: 0.99358845

00:24:08.195 --> 00:24:09.175 percent of the
NOTE Confidence: 0.95665765

00:24:09.619 --> 00:24:11.400 reimbursement by private payers
NOTE Confidence: 0.98216903

00:24:12.580 --> 00:24:14.040 was based on that RBRBS.
NOTE Confidence: 0.9930872

00:24:14.900 --> 00:24:15.400 Okay.
NOTE Confidence: 0.9899955

00:24:16.180 --> 00:24:17.380 So at the same time,
NOTE Confidence: 0.9899955

00:24:17.380 --> 00:24:18.119 we have
NOTE Confidence: 0.9818165

00:24:18.820 --> 00:24:21.380 the first or one of
NOTE Confidence: 0.9818165

00:24:21.380 --> 00:24:21.880 the
NOTE Confidence: 0.9965091

00:24:22.425 --> 00:24:24.605 more recent attempts at establishing
NOTE Confidence: 0.9261861

00:24:25.465 --> 00:24:27.005 single payer health care
NOTE Confidence: 0.8336142

00:24:27.785 --> 00:24:30.045 was affectionately or not affectionately

NOTE Confidence: 0.8336142

00:24:30.185 --> 00:24:31.565 known as Hillary Care.

NOTE Confidence: 0.96909726

00:24:33.225 --> 00:24:33.725 And,

NOTE Confidence: 0.99923134

00:24:34.309 --> 00:24:34.970 you know,

NOTE Confidence: 0.9633745

00:24:36.070 --> 00:24:37.290 I I sort of was

NOTE Confidence: 0.979704

00:24:37.750 --> 00:24:39.750 thinking about that, seeing how

NOTE Confidence: 0.979704

00:24:39.750 --> 00:24:41.290 that was playing out.

NOTE Confidence: 0.94386774

00:24:42.230 --> 00:24:43.109 Got a copy of the

NOTE Confidence: 0.94386774

00:24:43.109 --> 00:24:44.869 federal register, which is where

NOTE Confidence: 0.94386774

00:24:44.869 --> 00:24:46.549 they publish all of these

NOTE Confidence: 0.94386774

00:24:46.549 --> 00:24:47.929 r b relative values.

NOTE Confidence: 0.99305236

00:24:48.765 --> 00:24:49.965 None of the congenital codes

NOTE Confidence: 0.99305236

00:24:49.965 --> 00:24:51.725 had any relative values. Nobody

NOTE Confidence: 0.99305236

00:24:51.725 --> 00:24:53.565 had bothered because Medicare wasn't

NOTE Confidence: 0.99305236

00:24:53.565 --> 00:24:55.405 gonna pay for it. But

NOTE Confidence: 0.99305236

00:24:55.405 --> 00:24:56.525 if we went to single

NOTE Confidence: 0.99305236

00:24:56.525 --> 00:24:57.025 payer,
NOTE Confidence: 0.9912006

00:24:58.205 --> 00:24:59.165 we were gonna have to
NOTE Confidence: 0.9912006

00:24:59.165 --> 00:25:01.244 have values. So then it
NOTE Confidence: 0.9912006

00:25:01.244 --> 00:25:01.565 was
NOTE Confidence: 0.9391645

00:25:02.600 --> 00:25:04.540 we'll we'll figure that out.
NOTE Confidence: 0.9391645

00:25:04.600 --> 00:25:06.700 So we organized this study,
NOTE Confidence: 0.99716055

00:25:07.400 --> 00:25:07.900 got
NOTE Confidence: 0.9988771

00:25:09.080 --> 00:25:11.080 fifty congenital heart surgeons around
NOTE Confidence: 0.9988771

00:25:11.080 --> 00:25:12.040 the country to fill out
NOTE Confidence: 0.9988771

00:25:12.040 --> 00:25:13.180 surveys about
NOTE Confidence: 0.9741062

00:25:13.640 --> 00:25:14.680 how hard it is to
NOTE Confidence: 0.9741062

00:25:14.680 --> 00:25:16.815 do an ASD repair versus
NOTE Confidence: 0.9741062

00:25:16.975 --> 00:25:19.234 an aortic valve repair versus
NOTE Confidence: 0.9741062

00:25:19.534 --> 00:25:21.715 an arterial switch operation, whatever.
NOTE Confidence: 0.99862367

00:25:22.575 --> 00:25:23.534 And we got it all
NOTE Confidence: 0.99862367

00:25:23.534 --> 00:25:24.034 through

NOTE Confidence: 0.9675096

00:25:24.734 --> 00:25:26.835 this relative value update committee.

NOTE Confidence: 0.95541596

00:25:27.774 --> 00:25:29.455 So little funny stories in

NOTE Confidence: 0.95541596

00:25:29.455 --> 00:25:31.190 there as well about, you

NOTE Confidence: 0.95541596

00:25:31.190 --> 00:25:32.390 know, I was I went

NOTE Confidence: 0.95541596

00:25:32.390 --> 00:25:34.410 in with eighty codes that

NOTE Confidence: 0.95541596

00:25:34.470 --> 00:25:36.309 the this relative value update

NOTE Confidence: 0.95541596

00:25:36.309 --> 00:25:37.910 committee had to evaluate and

NOTE Confidence: 0.95541596

00:25:37.910 --> 00:25:39.109 decide whether or not they

NOTE Confidence: 0.95541596

00:25:39.109 --> 00:25:39.190 were

NOTE Confidence: 0.94785136

00:25:39.910 --> 00:25:41.510 and the staff person who

NOTE Confidence: 0.94785136

00:25:41.510 --> 00:25:43.609 was helping us with this

NOTE Confidence: 0.92184335

00:25:44.950 --> 00:25:45.450 said,

NOTE Confidence: 0.96167034

00:25:46.904 --> 00:25:47.865 we'll see you in a

NOTE Confidence: 0.96167034

00:25:47.865 --> 00:25:49.325 day or two because

NOTE Confidence: 0.97130567

00:25:49.865 --> 00:25:51.304 it takes forever even to

NOTE Confidence: 0.97130567

00:25:51.304 --> 00:25:53.005 get one code considered, and
NOTE Confidence: 0.94687444

00:25:53.384 --> 00:25:54.264 we were in and out
NOTE Confidence: 0.94687444

00:25:54.264 --> 00:25:55.325 in fifteen minutes.
NOTE Confidence: 0.99822336

00:25:56.184 --> 00:25:56.684 So
NOTE Confidence: 0.9572423

00:25:58.340 --> 00:26:00.020 why was that? Well, number
NOTE Confidence: 0.9572423

00:26:00.020 --> 00:26:00.520 one,
NOTE Confidence: 0.9915323

00:26:01.140 --> 00:26:02.420 we weren't gonna impact the
NOTE Confidence: 0.9915323

00:26:02.420 --> 00:26:02.920 Medicare
NOTE Confidence: 0.8764069

00:26:03.300 --> 00:26:03.800 budget,
NOTE Confidence: 0.99926573

00:26:04.260 --> 00:26:04.760 so
NOTE Confidence: 0.9997708

00:26:05.220 --> 00:26:06.840 nobody was worried about
NOTE Confidence: 0.9960842

00:26:07.220 --> 00:26:08.500 us taking dollars out of
NOTE Confidence: 0.9960842

00:26:08.500 --> 00:26:09.720 somebody else's pocket.
NOTE Confidence: 0.9734607

00:26:11.054 --> 00:26:12.654 And the second thing was
NOTE Confidence: 0.9734607

00:26:12.654 --> 00:26:14.174 that, actually, all the surveys
NOTE Confidence: 0.9734607

00:26:14.174 --> 00:26:15.375 had really worked out pretty

NOTE Confidence: 0.9734607
00:26:15.375 --> 00:26:16.895 well. We had pretty tight
NOTE Confidence: 0.9734607
00:26:16.895 --> 00:26:17.395 data.
NOTE Confidence: 0.98114824
00:26:18.015 --> 00:26:19.135 And all of a sudden,
NOTE Confidence: 0.98114824
00:26:19.135 --> 00:26:20.914 I was, you know, the
NOTE Confidence: 0.9997077
00:26:21.534 --> 00:26:22.515 local expert
NOTE Confidence: 0.98089546
00:26:22.880 --> 00:26:24.640 on this relative value update
NOTE Confidence: 0.98089546
00:26:24.640 --> 00:26:26.800 committee, which then led to
NOTE Confidence: 0.98089546
00:26:26.800 --> 00:26:28.480 me assuming that role for
NOTE Confidence: 0.98089546
00:26:28.480 --> 00:26:30.720 the entire STS. So all
NOTE Confidence: 0.98089546
00:26:30.720 --> 00:26:32.340 the adult cardiac and thoracic
NOTE Confidence: 0.98089546
00:26:32.400 --> 00:26:33.840 surgeons as well as the
NOTE Confidence: 0.98089546
00:26:33.840 --> 00:26:34.340 congenital
NOTE Confidence: 0.8468497
00:26:35.215 --> 00:26:35.715 surgeons.
NOTE Confidence: 0.9790251
00:26:36.815 --> 00:26:37.775 You know, and so I
NOTE Confidence: 0.9790251
00:26:37.775 --> 00:26:39.455 represented the STS for ten
NOTE Confidence: 0.9790251

00:26:39.455 --> 00:26:40.975 years at that relative value
NOTE Confidence: 0.9790251

00:26:40.975 --> 00:26:41.795 update committee.
NOTE Confidence: 0.99855775

00:26:42.815 --> 00:26:43.315 So
NOTE Confidence: 0.9542141

00:26:44.255 --> 00:26:45.715 this is sort of interesting.
NOTE Confidence: 0.9542141

00:26:45.775 --> 00:26:47.295 Right? I think as I
NOTE Confidence: 0.9542141

00:26:47.295 --> 00:26:48.655 reflect on this, you know,
NOTE Confidence: 0.9542141

00:26:48.655 --> 00:26:50.279 you have a problem. You
NOTE Confidence: 0.9542141

00:26:50.279 --> 00:26:51.340 recognize it.
NOTE Confidence: 0.9699041

00:26:53.000 --> 00:26:54.779 You start learning about it.
NOTE Confidence: 0.8973179

00:26:55.159 --> 00:26:55.899 New discipline.
NOTE Confidence: 0.89404756

00:26:56.519 --> 00:26:58.039 New nuts you know, things
NOTE Confidence: 0.89404756

00:26:58.039 --> 00:26:58.779 I'd never
NOTE Confidence: 0.9866848

00:26:59.399 --> 00:27:01.100 had any idea about before.
NOTE Confidence: 0.9980539

00:27:01.799 --> 00:27:02.299 And
NOTE Confidence: 0.96056414

00:27:03.685 --> 00:27:05.465 we actually devised a solution,
NOTE Confidence: 0.96056414

00:27:05.765 --> 00:27:06.665 and it worked.

NOTE Confidence: 0.9665426

00:27:07.605 --> 00:27:08.105 And,

NOTE Confidence: 0.9770544

00:27:08.725 --> 00:27:09.685 you know, a lot of

NOTE Confidence: 0.9770544

00:27:09.685 --> 00:27:11.225 those values that we established,

NOTE Confidence: 0.9770544

00:27:11.445 --> 00:27:12.965 you know, twenty plus years

NOTE Confidence: 0.9770544

00:27:12.965 --> 00:27:13.925 ago are the ones that

NOTE Confidence: 0.9770544

00:27:13.925 --> 00:27:15.125 are still in the book,

NOTE Confidence: 0.9770544

00:27:15.365 --> 00:27:17.225 and are guiding and governing

NOTE Confidence: 0.9770544

00:27:17.285 --> 00:27:17.785 reimbursable.

NOTE Confidence: 0.99607134

00:27:21.260 --> 00:27:21.760 So

NOTE Confidence: 0.95717037

00:27:22.619 --> 00:27:24.060 you know that led me

NOTE Confidence: 0.95717037

00:27:24.060 --> 00:27:26.080 into this whole other realm

NOTE Confidence: 0.95717037

00:27:26.140 --> 00:27:27.980 at the National Professional Society

NOTE Confidence: 0.95717037

00:27:27.980 --> 00:27:29.820 level, which is having to

NOTE Confidence: 0.95717037

00:27:29.820 --> 00:27:31.340 do with health policy in

NOTE Confidence: 0.95717037

00:27:31.340 --> 00:27:31.840 reimbursement

NOTE Confidence: 0.94838667

00:27:32.300 --> 00:27:32.800 issues.
NOTE Confidence: 0.9312215

00:27:34.505 --> 00:27:36.365 And, you know, so here,
NOTE Confidence: 0.987715

00:27:36.984 --> 00:27:38.445 I'm gonna come back and
NOTE Confidence: 0.987715

00:27:38.585 --> 00:27:40.265 sort of cite my history
NOTE Confidence: 0.987715

00:27:40.265 --> 00:27:42.025 major experience that gave me
NOTE Confidence: 0.987715

00:27:42.025 --> 00:27:43.304 the perspective to be able
NOTE Confidence: 0.987715

00:27:43.304 --> 00:27:44.125 to do that.
NOTE Confidence: 0.8951325

00:27:44.744 --> 00:27:46.905 And the experience, obviously, is
NOTE Confidence: 0.8951325

00:27:46.905 --> 00:27:47.484 a representative
NOTE Confidence: 0.9672493

00:27:47.940 --> 00:27:49.559 to the for the society
NOTE Confidence: 0.9672493

00:27:49.779 --> 00:27:51.859 to this relative value update
NOTE Confidence: 0.9672493

00:27:51.859 --> 00:27:52.359 committee.
NOTE Confidence: 0.9989775

00:27:53.940 --> 00:27:54.919 I had another
NOTE Confidence: 0.9990557

00:27:55.460 --> 00:27:56.679 formative experience
NOTE Confidence: 0.9579008

00:27:57.299 --> 00:27:58.440 because I was
NOTE Confidence: 0.99956185

00:27:59.139 --> 00:28:00.740 invited to be part of

NOTE Confidence: 0.99956185

00:28:00.740 --> 00:28:01.559 this course

NOTE Confidence: 0.9771884

00:28:01.984 --> 00:28:02.945 that was given at the

NOTE Confidence: 0.9771884

00:28:02.945 --> 00:28:04.244 Kennedy School of Government.

NOTE Confidence: 0.97011155

00:28:04.625 --> 00:28:06.545 It was mostly inspired by

NOTE Confidence: 0.97011155

00:28:06.545 --> 00:28:07.685 one of our senior

NOTE Confidence: 0.9730509

00:28:08.065 --> 00:28:09.825 surgeons at that time, a

NOTE Confidence: 0.9730509

00:28:09.825 --> 00:28:11.744 gentleman named Jack Matloff, who

NOTE Confidence: 0.9730509

00:28:11.744 --> 00:28:13.765 was at Cedars Sinai in

NOTE Confidence: 0.9730509

00:28:13.905 --> 00:28:15.585 Los Angeles, but had done

NOTE Confidence: 0.9730509

00:28:15.585 --> 00:28:16.859 a year as a

NOTE Confidence: 0.9920465

00:28:17.260 --> 00:28:18.160 master's degree

NOTE Confidence: 0.9657297

00:28:18.859 --> 00:28:20.000 during a sabbatical.

NOTE Confidence: 0.9942436

00:28:21.420 --> 00:28:23.340 And he thought we were

NOTE Confidence: 0.9942436

00:28:23.340 --> 00:28:23.840 woefully

NOTE Confidence: 0.857942

00:28:24.299 --> 00:28:24.799 under,

NOTE Confidence: 0.9967854

00:28:25.820 --> 00:28:26.320 represented
NOTE Confidence: 0.98647976

00:28:27.820 --> 00:28:29.179 in anything having to do
NOTE Confidence: 0.98647976

00:28:29.179 --> 00:28:30.400 with health care policy.
NOTE Confidence: 0.97798425

00:28:30.875 --> 00:28:32.475 And so the course was
NOTE Confidence: 0.97798425

00:28:32.475 --> 00:28:34.395 entitled understanding the new world
NOTE Confidence: 0.97798425

00:28:34.395 --> 00:28:35.275 of health care. It was
NOTE Confidence: 0.97798425

00:28:35.275 --> 00:28:36.975 a ten day executive course,
NOTE Confidence: 0.97798425

00:28:37.035 --> 00:28:38.315 and we learned a lot
NOTE Confidence: 0.97798425

00:28:38.315 --> 00:28:39.755 about how the government works
NOTE Confidence: 0.97798425

00:28:39.755 --> 00:28:40.655 and how it
NOTE Confidence: 0.9889865

00:28:41.115 --> 00:28:42.255 sometimes doesn't.
NOTE Confidence: 0.9907143

00:28:43.435 --> 00:28:45.195 And I would say that
NOTE Confidence: 0.9907143

00:28:45.195 --> 00:28:46.560 in addition to that,
NOTE Confidence: 0.86423665

00:28:48.960 --> 00:28:50.260 the military experience,
NOTE Confidence: 0.9995151

00:28:51.600 --> 00:28:52.820 gave me a whole
NOTE Confidence: 0.99256706

00:28:53.360 --> 00:28:55.520 unique insight, I think, into

NOTE Confidence: 0.99256706
00:28:55.520 --> 00:28:56.900 that side of the government
NOTE Confidence: 0.99256706
00:28:57.120 --> 00:28:57.780 as well
NOTE Confidence: 0.9687026
00:28:58.080 --> 00:29:00.500 and how stuff gets done
NOTE Confidence: 0.9687026
00:29:00.560 --> 00:29:01.860 at the government level.
NOTE Confidence: 0.9909964
00:29:03.255 --> 00:29:04.535 So I probably have time.
NOTE Confidence: 0.9909964
00:29:04.535 --> 00:29:05.735 I I'll tell you this
NOTE Confidence: 0.9909964
00:29:05.735 --> 00:29:06.235 story.
NOTE Confidence: 0.9982077
00:29:06.615 --> 00:29:07.115 So
NOTE Confidence: 0.9861895
00:29:07.895 --> 00:29:09.255 I'm in the military. We've
NOTE Confidence: 0.9861895
00:29:09.255 --> 00:29:11.755 got everything in place. Equipment
NOTE Confidence: 0.9861895
00:29:11.895 --> 00:29:14.075 wise, we had six
NOTE Confidence: 0.9962997
00:29:14.615 --> 00:29:15.115 anesthesia
NOTE Confidence: 0.99062085
00:29:15.895 --> 00:29:16.395 residents
NOTE Confidence: 0.999396
00:29:17.220 --> 00:29:18.200 who had been
NOTE Confidence: 0.981285
00:29:18.580 --> 00:29:19.860 they weren't residents. They were
NOTE Confidence: 0.981285

00:29:19.860 --> 00:29:21.780 now, like me, coming in
NOTE Confidence: 0.981285

00:29:21.780 --> 00:29:22.760 as part of
NOTE Confidence: 0.84295005

00:29:23.220 --> 00:29:24.280 the draft or
NOTE Confidence: 0.9661008

00:29:24.740 --> 00:29:26.020 they had had their medical
NOTE Confidence: 0.9661008

00:29:26.020 --> 00:29:27.160 school paid for
NOTE Confidence: 0.9412082

00:29:27.620 --> 00:29:29.460 in the HPSP program, but
NOTE Confidence: 0.9412082

00:29:29.460 --> 00:29:31.059 we had six fully trained
NOTE Confidence: 0.9412082

00:29:31.059 --> 00:29:32.120 cardiac anesthesiologists.
NOTE Confidence: 0.9899887

00:29:33.195 --> 00:29:35.215 We had two pumps that
NOTE Confidence: 0.9899887

00:29:35.434 --> 00:29:37.115 some of my predecessors had
NOTE Confidence: 0.9899887

00:29:37.115 --> 00:29:37.615 acquired.
NOTE Confidence: 0.9920799

00:29:39.115 --> 00:29:40.394 We had a fully equipped
NOTE Confidence: 0.9920799

00:29:40.394 --> 00:29:40.894 ICU.
NOTE Confidence: 0.98615766

00:29:42.394 --> 00:29:43.914 Why weren't we doing heart
NOTE Confidence: 0.98615766

00:29:43.914 --> 00:29:44.414 surgery?
NOTE Confidence: 0.96461517

00:29:45.160 --> 00:29:46.620 And instead, we were sending

NOTE Confidence: 0.97628826
00:29:46.920 --> 00:29:49.000 cardiac patients from our cath
NOTE Confidence: 0.97628826
00:29:49.000 --> 00:29:50.600 lab out to the private
NOTE Confidence: 0.97628826
00:29:50.600 --> 00:29:52.460 sector, which was costing,
NOTE Confidence: 0.99680775
00:29:53.400 --> 00:29:55.000 in those days, a lot
NOTE Confidence: 0.99680775
00:29:55.000 --> 00:29:55.580 of money.
NOTE Confidence: 0.9424285
00:29:56.120 --> 00:29:58.220 Nowadays, would seem trivial, but,
NOTE Confidence: 0.9424285
00:29:58.414 --> 00:29:59.615 you know, there was twenty
NOTE Confidence: 0.9424285
00:29:59.615 --> 00:30:01.054 five thousand or more per
NOTE Confidence: 0.9424285
00:30:01.054 --> 00:30:02.575 case to send that out
NOTE Confidence: 0.9424285
00:30:02.575 --> 00:30:03.774 to the private sector. So
NOTE Confidence: 0.9424285
00:30:03.774 --> 00:30:04.755 what do we do?
NOTE Confidence: 0.99933356
00:30:06.174 --> 00:30:06.674 I
NOTE Confidence: 0.9398159
00:30:07.294 --> 00:30:09.154 worked out in detail
NOTE Confidence: 0.9694097
00:30:10.255 --> 00:30:11.560 down to the suture How
NOTE Confidence: 0.9694097
00:30:11.560 --> 00:30:12.680 much it would cost us
NOTE Confidence: 0.9694097

00:30:12.680 --> 00:30:14.520 to do those cases at
NOTE Confidence: 0.9694097

00:30:14.520 --> 00:30:16.060 our hospital versus
NOTE Confidence: 0.9799011

00:30:16.520 --> 00:30:18.060 do them at
NOTE Confidence: 0.8730526

00:30:18.840 --> 00:30:20.060 a private institution,
NOTE Confidence: 0.9741818

00:30:20.840 --> 00:30:23.020 through this private insurance program
NOTE Confidence: 0.9741818

00:30:23.160 --> 00:30:24.860 called CHAMPUS in those days,
NOTE Confidence: 0.996891

00:30:26.065 --> 00:30:27.125 now called TRICARE.
NOTE Confidence: 0.9149563

00:30:27.825 --> 00:30:29.505 So I ran that up
NOTE Confidence: 0.9149563

00:30:29.505 --> 00:30:30.645 FIFO at,
NOTE Confidence: 0.8937262

00:30:31.185 --> 00:30:32.465 within the Air Force chain
NOTE Confidence: 0.8937262

00:30:32.465 --> 00:30:33.125 of command,
NOTE Confidence: 0.997986

00:30:33.665 --> 00:30:34.645 and they said,
NOTE Confidence: 0.9831422

00:30:35.345 --> 00:30:36.625 you know, you're in the
NOTE Confidence: 0.9831422

00:30:36.625 --> 00:30:38.225 same pot of money as
NOTE Confidence: 0.9831422

00:30:38.225 --> 00:30:39.345 the guys that are buying
NOTE Confidence: 0.9831422

00:30:39.345 --> 00:30:40.785 the jet fuel and the

NOTE Confidence: 0.9831422

00:30:40.785 --> 00:30:42.710 bullets for the machine guns

NOTE Confidence: 0.9831422

00:30:42.710 --> 00:30:43.690 and stuff like that.

NOTE Confidence: 0.8858518

00:30:44.389 --> 00:30:45.289 Can't do it.

NOTE Confidence: 0.99843526

00:30:46.549 --> 00:30:48.169 So I'm pretty discouraged.

NOTE Confidence: 0.9592718

00:30:49.110 --> 00:30:51.370 I take some temporary duty,

NOTE Confidence: 0.9592718

00:30:51.669 --> 00:30:53.029 wind up going to the

NOTE Confidence: 0.9592718

00:30:53.029 --> 00:30:54.730 Armed Forces Institute of Pathology

NOTE Confidence: 0.9592718

00:30:54.870 --> 00:30:56.149 in Washington because they had

NOTE Confidence: 0.9592718

00:30:56.149 --> 00:30:57.555 a heart collection,

NOTE Confidence: 0.99023414

00:30:58.095 --> 00:30:59.295 got to know the surgeons

NOTE Confidence: 0.99023414

00:30:59.295 --> 00:31:00.435 at Walter Reed.

NOTE Confidence: 0.9137071

00:31:01.935 --> 00:31:02.835 They were short.

NOTE Confidence: 0.9976972

00:31:03.775 --> 00:31:04.835 So they decided

NOTE Confidence: 0.9836631

00:31:05.775 --> 00:31:07.155 they were gonna trade.

NOTE Confidence: 0.9877318

00:31:07.775 --> 00:31:09.455 So they offered to trade

NOTE Confidence: 0.9877318

00:31:09.455 --> 00:31:10.755 an army thoracic
NOTE Confidence: 0.75843745

00:31:11.055 --> 00:31:12.275 non cardiac surgeon
NOTE Confidence: 0.87429523

00:31:12.880 --> 00:31:14.020 to the air force,
NOTE Confidence: 0.9819843

00:31:14.559 --> 00:31:16.179 come to be stationed in
NOTE Confidence: 0.9819843

00:31:16.400 --> 00:31:18.100 Mississippi where I was stationed,
NOTE Confidence: 0.9819843

00:31:18.320 --> 00:31:19.200 and then I would go
NOTE Confidence: 0.9819843

00:31:19.200 --> 00:31:19.860 to Washington.
NOTE Confidence: 0.99595106

00:31:21.679 --> 00:31:23.140 And the air force said,
NOTE Confidence: 0.9257143

00:31:25.885 --> 00:31:27.245 sorry. We need this Meyer
NOTE Confidence: 0.9257143

00:31:27.245 --> 00:31:28.445 guy here. You know? He's
NOTE Confidence: 0.9257143

00:31:28.445 --> 00:31:29.725 gonna start an open heart
NOTE Confidence: 0.9257143

00:31:29.725 --> 00:31:30.225 program
NOTE Confidence: 0.90634376

00:31:30.605 --> 00:31:31.965 after they just turned it
NOTE Confidence: 0.90634376

00:31:31.965 --> 00:31:32.465 down.
NOTE Confidence: 0.9483987

00:31:33.405 --> 00:31:35.265 So I got unhappy,
NOTE Confidence: 0.9921105

00:31:35.565 --> 00:31:36.625 as you might imagine,

NOTE Confidence: 0.98384434

00:31:36.925 --> 00:31:39.085 and happened to have a

NOTE Confidence: 0.98384434

00:31:39.085 --> 00:31:39.585 relative

NOTE Confidence: 0.98937446

00:31:41.900 --> 00:31:43.580 who was in Washington, and

NOTE Confidence: 0.98937446

00:31:43.580 --> 00:31:45.280 I really didn't quite appreciate

NOTE Confidence: 0.96635354

00:31:45.740 --> 00:31:47.920 everything that, he had done.

NOTE Confidence: 0.95412964

00:31:50.300 --> 00:31:51.600 And I sent him everything.

NOTE Confidence: 0.95412964

00:31:51.660 --> 00:31:52.700 He's I called him up.

NOTE Confidence: 0.95412964

00:31:52.700 --> 00:31:53.900 I sent him everything. He

NOTE Confidence: 0.95412964

00:31:53.900 --> 00:31:54.400 said,

NOTE Confidence: 0.9991363

00:31:55.385 --> 00:31:56.424 let me show this to

NOTE Confidence: 0.9991363

00:31:56.424 --> 00:31:57.725 a few people I know.

NOTE Confidence: 0.9991537

00:31:58.585 --> 00:32:00.445 Ten days later, I get

NOTE Confidence: 0.9991537

00:32:00.585 --> 00:32:01.325 a call

NOTE Confidence: 0.94628066

00:32:02.505 --> 00:32:04.105 from the office of the

NOTE Confidence: 0.94628066

00:32:04.105 --> 00:32:05.465 chairman of the Senate Armed

NOTE Confidence: 0.94628066

00:32:05.465 --> 00:32:06.524 Services Committee
NOTE Confidence: 0.98342067

00:32:11.060 --> 00:32:12.360 who, the staff person
NOTE Confidence: 0.9820427

00:32:13.300 --> 00:32:14.420 asked me to sort of
NOTE Confidence: 0.9820427

00:32:14.420 --> 00:32:15.300 go over a few of
NOTE Confidence: 0.9820427

00:32:15.300 --> 00:32:17.300 the details, verify the story.
NOTE Confidence: 0.9820427

00:32:17.300 --> 00:32:18.440 Yep. Okay.
NOTE Confidence: 0.99027175

00:32:21.140 --> 00:32:22.020 He said, well, as a
NOTE Confidence: 0.99027175

00:32:22.020 --> 00:32:23.380 taxpayer, that sort of pisses
NOTE Confidence: 0.99027175

00:32:23.380 --> 00:32:24.285 me off that you could
NOTE Confidence: 0.99027175

00:32:24.285 --> 00:32:25.325 do it for a fifth
NOTE Confidence: 0.99027175

00:32:25.325 --> 00:32:26.945 of the cost. Right? So
NOTE Confidence: 0.98568314

00:32:27.885 --> 00:32:29.405 six weeks later, my immediate
NOTE Confidence: 0.98568314

00:32:29.405 --> 00:32:30.685 superior officer was in my
NOTE Confidence: 0.98568314

00:32:30.685 --> 00:32:31.965 office asking me how soon
NOTE Confidence: 0.98568314

00:32:31.965 --> 00:32:32.925 I could be ready to
NOTE Confidence: 0.98568314

00:32:32.925 --> 00:32:33.425 go.

NOTE Confidence: 0.962372
00:32:37.860 --> 00:32:39.220 Sometimes you can't plan this
NOTE Confidence: 0.962372
00:32:39.220 --> 00:32:41.000 stuff out. It just happens.
NOTE Confidence: 0.8986462
00:32:41.700 --> 00:32:43.140 But it turned out, I
NOTE Confidence: 0.8986462
00:32:43.140 --> 00:32:44.280 found out subsequently,
NOTE Confidence: 0.99978006
00:32:44.740 --> 00:32:45.560 that my
NOTE Confidence: 0.98188215
00:32:46.260 --> 00:32:48.440 cousin by marriage had actually
NOTE Confidence: 0.98188215
00:32:48.740 --> 00:32:49.240 run
NOTE Confidence: 0.9979254
00:32:49.615 --> 00:32:51.955 Howard Baker's campaign for president
NOTE Confidence: 0.89879143
00:32:52.495 --> 00:32:53.774 when he was running for
NOTE Confidence: 0.89879143
00:32:53.774 --> 00:32:55.075 president in nineteen eighty,
NOTE Confidence: 0.9989325
00:32:55.534 --> 00:32:57.375 and you couldn't have picked
NOTE Confidence: 0.9989325
00:32:57.375 --> 00:32:58.434 a more connected
NOTE Confidence: 0.99835974
00:32:58.735 --> 00:32:59.235 person.
NOTE Confidence: 0.9610782
00:33:01.375 --> 00:33:01.875 So
NOTE Confidence: 0.9976684
00:33:02.575 --> 00:33:03.615 you never know, but you
NOTE Confidence: 0.9976684

00:33:03.615 --> 00:33:04.755 have to keep trying.
NOTE Confidence: 0.9822498

00:33:06.870 --> 00:33:08.310 This is actually a picture
NOTE Confidence: 0.9822498

00:33:08.310 --> 00:33:09.750 from that first Kennedy School
NOTE Confidence: 0.9822498

00:33:09.750 --> 00:33:10.250 course.
NOTE Confidence: 0.9899147

00:33:10.550 --> 00:33:12.070 There are seven people in
NOTE Confidence: 0.9899147

00:33:12.070 --> 00:33:14.490 that picture that were presidents
NOTE Confidence: 0.9899147

00:33:14.550 --> 00:33:15.830 of either the Society of
NOTE Confidence: 0.9899147

00:33:15.830 --> 00:33:17.450 Thoracic Surgeon or the American
NOTE Confidence: 0.9899147

00:33:17.510 --> 00:33:19.450 Association for Thoracic Surgery.
NOTE Confidence: 0.9839447

00:33:23.645 --> 00:33:24.925 So what about the science?
NOTE Confidence: 0.9839447

00:33:24.925 --> 00:33:25.885 You know, was I just
NOTE Confidence: 0.9839447

00:33:25.885 --> 00:33:27.485 fooling around in public policy
NOTE Confidence: 0.9839447

00:33:27.485 --> 00:33:28.845 and stuff all that time?
NOTE Confidence: 0.9839447

00:33:28.845 --> 00:33:30.605 Well, I would say I
NOTE Confidence: 0.9839447

00:33:30.605 --> 00:33:32.145 would give you two examples
NOTE Confidence: 0.9839447

00:33:32.205 --> 00:33:33.645 of things that occupied a

NOTE Confidence: 0.9839447
00:33:33.645 --> 00:33:34.625 lot of my
NOTE Confidence: 0.8957491
00:33:35.485 --> 00:33:35.985 academic,
NOTE Confidence: 0.99846727
00:33:37.130 --> 00:33:38.270 traditional academic
NOTE Confidence: 0.9663832
00:33:38.570 --> 00:33:39.070 work.
NOTE Confidence: 0.98214287
00:33:39.850 --> 00:33:42.090 One was in this realm
NOTE Confidence: 0.98214287
00:33:42.090 --> 00:33:44.410 of myocardial protection, and the
NOTE Confidence: 0.98214287
00:33:44.410 --> 00:33:45.390 question was
NOTE Confidence: 0.95011455
00:33:46.970 --> 00:33:49.150 common assumption in those earlier
NOTE Confidence: 0.95011455
00:33:49.210 --> 00:33:50.830 years that somehow neonates
NOTE Confidence: 0.92417556
00:33:51.210 --> 00:33:53.505 were there. Myocardium was more
NOTE Confidence: 0.92417556
00:33:53.505 --> 00:33:54.005 vulnerable
NOTE Confidence: 0.9284076
00:33:55.424 --> 00:33:56.965 to ischemia reperfusion
NOTE Confidence: 0.9981666
00:33:57.345 --> 00:33:58.885 than an adult
NOTE Confidence: 0.9925487
00:33:59.505 --> 00:34:00.945 who was having a heart
NOTE Confidence: 0.9925487
00:34:00.945 --> 00:34:01.445 operation.
NOTE Confidence: 0.98725796

00:34:02.385 --> 00:34:03.125 And so
NOTE Confidence: 0.9169513

00:34:03.745 --> 00:34:04.065 we
NOTE Confidence: 0.989025

00:34:04.950 --> 00:34:06.549 I had a fellow who
NOTE Confidence: 0.989025

00:34:06.549 --> 00:34:08.070 came to the lab who
NOTE Confidence: 0.989025

00:34:08.070 --> 00:34:09.750 made the observation that the
NOTE Confidence: 0.989025

00:34:09.750 --> 00:34:12.010 way that the patients were
NOTE Confidence: 0.99789053

00:34:12.630 --> 00:34:13.130 reperfused
NOTE Confidence: 0.9659774

00:34:13.670 --> 00:34:15.989 in our operating rooms were
NOTE Confidence: 0.9659774

00:34:15.989 --> 00:34:17.904 quite different after a period
NOTE Confidence: 0.9659774

00:34:17.904 --> 00:34:19.505 of ischemia, were quite different
NOTE Confidence: 0.9659774

00:34:19.505 --> 00:34:20.964 than from his home institution.
NOTE Confidence: 0.9968141

00:34:21.904 --> 00:34:23.605 And so we pursued that
NOTE Confidence: 0.9712379

00:34:25.025 --> 00:34:26.645 and found out that
NOTE Confidence: 0.99876994

00:34:27.984 --> 00:34:29.204 the pressure conditions
NOTE Confidence: 0.9927127

00:34:30.069 --> 00:34:31.750 under which you reperfuse the
NOTE Confidence: 0.9927127

00:34:31.750 --> 00:34:33.109 heart after a period of

NOTE Confidence: 0.9927127
00:34:33.109 --> 00:34:34.329 myocardial ischemia
NOTE Confidence: 0.9475319
00:34:35.030 --> 00:34:36.250 are pretty critical,
NOTE Confidence: 0.9218765
00:34:36.789 --> 00:34:38.569 at least especially for neonatal
NOTE Confidence: 0.9218765
00:34:38.710 --> 00:34:39.910 hearts. So we had a
NOTE Confidence: 0.9218765
00:34:39.910 --> 00:34:41.989 neonatal lamb model. That's what
NOTE Confidence: 0.9218765
00:34:41.989 --> 00:34:43.289 we did. We
NOTE Confidence: 0.99697995
00:34:44.235 --> 00:34:45.215 took the heart,
NOTE Confidence: 0.9839494
00:34:46.475 --> 00:34:47.935 subjected it to ischemia,
NOTE Confidence: 0.9963821
00:34:48.555 --> 00:34:49.375 cold ischemia
NOTE Confidence: 0.9350056
00:34:49.835 --> 00:34:50.795 as you would if you
NOTE Confidence: 0.9350056
00:34:50.795 --> 00:34:51.535 were having
NOTE Confidence: 0.97562504
00:34:51.915 --> 00:34:54.015 a cardiac operation, and then
NOTE Confidence: 0.9907371
00:34:54.555 --> 00:34:56.795 reperfused it and altered just
NOTE Confidence: 0.9907371
00:34:56.795 --> 00:34:57.535 the reperfusion
NOTE Confidence: 0.9915495
00:34:57.835 --> 00:34:58.335 conditions.
NOTE Confidence: 0.9961715

00:34:59.170 --> 00:35:00.370 And what we found out
NOTE Confidence: 0.9961715

00:35:00.370 --> 00:35:01.730 was there was pretty strong
NOTE Confidence: 0.9961715

00:35:01.730 --> 00:35:02.790 evidence there
NOTE Confidence: 0.99116707

00:35:03.090 --> 00:35:04.469 that there was endothelial
NOTE Confidence: 0.9996433

00:35:04.850 --> 00:35:05.350 injury
NOTE Confidence: 0.9975639

00:35:06.530 --> 00:35:08.210 that was occurring during that
NOTE Confidence: 0.9975639

00:35:08.210 --> 00:35:09.350 reperfusion period
NOTE Confidence: 0.8980647

00:35:10.130 --> 00:35:11.570 and that you could mitigate
NOTE Confidence: 0.8980647

00:35:11.570 --> 00:35:12.070 that
NOTE Confidence: 0.9989061

00:35:12.714 --> 00:35:13.535 with a variety
NOTE Confidence: 0.99773514

00:35:14.954 --> 00:35:15.614 of pharmacologic
NOTE Confidence: 0.9698384

00:35:16.395 --> 00:35:17.114 and other,
NOTE Confidence: 0.99917066

00:35:18.875 --> 00:35:19.375 means
NOTE Confidence: 0.9586498

00:35:19.675 --> 00:35:21.214 in addition to just controlling
NOTE Confidence: 0.9586498

00:35:21.355 --> 00:35:21.855 reperfusion,
NOTE Confidence: 0.9325967

00:35:23.355 --> 00:35:23.855 pressures.

NOTE Confidence: 0.9987921
00:35:24.555 --> 00:35:25.055 And
NOTE Confidence: 0.9303618
00:35:26.430 --> 00:35:27.170 we ultimately,
NOTE Confidence: 0.8124608
00:35:28.270 --> 00:35:28.770 determined,
NOTE Confidence: 0.9603534
00:35:29.630 --> 00:35:30.609 through some,
NOTE Confidence: 0.97256947
00:35:31.390 --> 00:35:33.890 endothelial function studies using
NOTE Confidence: 0.9964042
00:35:34.430 --> 00:35:34.930 acetylcholine
NOTE Confidence: 0.9936636
00:35:35.390 --> 00:35:36.690 as a coronary vasodilator
NOTE Confidence: 0.9869811
00:35:37.070 --> 00:35:38.130 that only works
NOTE Confidence: 0.9701168
00:35:38.510 --> 00:35:39.630 if you have an intact
NOTE Confidence: 0.9701168
00:35:39.630 --> 00:35:40.130 endothelium.
NOTE Confidence: 0.88525736
00:35:40.805 --> 00:35:42.156 You know what that in
NOTE Confidence: 0.88525736
00:35:42.156 --> 00:35:43.445 fact the endothelium was a
NOTE Confidence: 0.88525736
00:35:43.445 --> 00:35:44.825 really big part of this.
NOTE Confidence: 0.9706696
00:35:45.845 --> 00:35:46.725 That led to a lot
NOTE Confidence: 0.9706696
00:35:46.725 --> 00:35:47.385 of publications,
NOTE Confidence: 0.95781296

00:35:48.245 --> 00:35:49.864 but from a clinical standpoint,
NOTE Confidence: 0.99021965

00:35:50.405 --> 00:35:51.765 what did we learn? We
NOTE Confidence: 0.99021965

00:35:51.765 --> 00:35:52.825 learned that
NOTE Confidence: 0.99189246

00:35:53.205 --> 00:35:54.985 a variety of these medications
NOTE Confidence: 0.82964504

00:35:55.364 --> 00:35:57.579 would work, would help at
NOTE Confidence: 0.82964504

00:35:57.579 --> 00:35:59.680 least in isolated lamb hearts.
NOTE Confidence: 0.9811524

00:35:59.980 --> 00:36:00.880 And so
NOTE Confidence: 0.96756953

00:36:01.500 --> 00:36:03.339 what was available readily right
NOTE Confidence: 0.96756953

00:36:03.339 --> 00:36:04.719 off the shelf was nitroglycerin.
NOTE Confidence: 0.9931276

00:36:05.020 --> 00:36:06.540 And so every patient that
NOTE Confidence: 0.9931276

00:36:06.540 --> 00:36:07.760 I operated on
NOTE Confidence: 0.9773349

00:36:08.060 --> 00:36:09.825 after that got nitroglycerin
NOTE Confidence: 0.95708394

00:36:10.125 --> 00:36:12.225 during the initial reperfusion period
NOTE Confidence: 0.95708394

00:36:12.364 --> 00:36:13.985 after a period of myocardial
NOTE Confidence: 0.95708394

00:36:14.205 --> 00:36:14.705 ischemia.
NOTE Confidence: 0.9795967

00:36:15.805 --> 00:36:17.165 So that was all in

NOTE Confidence: 0.9795967
00:36:17.165 --> 00:36:19.105 the context of this emerging
NOTE Confidence: 0.9795967
00:36:19.165 --> 00:36:21.245 knowledge about endothelial function. It
NOTE Confidence: 0.9795967
00:36:21.245 --> 00:36:22.844 wasn't just a lining cell,
NOTE Confidence: 0.9795967
00:36:22.844 --> 00:36:24.045 it had all sorts of
NOTE Confidence: 0.9795967
00:36:24.045 --> 00:36:24.545 functional
NOTE Confidence: 0.93190557
00:36:25.320 --> 00:36:27.500 impact, including release of
NOTE Confidence: 0.9807038
00:36:27.800 --> 00:36:28.700 both relaxing
NOTE Confidence: 0.9502082
00:36:29.080 --> 00:36:29.580 and,
NOTE Confidence: 0.99952585
00:36:30.600 --> 00:36:31.100 constrictive
NOTE Confidence: 0.9695574
00:36:31.400 --> 00:36:31.900 factors.
NOTE Confidence: 0.98202133
00:36:33.560 --> 00:36:35.400 And what we also found
NOTE Confidence: 0.98202133
00:36:35.400 --> 00:36:36.860 out was that
NOTE Confidence: 0.9997284
00:36:38.184 --> 00:36:39.964 this was a collaborative
NOTE Confidence: 0.7418896
00:36:40.344 --> 00:36:40.844 effort.
NOTE Confidence: 0.98560715
00:36:41.625 --> 00:36:42.765 And it involved,
NOTE Confidence: 0.99229074

00:36:43.065 --> 00:36:44.664 you know, people from different
NOTE Confidence: 0.99229074

00:36:44.664 --> 00:36:46.204 backgrounds, different disciplines.
NOTE Confidence: 0.9991316

00:36:46.505 --> 00:36:47.005 We
NOTE Confidence: 0.99578243

00:36:47.385 --> 00:36:48.525 started investigating
NOTE Confidence: 0.9516889

00:36:49.065 --> 00:36:49.385 in,
NOTE Confidence: 0.9563736

00:36:49.864 --> 00:36:50.364 neutrophil,
NOTE Confidence: 0.99836797

00:36:50.904 --> 00:36:51.404 endothelial
NOTE Confidence: 0.9497448

00:36:51.785 --> 00:36:52.285 interactions,
NOTE Confidence: 0.96052253

00:36:53.780 --> 00:36:56.180 which were critical to, this
NOTE Confidence: 0.96052253

00:36:56.180 --> 00:36:59.000 whole endothelial injury and reperfusion,
NOTE Confidence: 0.9639382

00:37:00.820 --> 00:37:02.440 injury that that occurs.
NOTE Confidence: 0.98325795

00:37:04.100 --> 00:37:05.160 So that was
NOTE Confidence: 0.9713641

00:37:05.825 --> 00:37:07.265 the majority of the early
NOTE Confidence: 0.9713641

00:37:07.265 --> 00:37:07.765 work.
NOTE Confidence: 0.9978024

00:37:08.225 --> 00:37:08.965 And then
NOTE Confidence: 0.9912618

00:37:09.425 --> 00:37:10.945 in the last twenty five

NOTE Confidence: 0.9912618
00:37:10.945 --> 00:37:12.945 plus years, we've been trying
NOTE Confidence: 0.9912618
00:37:12.945 --> 00:37:14.325 to solve another problem,
NOTE Confidence: 0.9784066
00:37:14.705 --> 00:37:16.405 which is the problem of
NOTE Confidence: 0.99958247
00:37:17.825 --> 00:37:19.205 being able to accomplish
NOTE Confidence: 0.9986332
00:37:19.745 --> 00:37:20.245 a
NOTE Confidence: 0.9999565
00:37:20.700 --> 00:37:21.200 complete
NOTE Confidence: 0.99969375
00:37:21.500 --> 00:37:22.000 physiologic
NOTE Confidence: 0.9999769
00:37:22.300 --> 00:37:22.800 repair
NOTE Confidence: 0.97112924
00:37:23.739 --> 00:37:24.640 in a baby.
NOTE Confidence: 0.99913734
00:37:26.219 --> 00:37:27.980 But if that baby was
NOTE Confidence: 0.99913734
00:37:27.980 --> 00:37:28.480 lacking
NOTE Confidence: 0.95339096
00:37:28.780 --> 00:37:30.300 a pulmonary artery or pulmonary
NOTE Confidence: 0.95339096
00:37:30.300 --> 00:37:31.839 valve or both or whatever,
NOTE Confidence: 0.9800505
00:37:32.875 --> 00:37:33.675 that would,
NOTE Confidence: 0.83593684
00:37:35.755 --> 00:37:36.495 that you could
NOTE Confidence: 0.96242696

00:37:36.795 --> 00:37:37.775 find a conduit.
NOTE Confidence: 0.895075

00:37:38.235 --> 00:37:39.515 Typically, now what's used are
NOTE Confidence: 0.895075

00:37:39.515 --> 00:37:40.015 homographs.
NOTE Confidence: 0.98222876

00:37:40.635 --> 00:37:41.135 But,
NOTE Confidence: 0.9948997

00:37:41.835 --> 00:37:43.195 in the early days, people
NOTE Confidence: 0.9948997

00:37:43.195 --> 00:37:44.255 were using prosthetic
NOTE Confidence: 0.74154663

00:37:44.635 --> 00:37:45.135 graphs,
NOTE Confidence: 0.9755227

00:37:46.349 --> 00:37:47.789 but they don't grow. They're
NOTE Confidence: 0.9755227

00:37:47.789 --> 00:37:48.450 not alive.
NOTE Confidence: 0.9873202

00:37:48.829 --> 00:37:49.569 And so
NOTE Confidence: 0.97172517

00:37:50.269 --> 00:37:52.589 our last many years of
NOTE Confidence: 0.97172517

00:37:52.589 --> 00:37:53.089 work,
NOTE Confidence: 0.9905062

00:37:53.789 --> 00:37:55.789 have been directed at trying
NOTE Confidence: 0.9905062

00:37:55.789 --> 00:37:57.390 to address this problem by
NOTE Confidence: 0.9905062

00:37:57.390 --> 00:37:59.390 creating a living structure. So
NOTE Confidence: 0.9905062

00:37:59.390 --> 00:38:01.329 both valve and conduit wall,

NOTE Confidence: 0.9864802

00:38:02.484 --> 00:38:04.165 would be the, you know,

NOTE Confidence: 0.9864802

00:38:04.165 --> 00:38:05.385 the ultimate goal.

NOTE Confidence: 0.983198

00:38:05.844 --> 00:38:06.344 But

NOTE Confidence: 0.9889513

00:38:06.645 --> 00:38:07.385 the hypothesis

NOTE Confidence: 0.9964796

00:38:07.685 --> 00:38:08.805 is that if we have

NOTE Confidence: 0.9964796

00:38:08.805 --> 00:38:10.025 something that's alive,

NOTE Confidence: 0.9890709

00:38:11.364 --> 00:38:12.885 it will grow just like

NOTE Confidence: 0.9890709

00:38:12.885 --> 00:38:14.265 your normal valve does,

NOTE Confidence: 0.97795725

00:38:14.885 --> 00:38:16.265 and your normal artery.

NOTE Confidence: 0.9536344

00:38:18.230 --> 00:38:20.070 I wanna emphasize again the

NOTE Confidence: 0.9536344

00:38:20.070 --> 00:38:21.770 importance of these multidisciplinary

NOTE Confidence: 0.9120622

00:38:22.630 --> 00:38:23.130 collaborations.

NOTE Confidence: 0.82510066

00:38:26.550 --> 00:38:27.050 Bioengineering,

NOTE Confidence: 0.98483074

00:38:27.750 --> 00:38:29.450 I had a great collaborator,

NOTE Confidence: 0.9965624

00:38:30.150 --> 00:38:31.050 you know, for

NOTE Confidence: 0.999648

00:38:31.704 --> 00:38:32.204 twenty
NOTE Confidence: 0.83950317

00:38:32.585 --> 00:38:34.184 probably of those years as
NOTE Confidence: 0.83950317

00:38:34.184 --> 00:38:35.005 a bioengineer.
NOTE Confidence: 0.9823288

00:38:36.744 --> 00:38:38.905 We got involved with people
NOTE Confidence: 0.9823288

00:38:38.905 --> 00:38:40.585 who had expertise in matrix
NOTE Confidence: 0.9823288

00:38:40.585 --> 00:38:42.204 biology and cell biology.
NOTE Confidence: 0.9651169

00:38:42.984 --> 00:38:44.045 And more recently,
NOTE Confidence: 0.9985292

00:38:44.344 --> 00:38:44.844 we
NOTE Confidence: 0.99895024

00:38:45.489 --> 00:38:47.330 are collaborating with people who
NOTE Confidence: 0.99895024

00:38:47.330 --> 00:38:47.830 know
NOTE Confidence: 0.83261603

00:38:48.370 --> 00:38:49.590 a lot about proteomics,
NOTE Confidence: 0.95560837

00:38:50.690 --> 00:38:51.730 and as you saw in
NOTE Confidence: 0.95560837

00:38:51.730 --> 00:38:52.230 this
NOTE Confidence: 0.7376996

00:38:52.530 --> 00:38:53.030 disclosures,
NOTE Confidence: 0.9957292

00:38:54.050 --> 00:38:54.550 we've
NOTE Confidence: 0.9953764

00:38:54.930 --> 00:38:56.690 also gotten involved with some

NOTE Confidence: 0.9953764
00:38:56.690 --> 00:38:57.190 biotechnology
NOTE Confidence: 0.9959454
00:38:57.965 --> 00:38:59.165 companies who are trying to
NOTE Confidence: 0.9959454
00:38:59.165 --> 00:39:00.785 carry some of these ideas
NOTE Confidence: 0.9959454
00:39:00.844 --> 00:39:01.344 forward,
NOTE Confidence: 0.95579475
00:39:02.285 --> 00:39:03.265 into clinical,
NOTE Confidence: 0.9996728
00:39:03.965 --> 00:39:04.465 application
NOTE Confidence: 0.99635684
00:39:05.005 --> 00:39:05.905 and approval.
NOTE Confidence: 0.99600923
00:39:08.364 --> 00:39:08.864 So
NOTE Confidence: 0.99145305
00:39:11.210 --> 00:39:12.029 one last,
NOTE Confidence: 0.98806447
00:39:12.569 --> 00:39:14.190 vignette here is,
NOTE Confidence: 0.99914587
00:39:15.130 --> 00:39:15.630 the
NOTE Confidence: 0.99274653
00:39:16.089 --> 00:39:17.609 work that I've been involved
NOTE Confidence: 0.99274653
00:39:17.609 --> 00:39:18.109 in,
NOTE Confidence: 0.94559205
00:39:18.650 --> 00:39:20.089 in the last probably ten
NOTE Confidence: 0.94559205
00:39:20.089 --> 00:39:21.630 years or so about
NOTE Confidence: 0.98216933

00:39:22.650 --> 00:39:23.150 outcomes,
NOTE Confidence: 0.9939568

00:39:24.089 --> 00:39:25.869 in congenital heart surgery.
NOTE Confidence: 0.9981847

00:39:26.625 --> 00:39:28.645 And the context is that
NOTE Confidence: 0.95401984

00:39:29.265 --> 00:39:30.864 probably twenty years ago or
NOTE Confidence: 0.95401984

00:39:30.864 --> 00:39:31.364 more,
NOTE Confidence: 0.9905266

00:39:31.985 --> 00:39:33.665 an effort was started at
NOTE Confidence: 0.9905266

00:39:33.665 --> 00:39:35.344 the Society of Thoracic Surgeons
NOTE Confidence: 0.9905266

00:39:35.344 --> 00:39:36.405 to create a database
NOTE Confidence: 0.98814917

00:39:36.705 --> 00:39:37.745 that would collect all the
NOTE Confidence: 0.98814917

00:39:37.745 --> 00:39:39.364 cases that were being done,
NOTE Confidence: 0.99949086

00:39:40.170 --> 00:39:40.989 a lot of information
NOTE Confidence: 0.9636117

00:39:41.369 --> 00:39:42.650 about that, and then try
NOTE Confidence: 0.9636117

00:39:42.650 --> 00:39:43.710 to figure out,
NOTE Confidence: 0.99565065

00:39:44.329 --> 00:39:45.609 you know, how we could
NOTE Confidence: 0.99565065

00:39:45.609 --> 00:39:47.150 use that to get better.
NOTE Confidence: 0.9196113

00:39:48.489 --> 00:39:49.770 I think we got off

NOTE Confidence: 0.9196113
00:39:49.770 --> 00:39:50.829 track, or,
NOTE Confidence: 0.99175084
00:39:51.690 --> 00:39:53.369 leadership at that time got
NOTE Confidence: 0.99175084
00:39:53.369 --> 00:39:54.109 off track
NOTE Confidence: 0.9320029
00:39:54.594 --> 00:39:55.795 because not only do we
NOTE Confidence: 0.9320029
00:39:55.795 --> 00:39:56.695 create a
NOTE Confidence: 0.99268913
00:39:57.155 --> 00:39:58.614 mortality risk model,
NOTE Confidence: 0.997867
00:39:59.315 --> 00:40:01.155 but it got into the
NOTE Confidence: 0.997867
00:40:01.155 --> 00:40:02.055 public arena.
NOTE Confidence: 0.99344987
00:40:02.755 --> 00:40:03.895 And I think that's
NOTE Confidence: 0.99734914
00:40:04.435 --> 00:40:04.935 probably
NOTE Confidence: 0.9842612
00:40:05.235 --> 00:40:06.935 not such a good idea,
NOTE Confidence: 0.99653316
00:40:07.430 --> 00:40:09.190 and we could maybe discuss
NOTE Confidence: 0.99653316
00:40:09.190 --> 00:40:10.730 that further in the discussion
NOTE Confidence: 0.99653316
00:40:10.790 --> 00:40:11.290 time.
NOTE Confidence: 0.989454
00:40:11.910 --> 00:40:13.510 But what was happening is
NOTE Confidence: 0.989454

00:40:13.510 --> 00:40:14.250 two things.
NOTE Confidence: 0.9613267

00:40:14.870 --> 00:40:17.030 People started paying attention because
NOTE Confidence: 0.9613267

00:40:17.030 --> 00:40:18.230 this was showing up in
NOTE Confidence: 0.9613267

00:40:18.230 --> 00:40:19.690 US News and World Report,
NOTE Confidence: 0.9613267

00:40:19.989 --> 00:40:21.130 and it was,
NOTE Confidence: 0.8416727

00:40:23.143 --> 00:40:23.835 an a real incentive
NOTE Confidence: 0.95586914

00:40:24.775 --> 00:40:26.295 to game the system, if
NOTE Confidence: 0.95586914

00:40:26.295 --> 00:40:26.875 you will,
NOTE Confidence: 0.90065444

00:40:27.255 --> 00:40:28.795 up code, do whatever.
NOTE Confidence: 0.9880099

00:40:30.695 --> 00:40:32.615 And, also, I think it
NOTE Confidence: 0.9880099

00:40:32.615 --> 00:40:34.295 led to a lot of
NOTE Confidence: 0.9880099

00:40:34.295 --> 00:40:36.135 questions about how well the
NOTE Confidence: 0.9880099

00:40:36.135 --> 00:40:37.890 model worked. Was it really
NOTE Confidence: 0.9880099

00:40:37.890 --> 00:40:38.390 credible?
NOTE Confidence: 0.9598176

00:40:38.690 --> 00:40:39.589 Was it accurate?
NOTE Confidence: 0.9918282

00:40:40.290 --> 00:40:41.809 Or and how much was

NOTE Confidence: 0.9918282

00:40:41.809 --> 00:40:43.589 this getting off track?

NOTE Confidence: 0.99543023

00:40:46.690 --> 00:40:47.430 There was

NOTE Confidence: 0.90548843

00:40:48.609 --> 00:40:49.349 a real,

NOTE Confidence: 0.99246764

00:40:50.165 --> 00:40:52.405 movement among congenital heart surgeons

NOTE Confidence: 0.99246764

00:40:52.405 --> 00:40:54.085 around the country to bail

NOTE Confidence: 0.99246764

00:40:54.085 --> 00:40:54.585 out,

NOTE Confidence: 0.9617087

00:40:55.205 --> 00:40:56.325 which would, I think, have

NOTE Confidence: 0.9617087

00:40:56.325 --> 00:40:57.925 been a tragedy. And so

NOTE Confidence: 0.9617087

00:40:57.925 --> 00:40:59.045 I kind of got pulled

NOTE Confidence: 0.9617087

00:40:59.045 --> 00:40:59.945 into this,

NOTE Confidence: 0.98858505

00:41:00.885 --> 00:41:02.425 and asked to take over

NOTE Confidence: 0.98858505

00:41:02.484 --> 00:41:04.165 this effort. And as part

NOTE Confidence: 0.98858505

00:41:04.165 --> 00:41:04.825 of that,

NOTE Confidence: 0.9984813

00:41:06.080 --> 00:41:07.300 solving this problem,

NOTE Confidence: 0.99843025

00:41:07.760 --> 00:41:08.580 we developed

NOTE Confidence: 0.9997244

00:41:09.520 --> 00:41:10.820 some new concepts
NOTE Confidence: 0.9822038

00:41:11.120 --> 00:41:12.719 about how you define patient
NOTE Confidence: 0.9822038

00:41:12.719 --> 00:41:13.219 cohorts.
NOTE Confidence: 0.91151816

00:41:14.480 --> 00:41:15.540 And in particular,
NOTE Confidence: 0.9533338

00:41:16.239 --> 00:41:17.600 all the cohorting had been
NOTE Confidence: 0.9533338

00:41:17.600 --> 00:41:19.360 done based on the name
NOTE Confidence: 0.9533338

00:41:19.600 --> 00:41:20.739 the type of operation
NOTE Confidence: 0.97521204

00:41:22.094 --> 00:41:24.015 without considering a number of
NOTE Confidence: 0.97521204

00:41:24.015 --> 00:41:24.835 other things.
NOTE Confidence: 0.91920316

00:41:25.215 --> 00:41:26.895 And one that sort of
NOTE Confidence: 0.91920316

00:41:26.895 --> 00:41:28.094 jumped out at me and
NOTE Confidence: 0.91920316

00:41:28.094 --> 00:41:29.555 which we then explored,
NOTE Confidence: 0.99394244

00:41:31.455 --> 00:41:33.455 was to cohort both by
NOTE Confidence: 0.99394244

00:41:33.455 --> 00:41:34.915 diagnosis and procedure.
NOTE Confidence: 0.99748147

00:41:35.390 --> 00:41:36.670 And you may say, well,
NOTE Confidence: 0.99748147

00:41:36.670 --> 00:41:37.730 for many cases

NOTE Confidence: 0.6472331
00:41:38.510 --> 00:41:39.010 that
NOTE Confidence: 0.8014652
00:41:39.469 --> 00:41:41.250 diagnosis is on one diagnosis,
NOTE Confidence: 0.8014652
00:41:41.390 --> 00:41:42.130 one operation,
NOTE Confidence: 0.9528827
00:41:42.510 --> 00:41:43.469 you know, that's not a
NOTE Confidence: 0.9528827
00:41:43.469 --> 00:41:44.610 big deal. But
NOTE Confidence: 0.98346955
00:41:45.230 --> 00:41:47.070 for many, particularly of the
NOTE Confidence: 0.98346955
00:41:47.070 --> 00:41:47.570 more
NOTE Confidence: 0.99538815
00:41:48.255 --> 00:41:50.275 high risk and palliative
NOTE Confidence: 0.99422234
00:41:50.734 --> 00:41:51.234 operations,
NOTE Confidence: 0.9799346
00:41:51.855 --> 00:41:52.974 you can actually have a
NOTE Confidence: 0.9799346
00:41:52.974 --> 00:41:54.275 whole series of diagnoses
NOTE Confidence: 0.99138844
00:41:54.575 --> 00:41:55.775 that could lead you to
NOTE Confidence: 0.99138844
00:41:55.775 --> 00:41:57.875 that same operative intervention.
NOTE Confidence: 0.99680996
00:41:58.575 --> 00:41:59.875 And if that happens,
NOTE Confidence: 0.99306417
00:42:02.020 --> 00:42:02.920 does the outcome
NOTE Confidence: 0.99212545

00:42:03.220 --> 00:42:04.440 vary by diagnosis?
NOTE Confidence: 0.9444927

00:42:04.900 --> 00:42:06.440 And the answer is absolutely,
NOTE Confidence: 0.94842976

00:42:07.460 --> 00:42:08.820 which in some ways is
NOTE Confidence: 0.94842976

00:42:08.820 --> 00:42:10.340 sort of intuitively obvious, but
NOTE Confidence: 0.94842976

00:42:10.340 --> 00:42:11.640 we had never done that.
NOTE Confidence: 0.9017616

00:42:12.900 --> 00:42:13.780 I had to learn a
NOTE Confidence: 0.9017616

00:42:13.780 --> 00:42:14.920 lot about statistics,
NOTE Confidence: 0.9290919

00:42:15.414 --> 00:42:17.414 And, fortunately, I had really
NOTE Confidence: 0.9290919

00:42:17.414 --> 00:42:18.634 powerful collaborators,
NOTE Confidence: 0.97980076

00:42:19.255 --> 00:42:20.535 one of whom is one
NOTE Confidence: 0.97980076

00:42:20.535 --> 00:42:22.214 of the statistical editors for
NOTE Confidence: 0.97980076

00:42:22.214 --> 00:42:23.515 the New England Journal.
NOTE Confidence: 0.9829795

00:42:24.454 --> 00:42:25.654 Nice to be in the
NOTE Confidence: 0.9829795

00:42:25.654 --> 00:42:26.634 local environment.
NOTE Confidence: 0.9885915

00:42:28.214 --> 00:42:28.714 And,
NOTE Confidence: 0.9973116

00:42:29.015 --> 00:42:30.234 you know, I

NOTE Confidence: 0.9565862
00:42:31.260 --> 00:42:33.200 still don't claim any expertise,
NOTE Confidence: 0.9565862
00:42:33.420 --> 00:42:34.719 but at least I can
NOTE Confidence: 0.9565862
00:42:34.780 --> 00:42:35.980 talk the language a little
NOTE Confidence: 0.9565862
00:42:35.980 --> 00:42:37.760 bit. And I understand about
NOTE Confidence: 0.7975348
00:42:38.460 --> 00:42:40.460 Bayesian edited regression trees and
NOTE Confidence: 0.7975348
00:42:40.460 --> 00:42:41.440 less so. And,
NOTE Confidence: 0.92608345
00:42:41.900 --> 00:42:43.120 you know, this has subsequently
NOTE Confidence: 0.92608345
00:42:43.420 --> 00:42:44.239 led to
NOTE Confidence: 0.982339
00:42:44.585 --> 00:42:45.484 NIH funding
NOTE Confidence: 0.98056644
00:42:46.105 --> 00:42:47.065 and, you know, at least
NOTE Confidence: 0.98056644
00:42:47.065 --> 00:42:49.144 four papers already published and
NOTE Confidence: 0.98056644
00:42:49.144 --> 00:42:50.924 several more in the works.
NOTE Confidence: 0.9955674
00:42:51.704 --> 00:42:52.204 And
NOTE Confidence: 0.9942603
00:42:52.744 --> 00:42:53.565 we've already
NOTE Confidence: 0.9992028
00:42:55.545 --> 00:42:56.045 accomplished
NOTE Confidence: 0.9873878

00:42:56.550 --> 00:42:57.910 changing at least some of
NOTE Confidence: 0.9873878

00:42:57.910 --> 00:42:59.210 the ways that STS
NOTE Confidence: 0.92396927

00:42:59.510 --> 00:43:01.670 has been running this risk
NOTE Confidence: 0.92396927

00:43:01.670 --> 00:43:03.530 model mortality risk algorithm.
NOTE Confidence: 0.97222036

00:43:04.710 --> 00:43:05.989 And by the way, I
NOTE Confidence: 0.97222036

00:43:05.989 --> 00:43:07.670 will take personal credit for
NOTE Confidence: 0.97222036

00:43:07.670 --> 00:43:08.790 getting rid of the star
NOTE Confidence: 0.97222036

00:43:08.790 --> 00:43:09.290 system,
NOTE Confidence: 0.95029145

00:43:09.645 --> 00:43:11.265 you know, like rating restaurants.
NOTE Confidence: 0.95029145

00:43:11.325 --> 00:43:12.045 You know, we had one
NOTE Confidence: 0.95029145

00:43:12.045 --> 00:43:13.505 star, two star, three star
NOTE Confidence: 0.95029145

00:43:13.645 --> 00:43:14.145 programs.
NOTE Confidence: 0.99163616

00:43:15.165 --> 00:43:16.364 I got rid of that,
NOTE Confidence: 0.99972534

00:43:16.765 --> 00:43:17.745 as part of
NOTE Confidence: 0.99689984

00:43:18.205 --> 00:43:19.665 the time when I was
NOTE Confidence: 0.99689984

00:43:19.805 --> 00:43:21.105 leading this effort.

NOTE Confidence: 0.9889376

00:43:21.405 --> 00:43:22.525 So now we're trying to

NOTE Confidence: 0.9889376

00:43:22.525 --> 00:43:23.905 lead from behind and

NOTE Confidence: 0.97327673

00:43:24.270 --> 00:43:25.890 develop new science and

NOTE Confidence: 0.9288225

00:43:26.350 --> 00:43:26.850 bringing,

NOTE Confidence: 0.97238785

00:43:28.510 --> 00:43:29.090 bringing, this,

NOTE Confidence: 0.97560334

00:43:30.510 --> 00:43:31.550 what to what I hope

NOTE Confidence: 0.97560334

00:43:31.550 --> 00:43:32.850 is both a more credible

NOTE Confidence: 0.97560334

00:43:32.910 --> 00:43:33.730 and a more,

NOTE Confidence: 0.8750143

00:43:34.830 --> 00:43:35.330 accurate,

NOTE Confidence: 0.99953485

00:43:35.790 --> 00:43:37.170 way of establishing

NOTE Confidence: 0.9990523

00:43:37.469 --> 00:43:37.969 risk.

NOTE Confidence: 0.9932401

00:43:40.675 --> 00:43:41.714 So what am I doing

NOTE Confidence: 0.9932401

00:43:41.714 --> 00:43:43.635 now? I'm still going to

NOTE Confidence: 0.9932401

00:43:43.635 --> 00:43:44.135 work.

NOTE Confidence: 0.92749876

00:43:45.075 --> 00:43:46.614 I'm would characterize

NOTE Confidence: 0.98249865

00:43:46.994 --> 00:43:47.494 my
NOTE Confidence: 0.89494646

00:43:48.194 --> 00:43:49.875 time now is my give
NOTE Confidence: 0.89494646

00:43:49.875 --> 00:43:50.694 back time.
NOTE Confidence: 0.9758723

00:43:51.075 --> 00:43:52.035 Part of the reason I'm
NOTE Confidence: 0.9758723

00:43:52.035 --> 00:43:52.535 here.
NOTE Confidence: 0.9954905

00:43:52.880 --> 00:43:54.080 Part of the reason that
NOTE Confidence: 0.9954905

00:43:54.080 --> 00:43:54.560 I'm teaching,
NOTE Confidence: 0.93144363

00:43:56.000 --> 00:43:57.440 at the first year students
NOTE Confidence: 0.93144363

00:43:57.440 --> 00:43:58.660 at the medical school.
NOTE Confidence: 0.99434847

00:43:59.840 --> 00:44:00.580 I've continued
NOTE Confidence: 0.8041928

00:44:00.880 --> 00:44:01.380 to,
NOTE Confidence: 0.9846017

00:44:02.480 --> 00:44:02.980 teach,
NOTE Confidence: 0.96175784

00:44:03.680 --> 00:44:05.200 our residents and fellows as
NOTE Confidence: 0.96175784

00:44:05.200 --> 00:44:06.320 I have all the way
NOTE Confidence: 0.96175784

00:44:06.320 --> 00:44:07.760 along during my time in
NOTE Confidence: 0.96175784

00:44:07.760 --> 00:44:08.145 Boston.

NOTE Confidence: 0.7784493
00:44:09.385 --> 00:44:09.885 I
NOTE Confidence: 0.93028224
00:44:10.625 --> 00:44:12.305 think, you know, even this
NOTE Confidence: 0.93028224
00:44:12.305 --> 00:44:13.844 has required some new learning.
NOTE Confidence: 0.93247175
00:44:14.225 --> 00:44:14.945 You know, I have had
NOTE Confidence: 0.93247175
00:44:14.945 --> 00:44:16.245 to learn some new vocabulary,
NOTE Confidence: 0.92833245
00:44:17.745 --> 00:44:19.665 because the way is things
NOTE Confidence: 0.92833245
00:44:19.665 --> 00:44:21.445 are taught at HMS
NOTE Confidence: 0.7665329
00:44:21.825 --> 00:44:22.325 are,
NOTE Confidence: 0.9752296
00:44:22.640 --> 00:44:23.760 you know, we use this
NOTE Confidence: 0.9752296
00:44:23.760 --> 00:44:25.700 technique called case based collaborative
NOTE Confidence: 0.9752296
00:44:25.760 --> 00:44:26.260 learning.
NOTE Confidence: 0.9786181
00:44:26.640 --> 00:44:28.100 There's a lot of emphasis
NOTE Confidence: 0.9786181
00:44:28.239 --> 00:44:29.140 on interleaving,
NOTE Confidence: 0.9974936
00:44:30.080 --> 00:44:30.580 and
NOTE Confidence: 0.96016735
00:44:31.120 --> 00:44:32.980 in this case based learning,
NOTE Confidence: 0.96016735

00:44:33.120 --> 00:44:33.620 we
NOTE Confidence: 0.6123746

00:44:34.480 --> 00:44:34.980 frequently
NOTE Confidence: 0.9928437

00:44:35.520 --> 00:44:37.540 present the students with difficulties
NOTE Confidence: 0.9928437

00:44:37.760 --> 00:44:38.934 and ask them to work
NOTE Confidence: 0.9928437

00:44:38.934 --> 00:44:39.994 their way through it.
NOTE Confidence: 0.81326

00:44:40.694 --> 00:44:41.194 Some
NOTE Confidence: 0.871491

00:44:41.494 --> 00:44:43.035 been characterized as
NOTE Confidence: 0.9151998

00:44:43.494 --> 00:44:43.994 desirable
NOTE Confidence: 0.9968266

00:44:44.535 --> 00:44:45.035 difficulties
NOTE Confidence: 0.9608878

00:44:45.335 --> 00:44:47.674 in learning, which is important
NOTE Confidence: 0.9608878

00:44:47.734 --> 00:44:49.114 for making it stick.
NOTE Confidence: 0.9266284

00:44:49.895 --> 00:44:51.174 There's actually a book called
NOTE Confidence: 0.9266284

00:44:51.174 --> 00:44:52.234 Making It Stick.
NOTE Confidence: 0.9352422

00:44:53.414 --> 00:44:54.234 But in
NOTE Confidence: 0.97240084

00:44:54.780 --> 00:44:56.640 more both learning opportunities
NOTE Confidence: 0.96976185

00:44:57.020 --> 00:44:57.980 as well as a way

NOTE Confidence: 0.96976185
00:44:57.980 --> 00:44:58.800 to give back.
NOTE Confidence: 0.9207704
00:45:00.380 --> 00:45:01.660 So did all you know
NOTE Confidence: 0.9207704
00:45:01.660 --> 00:45:02.620 how did this all come
NOTE Confidence: 0.9207704
00:45:02.620 --> 00:45:03.820 about? Was I just you
NOTE Confidence: 0.9207704
00:45:03.820 --> 00:45:04.540 know sort of
NOTE Confidence: 0.98356724
00:45:05.500 --> 00:45:06.160 you know
NOTE Confidence: 0.9925842
00:45:08.045 --> 00:45:09.484 jumping around from one thing
NOTE Confidence: 0.9925842
00:45:09.484 --> 00:45:11.244 to another. I I have
NOTE Confidence: 0.9925842
00:45:11.244 --> 00:45:12.684 to confess that one of
NOTE Confidence: 0.9925842
00:45:12.684 --> 00:45:13.825 the more important
NOTE Confidence: 0.9794605
00:45:14.444 --> 00:45:14.944 little
NOTE Confidence: 0.99959505
00:45:15.484 --> 00:45:17.265 turning points in my career
NOTE Confidence: 0.99959505
00:45:17.325 --> 00:45:18.545 was this article
NOTE Confidence: 0.99605346
00:45:20.310 --> 00:45:21.610 that one of my pediatric
NOTE Confidence: 0.99605346
00:45:21.670 --> 00:45:22.170 cardiology
NOTE Confidence: 0.9978962

00:45:22.950 --> 00:45:24.410 associates gave me
NOTE Confidence: 0.91155887

00:45:24.790 --> 00:45:27.030 called Open Season. And Robert
NOTE Confidence: 0.91155887

00:45:27.030 --> 00:45:27.530 Sapolsky
NOTE Confidence: 0.98663414

00:45:28.630 --> 00:45:29.110 was
NOTE Confidence: 0.99318284

00:45:29.430 --> 00:45:30.890 is a neuroscience
NOTE Confidence: 0.9389841

00:45:31.270 --> 00:45:32.410 professor at Stanford,
NOTE Confidence: 0.95318973

00:45:33.675 --> 00:45:35.035 who is really a renaissance
NOTE Confidence: 0.95318973

00:45:35.035 --> 00:45:36.155 kinda guy. I mean, he's
NOTE Confidence: 0.95318973

00:45:36.155 --> 00:45:37.915 written about a lot of
NOTE Confidence: 0.95318973

00:45:37.915 --> 00:45:39.114 stuff in a lot of
NOTE Confidence: 0.95318973

00:45:39.114 --> 00:45:39.515 different,
NOTE Confidence: 0.97685695

00:45:40.555 --> 00:45:41.915 things, but a lot of
NOTE Confidence: 0.97685695

00:45:41.915 --> 00:45:43.535 it has to do with
NOTE Confidence: 0.97685695

00:45:43.594 --> 00:45:44.895 human and human
NOTE Confidence: 0.99118716

00:45:45.594 --> 00:45:46.094 motivations
NOTE Confidence: 0.9451989

00:45:46.395 --> 00:45:47.135 and psychology

NOTE Confidence: 0.9907203

00:45:47.435 --> 00:45:48.655 and things like that.

NOTE Confidence: 0.9980525

00:45:49.489 --> 00:45:50.450 And I'll just give you

NOTE Confidence: 0.9980525

00:45:50.450 --> 00:45:51.969 a few things that I

NOTE Confidence: 0.9980525

00:45:51.969 --> 00:45:53.650 learned from that article that

NOTE Confidence: 0.9980525

00:45:53.650 --> 00:45:55.190 really influenced me.

NOTE Confidence: 0.99305224

00:45:56.530 --> 00:45:57.569 You know, there was a

NOTE Confidence: 0.99305224

00:45:57.569 --> 00:45:59.109 lot of conventional wisdom,

NOTE Confidence: 0.99103343

00:45:59.969 --> 00:46:01.430 up to that point that,

NOTE Confidence: 0.99103343

00:46:01.725 --> 00:46:03.085 you know, great creative minds

NOTE Confidence: 0.99103343

00:46:03.085 --> 00:46:04.605 were less likely to generate

NOTE Confidence: 0.99103343

00:46:04.605 --> 00:46:05.585 anything new,

NOTE Confidence: 0.95024776

00:46:06.285 --> 00:46:08.045 over time. You know, they

NOTE Confidence: 0.95024776

00:46:08.045 --> 00:46:09.485 had their flesh in their

NOTE Confidence: 0.95024776

00:46:09.485 --> 00:46:11.165 twenties and thirties, and and

NOTE Confidence: 0.95024776

00:46:11.165 --> 00:46:12.685 that was it. And, you

NOTE Confidence: 0.95024776

00:46:12.685 --> 00:46:15.085 know, two notable examples were

NOTE Confidence: 0.95024776

00:46:15.085 --> 00:46:16.864 Einstein, who could never apparently

NOTE Confidence: 0.95024776

00:46:16.925 --> 00:46:18.390 get his head quite around

NOTE Confidence: 0.95024776

00:46:18.390 --> 00:46:19.369 quantum mechanics,

NOTE Confidence: 0.97576773

00:46:19.910 --> 00:46:20.410 and,

NOTE Confidence: 0.9823639

00:46:21.510 --> 00:46:23.670 Mierski was a leading cell

NOTE Confidence: 0.9823639

00:46:23.670 --> 00:46:25.989 biology person who never accepted

NOTE Confidence: 0.9823639

00:46:25.989 --> 00:46:27.510 the idea that DNA was

NOTE Confidence: 0.9823639

00:46:27.510 --> 00:46:28.809 a molecule of heredity.

NOTE Confidence: 0.93080866

00:46:31.464 --> 00:46:31.904 What,

NOTE Confidence: 0.97896016

00:46:32.344 --> 00:46:33.325 doctor Sapolsky,

NOTE Confidence: 0.9754321

00:46:34.505 --> 00:46:36.525 pointed out is that, actually,

NOTE Confidence: 0.9754321

00:46:36.585 --> 00:46:38.525 brain aging does not necessarily

NOTE Confidence: 0.9277145

00:46:39.464 --> 00:46:41.484 involve massive neuron loss,

NOTE Confidence: 0.99805576

00:46:42.184 --> 00:46:43.545 and that the aging brain

NOTE Confidence: 0.99805576

00:46:43.545 --> 00:46:44.984 can actually make new neurons

NOTE Confidence: 0.99805576
00:46:44.984 --> 00:46:46.204 and form new connections.
NOTE Confidence: 0.97807646
00:46:47.219 --> 00:46:48.340 And one of the surest
NOTE Confidence: 0.97807646
00:46:48.340 --> 00:46:50.200 ways to make that happen
NOTE Confidence: 0.9922331
00:46:51.540 --> 00:46:53.400 is to place the organism,
NOTE Confidence: 0.9922331
00:46:53.619 --> 00:46:55.380 whether it's an experimental animal
NOTE Confidence: 0.9922331
00:46:55.380 --> 00:46:55.880 or
NOTE Confidence: 0.7338334
00:46:56.260 --> 00:46:57.160 Homo sapiens,
NOTE Confidence: 0.99846125
00:46:57.460 --> 00:46:58.359 in a stimulating
NOTE Confidence: 0.93206275
00:46:58.739 --> 00:46:59.239 environment.
NOTE Confidence: 0.9836681
00:47:00.465 --> 00:47:02.405 And he relates this
NOTE Confidence: 0.9995559
00:47:02.785 --> 00:47:04.705 ability to continue to have
NOTE Confidence: 0.9995559
00:47:04.705 --> 00:47:05.765 creative output
NOTE Confidence: 0.88695496
00:47:06.145 --> 00:47:07.765 and openness to novelty
NOTE Confidence: 0.9738261
00:47:08.785 --> 00:47:09.925 is best predicted
NOTE Confidence: 0.9582677
00:47:10.545 --> 00:47:12.245 by one's time and discipline.
NOTE Confidence: 0.9846483

00:47:13.010 --> 00:47:14.050 And I took this to
NOTE Confidence: 0.9846483

00:47:14.050 --> 00:47:15.569 heart. And as you can
NOTE Confidence: 0.9846483

00:47:15.569 --> 00:47:17.250 see, I've been in more
NOTE Confidence: 0.9846483

00:47:17.250 --> 00:47:18.309 than one discipline
NOTE Confidence: 0.99806803

00:47:18.849 --> 00:47:20.309 during the course of my
NOTE Confidence: 0.99806803

00:47:20.369 --> 00:47:21.430 academic career.
NOTE Confidence: 0.98625714

00:47:22.210 --> 00:47:23.329 I've had to learn a
NOTE Confidence: 0.98625714

00:47:23.329 --> 00:47:24.469 lot of new stuff.
NOTE Confidence: 0.9755864

00:47:25.625 --> 00:47:27.165 Had to learn about engineering.
NOTE Confidence: 0.9755864

00:47:27.464 --> 00:47:28.825 What engineering did I learn
NOTE Confidence: 0.9755864

00:47:28.825 --> 00:47:29.625 about when I was a
NOTE Confidence: 0.9755864

00:47:29.625 --> 00:47:31.244 history major? Not much.
NOTE Confidence: 0.9688484

00:47:31.785 --> 00:47:33.565 I had to learn about
NOTE Confidence: 0.989033

00:47:33.944 --> 00:47:35.464 public policy, and I had
NOTE Confidence: 0.989033

00:47:35.464 --> 00:47:37.065 to learn about this whole
NOTE Confidence: 0.989033

00:47:37.065 --> 00:47:38.444 relative value system.

NOTE Confidence: 0.9725825
00:47:39.050 --> 00:47:40.890 And I've had to learn,
NOTE Confidence: 0.9989039
00:47:41.210 --> 00:47:41.710 about
NOTE Confidence: 0.9720636
00:47:42.410 --> 00:47:43.550 endothelial biology
NOTE Confidence: 0.98693466
00:47:43.930 --> 00:47:45.150 and endothelial
NOTE Confidence: 0.98925275
00:47:45.450 --> 00:47:46.190 cell function,
NOTE Confidence: 0.9963268
00:47:46.570 --> 00:47:47.690 you know, and how that
NOTE Confidence: 0.9963268
00:47:47.690 --> 00:47:48.670 relates back
NOTE Confidence: 0.9974133
00:47:49.530 --> 00:47:50.989 to what we do clinically.
NOTE Confidence: 0.90600264
00:47:52.775 --> 00:47:54.915 So this was really a
NOTE Confidence: 0.90600264
00:47:55.175 --> 00:47:56.315 important article.
NOTE Confidence: 0.9351905
00:47:56.855 --> 00:47:57.975 It's first published in the
NOTE Confidence: 0.9351905
00:47:57.975 --> 00:47:59.595 New Yorker and then published
NOTE Confidence: 0.9351905
00:47:59.655 --> 00:48:00.715 as part of
NOTE Confidence: 0.8039194
00:48:01.095 --> 00:48:01.675 a multiple,
NOTE Confidence: 0.97477496
00:48:03.095 --> 00:48:03.595 multiple,
NOTE Confidence: 0.9806248

00:48:04.215 --> 00:48:06.075 thoughts from this author,
NOTE Confidence: 0.9573844

00:48:06.989 --> 00:48:08.270 that was published in a
NOTE Confidence: 0.9573844

00:48:08.270 --> 00:48:10.350 book called Monkey Love, which,
NOTE Confidence: 0.99825007

00:48:11.630 --> 00:48:12.770 you might infer
NOTE Confidence: 0.9621763

00:48:13.070 --> 00:48:13.969 from the title,
NOTE Confidence: 0.9738964

00:48:15.390 --> 00:48:16.670 had to do with how
NOTE Confidence: 0.9738964

00:48:16.670 --> 00:48:18.270 we are, in many ways,
NOTE Confidence: 0.9738964

00:48:18.270 --> 00:48:20.050 still functioning as animals.
NOTE Confidence: 0.94764864

00:48:21.755 --> 00:48:22.655 So takeaways
NOTE Confidence: 0.9263009

00:48:23.355 --> 00:48:24.094 from this,
NOTE Confidence: 0.90396166

00:48:26.075 --> 00:48:27.355 I I guess my advice
NOTE Confidence: 0.90396166

00:48:27.355 --> 00:48:28.555 would be to beware the
NOTE Confidence: 0.90396166

00:48:28.555 --> 00:48:29.375 straight line,
NOTE Confidence: 0.9772271

00:48:30.555 --> 00:48:31.855 notion of a career.
NOTE Confidence: 0.9968661

00:48:33.035 --> 00:48:33.535 Recognize
NOTE Confidence: 0.999729

00:48:33.835 --> 00:48:34.335 that

NOTE Confidence: 0.9397781
00:48:35.450 --> 00:48:37.469 working hard always works.
NOTE Confidence: 0.93267494
00:48:39.210 --> 00:48:40.029 But, also,
NOTE Confidence: 0.9997893
00:48:40.410 --> 00:48:41.390 one has to
NOTE Confidence: 0.99987274
00:48:41.690 --> 00:48:42.829 remember that
NOTE Confidence: 0.9735755
00:48:43.690 --> 00:48:45.130 it's important to try new
NOTE Confidence: 0.9735755
00:48:45.130 --> 00:48:46.989 things, and that's the
NOTE Confidence: 0.86450154
00:48:47.875 --> 00:48:48.775 whole Sapolsky
NOTE Confidence: 0.9721143
00:48:49.155 --> 00:48:49.655 message.
NOTE Confidence: 0.97643816
00:48:50.435 --> 00:48:51.975 Look for problems to solve.
NOTE Confidence: 0.99959314
00:48:53.075 --> 00:48:55.095 Be willing to cross disciplines.
NOTE Confidence: 0.9938737
00:48:56.675 --> 00:48:58.295 I think, you know, we
NOTE Confidence: 0.9938737
00:48:58.515 --> 00:49:00.114 sometimes get in our silos,
NOTE Confidence: 0.9938737
00:49:00.114 --> 00:49:01.650 and I think that is
NOTE Confidence: 0.9938737
00:49:01.650 --> 00:49:04.150 not good for making progress.
NOTE Confidence: 0.94627416
00:49:06.049 --> 00:49:07.569 Always think about if you
NOTE Confidence: 0.94627416

00:49:07.569 --> 00:49:09.109 don't know much about something,

NOTE Confidence: 0.99341136

00:49:09.489 --> 00:49:11.329 find somebody who does. I

NOTE Confidence: 0.99341136

00:49:11.329 --> 00:49:13.089 happen to be fortunate enough

NOTE Confidence: 0.99341136

00:49:13.089 --> 00:49:14.150 to live in a

NOTE Confidence: 0.9721121

00:49:14.744 --> 00:49:17.085 very rich intellectual environment.

NOTE Confidence: 0.9737068

00:49:18.184 --> 00:49:19.545 I can always find somebody

NOTE Confidence: 0.9737068

00:49:19.545 --> 00:49:20.505 who knows a heck of

NOTE Confidence: 0.9737068

00:49:20.505 --> 00:49:21.545 a lot more about a

NOTE Confidence: 0.9737068

00:49:21.545 --> 00:49:22.684 topic than I do,

NOTE Confidence: 0.968094

00:49:23.385 --> 00:49:25.305 and seek them out, and

NOTE Confidence: 0.968094

00:49:25.305 --> 00:49:26.664 find out, and learn from

NOTE Confidence: 0.968094

00:49:26.664 --> 00:49:27.785 them. And you have to

NOTE Confidence: 0.968094

00:49:27.785 --> 00:49:28.285 learn

NOTE Confidence: 0.9923278

00:49:28.590 --> 00:49:29.870 how to talk their talk,

NOTE Confidence: 0.9923278

00:49:29.870 --> 00:49:31.250 how to learn their vocabulary,

NOTE Confidence: 0.95671856

00:49:31.950 --> 00:49:32.770 but also

NOTE Confidence: 0.9640384

00:49:33.230 --> 00:49:34.510 learn how they think about

NOTE Confidence: 0.9640384

00:49:34.510 --> 00:49:35.010 problems.

NOTE Confidence: 0.9919149

00:49:35.469 --> 00:49:38.030 Because that cross disciplinary approach

NOTE Confidence: 0.9919149

00:49:38.030 --> 00:49:39.010 really enriches

NOTE Confidence: 0.9502826

00:49:39.469 --> 00:49:41.890 one's ability to make progress.

NOTE Confidence: 0.99920934

00:49:42.375 --> 00:49:44.055 And I think this is

NOTE Confidence: 0.99920934

00:49:44.055 --> 00:49:45.355 an important thing.

NOTE Confidence: 0.9127207

00:49:46.535 --> 00:49:47.675 So keep learning.

NOTE Confidence: 0.95755637

00:49:48.695 --> 00:49:49.975 And I would say particularly

NOTE Confidence: 0.95755637

00:49:49.975 --> 00:49:51.495 from this perspective as a

NOTE Confidence: 0.95755637

00:49:51.495 --> 00:49:52.875 no hair, gray hair guy

NOTE Confidence: 0.9833309

00:49:53.255 --> 00:49:55.094 that, you know, it's important

NOTE Confidence: 0.9833309

00:49:55.094 --> 00:49:56.614 to give back whenever you

NOTE Confidence: 0.9833309

00:49:56.614 --> 00:49:57.114 can.

NOTE Confidence: 0.9973635

00:49:58.180 --> 00:49:59.780 So thanks very much. I'm

NOTE Confidence: 0.9973635

00:49:59.780 --> 00:50:00.600 happy to
NOTE Confidence: 0.9741257

00:50:00.900 --> 00:50:02.660 have a discussion about any
NOTE Confidence: 0.9741257

00:50:02.660 --> 00:50:03.860 of or all of these
NOTE Confidence: 0.9741257

00:50:03.860 --> 00:50:05.300 points, and thank you very
NOTE Confidence: 0.9741257

00:50:05.300 --> 00:50:06.440 much for having me.
NOTE Confidence: 0.9368455

00:50:15.864 --> 00:50:16.905 All right. Thanks, Doctor. Meyer.
NOTE Confidence: 0.9368455

00:50:16.905 --> 00:50:17.705 It was great to hear
NOTE Confidence: 0.9368455

00:50:17.705 --> 00:50:18.445 about your,
NOTE Confidence: 0.99821436

00:50:18.825 --> 00:50:19.325 interdisciplinary
NOTE Confidence: 0.9584608

00:50:19.785 --> 00:50:20.585 career and see how a
NOTE Confidence: 0.9584608

00:50:20.585 --> 00:50:21.725 lot of it came together.
NOTE Confidence: 0.88988304

00:50:22.425 --> 00:50:23.864 We have about nine minutes
NOTE Confidence: 0.88988304

00:50:23.864 --> 00:50:24.825 for questions, so I can
NOTE Confidence: 0.88988304

00:50:24.825 --> 00:50:25.625 pass the mic around so
NOTE Confidence: 0.88988304

00:50:25.625 --> 00:50:26.400 we get it on the
NOTE Confidence: 0.88988304

00:50:26.400 --> 00:50:27.279 recording as well if if

NOTE Confidence: 0.88988304

00:50:27.279 --> 00:50:28.260 anyone has any.

NOTE Confidence: 0.9773647

00:50:33.680 --> 00:50:34.719 Hi, doctor Meyer. Thank you

NOTE Confidence: 0.9773647

00:50:34.719 --> 00:50:35.920 so much for your talk.

NOTE Confidence: 0.9773647

00:50:36.239 --> 00:50:37.200 It seems like you've been

NOTE Confidence: 0.9773647

00:50:37.200 --> 00:50:38.239 involved in a lot of

NOTE Confidence: 0.9773647

00:50:38.239 --> 00:50:40.099 different arenas throughout your career.

NOTE Confidence: 0.9773647

00:50:40.285 --> 00:50:41.485 And I'm curious how at

NOTE Confidence: 0.9773647

00:50:41.485 --> 00:50:42.844 each time point you kind

NOTE Confidence: 0.9773647

00:50:42.844 --> 00:50:44.125 of made the decision about

NOTE Confidence: 0.9773647

00:50:44.125 --> 00:50:45.245 how to balance your time.

NOTE Confidence: 0.9773647

00:50:45.245 --> 00:50:46.765 Obviously, it's impossible to be

NOTE Confidence: 0.9773647

00:50:46.765 --> 00:50:47.805 good at everything all the

NOTE Confidence: 0.9773647

00:50:47.805 --> 00:50:48.305 time.

NOTE Confidence: 0.9965802

00:50:48.765 --> 00:50:49.725 And so was that a

NOTE Confidence: 0.9965802

00:50:49.725 --> 00:50:50.925 role of mentors who, you

NOTE Confidence: 0.9965802

00:50:50.925 --> 00:50:51.425 know,
NOTE Confidence: 0.9695758

00:50:51.885 --> 00:50:53.245 helped guide you toward things,
NOTE Confidence: 0.9695758

00:50:53.245 --> 00:50:54.045 or was that kind of
NOTE Confidence: 0.9695758

00:50:54.045 --> 00:50:56.150 intellectual curiosity? And would love
NOTE Confidence: 0.9695758

00:50:56.150 --> 00:50:56.750 to hear a little bit
NOTE Confidence: 0.9695758

00:50:56.750 --> 00:50:57.630 more about that. I I
NOTE Confidence: 0.9695758

00:50:57.630 --> 00:50:58.989 think probably most of it
NOTE Confidence: 0.9695758

00:50:58.989 --> 00:51:00.989 was curiosity and recognizing a
NOTE Confidence: 0.9695758

00:51:00.989 --> 00:51:02.430 problem and then going after
NOTE Confidence: 0.9695758

00:51:02.430 --> 00:51:02.930 it.
NOTE Confidence: 0.98802876

00:51:03.310 --> 00:51:04.530 It's kind of a surgical
NOTE Confidence: 0.98802876

00:51:04.589 --> 00:51:06.030 approach, I suppose, one might
NOTE Confidence: 0.98802876

00:51:06.030 --> 00:51:06.530 argue.
NOTE Confidence: 0.96102315

00:51:08.355 --> 00:51:08.855 It's,
NOTE Confidence: 0.98260385

00:51:10.035 --> 00:51:11.155 you know, I I had
NOTE Confidence: 0.98260385

00:51:11.155 --> 00:51:11.815 a very

NOTE Confidence: 0.99389637
00:51:12.275 --> 00:51:13.415 supportive environment,
NOTE Confidence: 0.97441494
00:51:14.195 --> 00:51:14.695 certainly,
NOTE Confidence: 0.9979123
00:51:15.715 --> 00:51:16.215 where,
NOTE Confidence: 0.99941844
00:51:17.075 --> 00:51:18.855 you know, I could take
NOTE Confidence: 0.9614879
00:51:19.635 --> 00:51:21.075 three days, four times a
NOTE Confidence: 0.9614879
00:51:21.075 --> 00:51:22.375 week to go to a
NOTE Confidence: 0.9614879
00:51:22.489 --> 00:51:24.250 relative value update committee meeting,
NOTE Confidence: 0.9614879
00:51:24.250 --> 00:51:25.230 or I could
NOTE Confidence: 0.9797174
00:51:25.770 --> 00:51:26.809 take a week or ten
NOTE Confidence: 0.9797174
00:51:26.809 --> 00:51:27.690 days and go to the
NOTE Confidence: 0.9797174
00:51:27.690 --> 00:51:29.069 Kennedy School, or,
NOTE Confidence: 0.99201465
00:51:30.329 --> 00:51:31.369 you know, have time to
NOTE Confidence: 0.99201465
00:51:31.369 --> 00:51:32.349 work in the lab.
NOTE Confidence: 0.99089396
00:51:33.289 --> 00:51:34.890 You know, when we worked
NOTE Confidence: 0.99089396
00:51:34.890 --> 00:51:36.010 in the operating room, we
NOTE Confidence: 0.99089396

00:51:36.010 --> 00:51:37.390 worked hard. We did
NOTE Confidence: 0.97443205

00:51:37.974 --> 00:51:38.795 lots of cases.
NOTE Confidence: 0.98431087

00:51:40.295 --> 00:51:40.795 So
NOTE Confidence: 0.9436541

00:51:41.548 --> 00:51:42.694 and and but I would
NOTE Confidence: 0.9436541

00:51:42.694 --> 00:51:44.375 say the other thing, and
NOTE Confidence: 0.9436541

00:51:44.375 --> 00:51:46.375 I didn't emphasize it, at
NOTE Confidence: 0.9436541

00:51:46.375 --> 00:51:47.815 all and should have, is
NOTE Confidence: 0.9436541

00:51:47.815 --> 00:51:48.315 that,
NOTE Confidence: 0.95921195

00:51:48.694 --> 00:51:50.535 you know, the intellectual environment
NOTE Confidence: 0.95921195

00:51:50.535 --> 00:51:51.815 here is not just within
NOTE Confidence: 0.95921195

00:51:51.815 --> 00:51:53.370 the Department of Surgery. It's
NOTE Confidence: 0.95921195

00:51:53.610 --> 00:51:55.210 within the whole program. And
NOTE Confidence: 0.95921195

00:51:55.210 --> 00:51:56.170 so I think more and
NOTE Confidence: 0.95921195

00:51:56.170 --> 00:51:57.610 more now across the country,
NOTE Confidence: 0.95921195

00:51:57.610 --> 00:51:58.110 there
NOTE Confidence: 0.9943337

00:51:58.490 --> 00:52:00.570 are congenital heart programs that

NOTE Confidence: 0.9943337

00:52:00.570 --> 00:52:01.790 involve cardiologists

NOTE Confidence: 0.8990308

00:52:02.090 --> 00:52:03.630 and surgeons and anesthesiologists

NOTE Confidence: 0.96881694

00:52:04.490 --> 00:52:06.750 and intensive care docs

NOTE Confidence: 0.80937797

00:52:07.850 --> 00:52:09.150 and nursing and

NOTE Confidence: 0.97218835

00:52:09.844 --> 00:52:11.704 respiratory therapy and the perfusionist.

NOTE Confidence: 0.97218835

00:52:11.924 --> 00:52:12.964 I mean, it's a team

NOTE Confidence: 0.97218835

00:52:12.964 --> 00:52:13.464 sport.

NOTE Confidence: 0.9465645

00:52:14.885 --> 00:52:15.385 So

NOTE Confidence: 0.96952206

00:52:17.125 --> 00:52:18.244 I will have to say

NOTE Confidence: 0.96952206

00:52:18.244 --> 00:52:19.525 one other thing that I

NOTE Confidence: 0.96952206

00:52:19.525 --> 00:52:20.664 think is critical.

NOTE Confidence: 0.9251696

00:52:22.219 --> 00:52:24.299 I happen to be fortunate

NOTE Confidence: 0.9251696

00:52:24.299 --> 00:52:26.219 enough to marry a an

NOTE Confidence: 0.9251696

00:52:26.219 --> 00:52:26.719 extraordinarily

NOTE Confidence: 0.99704427

00:52:27.099 --> 00:52:27.599 supportive

NOTE Confidence: 0.96429944

00:52:27.980 --> 00:52:28.480 spouse,
NOTE Confidence: 0.9979432
00:52:29.900 --> 00:52:30.400 who
NOTE Confidence: 0.93306106
00:52:30.779 --> 00:52:32.140 when I couldn't show up
NOTE Confidence: 0.93306106
00:52:32.140 --> 00:52:33.260 for something because I was
NOTE Confidence: 0.93306106
00:52:33.260 --> 00:52:34.539 stuck in the operating room
NOTE Confidence: 0.93306106
00:52:34.539 --> 00:52:35.900 or off at one of
NOTE Confidence: 0.93306106
00:52:35.900 --> 00:52:37.275 these meetings or whatever.
NOTE Confidence: 0.9541963
00:52:37.835 --> 00:52:38.795 You know, she just picked
NOTE Confidence: 0.9541963
00:52:38.795 --> 00:52:40.234 up the ball and and
NOTE Confidence: 0.9541963
00:52:40.234 --> 00:52:41.055 carried it.
NOTE Confidence: 0.98179066
00:52:41.994 --> 00:52:42.494 So
NOTE Confidence: 0.94960266
00:52:42.875 --> 00:52:43.994 it would I would be
NOTE Confidence: 0.94960266
00:52:43.994 --> 00:52:45.594 very remiss not to,
NOTE Confidence: 0.9988718
00:52:46.154 --> 00:52:47.535 emphasize that point.
NOTE Confidence: 0.48075294
00:52:49.035 --> 00:52:49.535 I
NOTE Confidence: 0.9893354
00:52:49.850 --> 00:52:51.450 I think, you know, have

NOTE Confidence: 0.9893354

00:52:51.450 --> 00:52:52.730 we been down some blind

NOTE Confidence: 0.9893354

00:52:52.730 --> 00:52:53.230 alleys?

NOTE Confidence: 0.98262525

00:52:53.770 --> 00:52:54.270 Absolutely.

NOTE Confidence: 0.9128797

00:52:55.450 --> 00:52:55.950 Certainly,

NOTE Confidence: 0.9857582

00:52:56.890 --> 00:52:58.330 one might argue we don't

NOTE Confidence: 0.9857582

00:52:58.330 --> 00:52:59.850 have anything clinically ready to

NOTE Confidence: 0.9857582

00:52:59.850 --> 00:53:01.230 go in the tissue engineering

NOTE Confidence: 0.9857582

00:53:01.450 --> 00:53:03.390 space, but, you know, that

NOTE Confidence: 0.92781055

00:53:03.844 --> 00:53:05.545 we we remain optimistic.

NOTE Confidence: 0.99843186

00:53:06.325 --> 00:53:07.285 And the fact that we've

NOTE Confidence: 0.99843186

00:53:07.285 --> 00:53:08.025 got some

NOTE Confidence: 0.9841177

00:53:08.325 --> 00:53:10.585 companies now involved and interested

NOTE Confidence: 0.8202979

00:53:10.885 --> 00:53:11.864 suggests that

NOTE Confidence: 0.98580575

00:53:12.484 --> 00:53:13.704 maybe there's a future.

NOTE Confidence: 0.93172795

00:53:15.605 --> 00:53:16.825 But I I think,

NOTE Confidence: 0.9873395

00:53:17.960 --> 00:53:19.739 I I've been fortunate enough,
NOTE Confidence: 0.9994565

00:53:20.920 --> 00:53:21.980 to be able to
NOTE Confidence: 0.9256583

00:53:22.440 --> 00:53:23.880 go where my interest took
NOTE Confidence: 0.9256583

00:53:23.880 --> 00:53:24.380 me.
NOTE Confidence: 0.9816722

00:53:25.559 --> 00:53:26.059 And
NOTE Confidence: 0.9966947

00:53:26.839 --> 00:53:27.799 I don't think it's worked
NOTE Confidence: 0.9966947

00:53:27.799 --> 00:53:28.619 out too bad.
NOTE Confidence: 0.9641803

00:53:40.015 --> 00:53:41.535 Thanks. So for anybody who
NOTE Confidence: 0.9641803

00:53:41.535 --> 00:53:42.734 doesn't know me, I'm Peter
NOTE Confidence: 0.9641803

00:53:42.734 --> 00:53:44.170 Gruber. I'm a pediatric heart
NOTE Confidence: 0.9641803

00:53:44.170 --> 00:53:45.310 surgeon here at Yale.
NOTE Confidence: 0.9892957

00:53:45.690 --> 00:53:47.290 And if it wasn't obvious
NOTE Confidence: 0.9892957

00:53:47.290 --> 00:53:49.370 from doctor Mayer's, presentation and
NOTE Confidence: 0.9892957

00:53:49.370 --> 00:53:50.910 what he's accomplished so far,
NOTE Confidence: 0.9849902

00:53:51.290 --> 00:53:52.570 he's an absolute legend in
NOTE Confidence: 0.9849902

00:53:52.570 --> 00:53:53.930 the field of cardiac surgery,

NOTE Confidence: 0.9849902
00:53:53.930 --> 00:53:55.870 let alone pediatric cardiac surgery,
NOTE Confidence: 0.9998633
00:53:56.395 --> 00:53:58.475 and his contributions are really
NOTE Confidence: 0.9998633
00:53:58.475 --> 00:53:58.975 incalculable
NOTE Confidence: 0.9827441
00:53:59.435 --> 00:54:01.114 in many different areas. So
NOTE Confidence: 0.9827441
00:54:01.114 --> 00:54:02.335 thank you, doctor Mayer.
NOTE Confidence: 0.97100395
00:54:02.955 --> 00:54:04.735 I just wanted to quickly
NOTE Confidence: 0.97100395
00:54:04.795 --> 00:54:06.075 follow-up on something you just
NOTE Confidence: 0.97100395
00:54:06.075 --> 00:54:07.114 said, and that is how
NOTE Confidence: 0.97100395
00:54:07.114 --> 00:54:07.915 do you know when to
NOTE Confidence: 0.97100395
00:54:07.915 --> 00:54:08.415 quit?
NOTE Confidence: 0.96872365
00:54:09.270 --> 00:54:10.550 Right? Because those are all
NOTE Confidence: 0.96872365
00:54:10.550 --> 00:54:11.750 great things you've achieved, but
NOTE Confidence: 0.96872365
00:54:11.750 --> 00:54:12.630 I bet there's a whole
NOTE Confidence: 0.96872365
00:54:12.630 --> 00:54:13.670 barrel of stuff that you
NOTE Confidence: 0.96872365
00:54:13.670 --> 00:54:14.469 said, you know what? We're
NOTE Confidence: 0.96872365

00:54:14.469 --> 00:54:16.010 not gonna finish this.
NOTE Confidence: 0.94971955

00:54:16.710 --> 00:54:18.570 Well, I I I'm gonna
NOTE Confidence: 0.97643805

00:54:18.870 --> 00:54:21.190 quote something I came across,
NOTE Confidence: 0.97643805

00:54:21.190 --> 00:54:22.070 I think, when I was
NOTE Confidence: 0.97643805

00:54:22.070 --> 00:54:23.110 when I was in high
NOTE Confidence: 0.97643805

00:54:23.110 --> 00:54:23.610 school,
NOTE Confidence: 0.99944216

00:54:24.355 --> 00:54:24.855 which
NOTE Confidence: 0.9339668

00:54:25.155 --> 00:54:26.775 is something to the effect.
NOTE Confidence: 0.9339668

00:54:26.835 --> 00:54:27.955 I won't get the quote
NOTE Confidence: 0.9339668

00:54:27.955 --> 00:54:28.855 exactly right.
NOTE Confidence: 0.9049284

00:54:29.555 --> 00:54:31.875 But nothing's really fun. Not
NOTE Confidence: 0.9049284

00:54:31.955 --> 00:54:33.335 nothing's really work
NOTE Confidence: 0.9837888

00:54:33.635 --> 00:54:34.995 unless you'd rather be doing
NOTE Confidence: 0.9837888

00:54:34.995 --> 00:54:35.815 something else.
NOTE Confidence: 0.99100316

00:54:36.515 --> 00:54:37.335 And so,
NOTE Confidence: 0.9975359

00:54:38.469 --> 00:54:39.590 you know, as long as

NOTE Confidence: 0.9975359
00:54:39.590 --> 00:54:41.690 my health holds and my
NOTE Confidence: 0.8400271
00:54:42.310 --> 00:54:44.650 interest remain high, I,
NOTE Confidence: 0.9886767
00:54:45.110 --> 00:54:46.390 you know, I I'm don't
NOTE Confidence: 0.9886767
00:54:46.390 --> 00:54:47.430 see any reason not to
NOTE Confidence: 0.9886767
00:54:47.430 --> 00:54:48.090 keep working.
NOTE Confidence: 0.9832282
00:54:48.630 --> 00:54:49.130 And,
NOTE Confidence: 0.998704
00:54:50.390 --> 00:54:50.890 it's
NOTE Confidence: 0.9592705
00:54:51.785 --> 00:54:52.825 been a great place to
NOTE Confidence: 0.9592705
00:54:52.825 --> 00:54:53.325 work.
NOTE Confidence: 0.9435571
00:54:54.105 --> 00:54:55.225 You know, a great and
NOTE Confidence: 0.9435571
00:54:55.225 --> 00:54:55.725 supportive
NOTE Confidence: 0.99262583
00:54:56.025 --> 00:54:56.525 environment.
NOTE Confidence: 0.95768934
00:54:58.585 --> 00:54:59.705 I I feel like as
NOTE Confidence: 0.95768934
00:54:59.705 --> 00:55:00.825 long as I'm making a
NOTE Confidence: 0.95768934
00:55:00.825 --> 00:55:01.325 contribution,
NOTE Confidence: 0.8910118

00:55:01.785 --> 00:55:03.085 and I always
NOTE Confidence: 0.97006303

00:55:03.800 --> 00:55:05.080 make it as clear as
NOTE Confidence: 0.97006303

00:55:05.080 --> 00:55:06.280 I can that if somebody
NOTE Confidence: 0.97006303

00:55:06.280 --> 00:55:07.239 feels I'm not making a
NOTE Confidence: 0.97006303

00:55:07.239 --> 00:55:09.000 contribution anymore, just tell me
NOTE Confidence: 0.97006303

00:55:09.000 --> 00:55:10.040 and then, you know, I'll
NOTE Confidence: 0.97006303

00:55:10.040 --> 00:55:10.920 hang it up. I'll go
NOTE Confidence: 0.97006303

00:55:10.920 --> 00:55:12.219 do something else. But,
NOTE Confidence: 0.9878321

00:55:13.640 --> 00:55:15.020 I think as long as
NOTE Confidence: 0.9878321

00:55:15.239 --> 00:55:16.680 one is able to do
NOTE Confidence: 0.9878321

00:55:16.680 --> 00:55:17.055 that,
NOTE Confidence: 0.9533679

00:55:17.614 --> 00:55:19.934 and as long as you
NOTE Confidence: 0.9533679

00:55:19.934 --> 00:55:21.795 are making a contribution and
NOTE Confidence: 0.99951744

00:55:22.255 --> 00:55:23.075 you're still
NOTE Confidence: 0.99186456

00:55:23.454 --> 00:55:25.135 thinking and working and trying
NOTE Confidence: 0.99186456

00:55:25.135 --> 00:55:26.114 to solve problems,

NOTE Confidence: 0.97312087

00:55:26.415 --> 00:55:27.614 I I don't see any

NOTE Confidence: 0.97312087

00:55:27.614 --> 00:55:28.994 reason not to keep going.

NOTE Confidence: 0.9954278

00:55:29.940 --> 00:55:31.540 I wanna just clarify my

NOTE Confidence: 0.9954278

00:55:31.540 --> 00:55:33.219 my question briefly. We certainly

NOTE Confidence: 0.9954278

00:55:33.219 --> 00:55:34.260 don't ever want you to

NOTE Confidence: 0.9954278

00:55:34.260 --> 00:55:34.760 quit.

NOTE Confidence: 0.9840419

00:55:36.260 --> 00:55:37.700 I was actually referring to

NOTE Confidence: 0.9840419

00:55:37.700 --> 00:55:39.460 all those experiments that you

NOTE Confidence: 0.9840419

00:55:39.460 --> 00:55:40.739 could do forever and ever

NOTE Confidence: 0.9840419

00:55:40.739 --> 00:55:42.180 that will never work. And

NOTE Confidence: 0.9840419

00:55:42.180 --> 00:55:43.140 then you gotta say to

NOTE Confidence: 0.9840419

00:55:43.140 --> 00:55:44.180 yourself, you know what? It's

NOTE Confidence: 0.9840419

00:55:44.180 --> 00:55:45.614 time to move on. Yeah.

NOTE Confidence: 0.9840419

00:55:45.614 --> 00:55:46.655 And you've been in lots

NOTE Confidence: 0.9840419

00:55:46.655 --> 00:55:48.335 of different areas, and, certainly,

NOTE Confidence: 0.9840419

00:55:48.335 --> 00:55:49.235 you need to make
NOTE Confidence: 0.96781313

00:55:49.614 --> 00:55:50.114 those,
NOTE Confidence: 0.9997674

00:55:50.815 --> 00:55:52.114 decisions at some point.
NOTE Confidence: 0.98000336

00:55:52.495 --> 00:55:53.695 Yeah. I'll tell you.
NOTE Confidence: 0.98000336

00:55:53.695 --> 00:55:55.215 I think the reason that
NOTE Confidence: 0.98000336

00:55:55.215 --> 00:55:55.715 we
NOTE Confidence: 0.9904818

00:55:56.094 --> 00:55:56.835 kind of
NOTE Confidence: 0.74649656

00:55:57.215 --> 00:55:57.715 stop
NOTE Confidence: 0.997441

00:55:58.299 --> 00:56:00.539 pursuing the myocardial preservation stuff
NOTE Confidence: 0.997441

00:56:00.539 --> 00:56:01.039 is
NOTE Confidence: 0.9912274

00:56:01.339 --> 00:56:03.339 the clinical problem had become
NOTE Confidence: 0.9912274

00:56:03.339 --> 00:56:04.619 much less of an issue.
NOTE Confidence: 0.9912274

00:56:04.619 --> 00:56:05.980 We really had figured out,
NOTE Confidence: 0.9912274

00:56:05.980 --> 00:56:07.119 I think, how to
NOTE Confidence: 0.9981057

00:56:08.460 --> 00:56:09.500 be able to preserve the
NOTE Confidence: 0.9981057

00:56:09.500 --> 00:56:10.319 heart for

NOTE Confidence: 0.9964583

00:56:10.755 --> 00:56:12.355 relatively longer periods of time

NOTE Confidence: 0.9964583

00:56:12.355 --> 00:56:13.315 that would allow us to

NOTE Confidence: 0.9964583

00:56:13.315 --> 00:56:15.575 get more complicated operations done.

NOTE Confidence: 0.9854517

00:56:16.755 --> 00:56:17.714 And we were sort of

NOTE Confidence: 0.9854517

00:56:17.714 --> 00:56:18.994 at the you know, I

NOTE Confidence: 0.9854517

00:56:18.994 --> 00:56:20.934 was at a block roadblock.

NOTE Confidence: 0.9914866

00:56:21.555 --> 00:56:22.515 You know, there were only

NOTE Confidence: 0.9914866

00:56:22.515 --> 00:56:23.635 so many new drugs to

NOTE Confidence: 0.9914866

00:56:23.635 --> 00:56:25.474 try during reperfusion and things

NOTE Confidence: 0.9914866

00:56:25.474 --> 00:56:26.010 like that.

NOTE Confidence: 0.99943984

00:56:27.530 --> 00:56:28.570 And I didn't have a

NOTE Confidence: 0.99943984

00:56:28.570 --> 00:56:29.310 good collaborator

NOTE Confidence: 0.9925878

00:56:29.690 --> 00:56:31.130 that would really help me

NOTE Confidence: 0.9925878

00:56:31.130 --> 00:56:33.450 dig down inside, you know,

NOTE Confidence: 0.9925878

00:56:33.450 --> 00:56:35.290 cell biology and that sort

NOTE Confidence: 0.9925878

00:56:35.290 --> 00:56:36.730 of thing. And so for
NOTE Confidence: 0.9925878

00:56:36.730 --> 00:56:37.630 those reasons,
NOTE Confidence: 0.92149013

00:56:38.969 --> 00:56:40.170 as well as,
NOTE Confidence: 0.93266547

00:56:42.625 --> 00:56:43.905 the fact that there was
NOTE Confidence: 0.93266547

00:56:43.905 --> 00:56:45.125 this other possibility
NOTE Confidence: 0.96703553

00:56:45.825 --> 00:56:47.345 and, you know, with the
NOTE Confidence: 0.96703553

00:56:47.345 --> 00:56:48.805 tissue engineering stuff
NOTE Confidence: 0.92343724

00:56:49.185 --> 00:56:49.685 that,
NOTE Confidence: 0.95621943

00:56:50.225 --> 00:56:51.905 I thought, you know, maybe
NOTE Confidence: 0.95621943

00:56:51.905 --> 00:56:53.345 we should pivot a little
NOTE Confidence: 0.95621943

00:56:53.345 --> 00:56:55.105 bit and go not a
NOTE Confidence: 0.95621943

00:56:55.105 --> 00:56:56.165 little bit, a lot.
NOTE Confidence: 0.9490955

00:56:57.025 --> 00:56:57.525 And,
NOTE Confidence: 0.9979727

00:56:58.040 --> 00:56:59.080 you know, there's a little
NOTE Confidence: 0.9979727

00:56:59.080 --> 00:56:59.580 serendipity
NOTE Confidence: 0.9864211

00:56:59.960 --> 00:57:01.400 story here that I think

NOTE Confidence: 0.9864211

00:57:01.400 --> 00:57:03.640 is also important. You can

NOTE Confidence: 0.9864211

00:57:03.640 --> 00:57:04.520 see there have been a

NOTE Confidence: 0.9864211

00:57:04.520 --> 00:57:06.680 few serendipity things that have

NOTE Confidence: 0.9864211

00:57:06.680 --> 00:57:07.900 affected my life.

NOTE Confidence: 0.9974661

00:57:08.520 --> 00:57:09.020 But

NOTE Confidence: 0.99468553

00:57:09.719 --> 00:57:11.420 this one was I

NOTE Confidence: 0.9924906

00:57:11.994 --> 00:57:14.075 actually was sitting down at

NOTE Confidence: 0.9924906

00:57:14.075 --> 00:57:14.575 lunch

NOTE Confidence: 0.96491927

00:57:15.114 --> 00:57:16.315 with when there was a

NOTE Confidence: 0.96491927

00:57:16.315 --> 00:57:17.755 doctor's dining room. There isn't

NOTE Confidence: 0.96491927

00:57:17.755 --> 00:57:18.795 anymore, but there used to

NOTE Confidence: 0.96491927

00:57:18.795 --> 00:57:20.155 be one at Boston Children's.

NOTE Confidence: 0.96491927

00:57:20.155 --> 00:57:21.295 And one of my colleagues

NOTE Confidence: 0.9981577

00:57:21.675 --> 00:57:22.714 was trying to figure out

NOTE Confidence: 0.9981577

00:57:22.714 --> 00:57:24.015 how to grow a liver

NOTE Confidence: 0.9751535

00:57:24.869 --> 00:57:26.150 because he was running the
NOTE Confidence: 0.9751535

00:57:26.150 --> 00:57:27.829 liver transplant program, and they
NOTE Confidence: 0.9751535

00:57:27.829 --> 00:57:29.190 had too many kids who
NOTE Confidence: 0.9751535

00:57:29.190 --> 00:57:30.630 weren't surviving to the point
NOTE Confidence: 0.9751535

00:57:30.630 --> 00:57:31.930 of getting a liver transplant.
NOTE Confidence: 0.99916446

00:57:33.910 --> 00:57:34.410 So
NOTE Confidence: 0.92806166

00:57:34.789 --> 00:57:35.670 he was telling me he
NOTE Confidence: 0.92806166

00:57:35.670 --> 00:57:36.869 had sort of gotten started
NOTE Confidence: 0.92806166

00:57:36.869 --> 00:57:38.549 in this tissue engineering field
NOTE Confidence: 0.92806166

00:57:38.549 --> 00:57:39.049 and
NOTE Confidence: 0.9230093

00:57:40.775 --> 00:57:42.215 was trying to grow a
NOTE Confidence: 0.9230093

00:57:42.215 --> 00:57:43.435 liver. I
NOTE Confidence: 0.9559435

00:57:43.815 --> 00:57:44.775 looked at him. I said,
NOTE Confidence: 0.9559435

00:57:44.775 --> 00:57:46.295 boy, that's really gotta be
NOTE Confidence: 0.9559435

00:57:46.295 --> 00:57:47.675 hard. That's what a complicated
NOTE Confidence: 0.9559435

00:57:47.815 --> 00:57:48.315 structure.

NOTE Confidence: 0.9611836
00:57:49.015 --> 00:57:50.375 Why don't we do something
NOTE Confidence: 0.9611836
00:57:50.375 --> 00:57:51.575 simple like make a heart
NOTE Confidence: 0.9611836
00:57:51.575 --> 00:57:52.075 valve?
NOTE Confidence: 0.9426961
00:57:52.869 --> 00:57:54.710 Right? Better be naive than
NOTE Confidence: 0.9426961
00:57:54.710 --> 00:57:55.849 informed sometimes.
NOTE Confidence: 0.7919527
00:57:56.390 --> 00:57:57.210 And literally,
NOTE Confidence: 0.9411061
00:57:57.830 --> 00:57:59.910 that we got one fellow
NOTE Confidence: 0.9411061
00:57:59.910 --> 00:58:01.109 from his lab, one fellow
NOTE Confidence: 0.9411061
00:58:01.109 --> 00:58:02.010 from my lab
NOTE Confidence: 0.63727874
00:58:02.710 --> 00:58:03.210 who
NOTE Confidence: 0.97353
00:58:03.670 --> 00:58:05.115 started working on this.
NOTE Confidence: 0.9802973
00:58:06.075 --> 00:58:07.675 And, you know, we've we've
NOTE Confidence: 0.9802973
00:58:07.675 --> 00:58:08.635 made a lot of progress.
NOTE Confidence: 0.9802973
00:58:08.635 --> 00:58:09.835 We learned a lot. We
NOTE Confidence: 0.9802973
00:58:09.835 --> 00:58:11.275 learned a lot about basic
NOTE Confidence: 0.9802973

00:58:11.275 --> 00:58:13.935 valve biology, basic valve mechanics.

NOTE Confidence: 0.97169435

00:58:14.875 --> 00:58:15.994 You know, why if you

NOTE Confidence: 0.97169435

00:58:15.994 --> 00:58:17.135 put a piece of pericardium

NOTE Confidence: 0.99264914

00:58:17.435 --> 00:58:18.875 in in place of an

NOTE Confidence: 0.99264914

00:58:18.875 --> 00:58:20.175 aortic valve leaflet,

NOTE Confidence: 0.91288453

00:58:20.720 --> 00:58:21.619 it isn't gonna

NOTE Confidence: 0.9503585

00:58:22.000 --> 00:58:22.579 work because

NOTE Confidence: 0.96857285

00:58:23.640 --> 00:58:24.140 the,

NOTE Confidence: 0.9996446

00:58:25.680 --> 00:58:26.180 biomechanical

NOTE Confidence: 0.9911278

00:58:26.559 --> 00:58:28.240 characteristics aren't right. It's a

NOTE Confidence: 0.9911278

00:58:28.240 --> 00:58:29.599 dead piece of tissue. It's,

NOTE Confidence: 0.9911278

00:58:29.599 --> 00:58:30.660 you know, it's just

NOTE Confidence: 0.98474276

00:58:30.960 --> 00:58:32.319 all those things. But, you

NOTE Confidence: 0.98474276

00:58:32.319 --> 00:58:33.599 know, you one would never

NOTE Confidence: 0.98474276

00:58:33.599 --> 00:58:35.460 have had those insights without

NOTE Confidence: 0.9518513

00:58:36.444 --> 00:58:38.204 having had all that background

NOTE Confidence: 0.9518513

00:58:38.204 --> 00:58:39.244 and trying to figure out

NOTE Confidence: 0.9518513

00:58:39.244 --> 00:58:40.845 valve biology and what does

NOTE Confidence: 0.9518513

00:58:40.845 --> 00:58:42.125 an interstitial cell do and

NOTE Confidence: 0.9518513

00:58:42.125 --> 00:58:43.645 what does an endothelial cell

NOTE Confidence: 0.9518513

00:58:43.645 --> 00:58:44.385 do, etcetera.

NOTE Confidence: 0.9963052

00:58:44.845 --> 00:58:45.345 So,

NOTE Confidence: 0.9647034

00:58:47.244 --> 00:58:48.145 you know, these

NOTE Confidence: 0.96697503

00:58:48.740 --> 00:58:51.220 what you learn in different

NOTE Confidence: 0.96697503

00:58:51.220 --> 00:58:53.059 ways can come back and

NOTE Confidence: 0.96697503

00:58:53.059 --> 00:58:53.559 influence

NOTE Confidence: 0.9695899

00:58:53.859 --> 00:58:55.140 things in the future pretty

NOTE Confidence: 0.9695899

00:58:55.140 --> 00:58:55.640 positively.

NOTE Confidence: 0.9963099

00:58:56.500 --> 00:58:57.640 And I think that's,

NOTE Confidence: 0.96294045

00:58:58.180 --> 00:58:59.220 you know, that's one of

NOTE Confidence: 0.96294045

00:58:59.220 --> 00:59:00.740 the benefits of doing research.

NOTE Confidence: 0.96294045

00:59:00.740 --> 00:59:01.859 You know, it's not always,
NOTE Confidence: 0.96294045

00:59:01.859 --> 00:59:02.760 well, I wanna
NOTE Confidence: 0.97010875

00:59:03.335 --> 00:59:04.934 cure that cancer, so I
NOTE Confidence: 0.97010875

00:59:04.934 --> 00:59:06.394 know that I have
NOTE Confidence: 0.9619946

00:59:06.694 --> 00:59:07.734 these steps that I have
NOTE Confidence: 0.9619946

00:59:07.734 --> 00:59:08.775 to do. You know? We're
NOTE Confidence: 0.9619946

00:59:08.775 --> 00:59:10.634 learning stuff about valve biology,
NOTE Confidence: 0.9619946

00:59:10.775 --> 00:59:12.694 and maybe some point we're
NOTE Confidence: 0.9619946

00:59:12.694 --> 00:59:14.454 gonna get to the having
NOTE Confidence: 0.9619946

00:59:14.454 --> 00:59:16.714 a better valve substitute. But,
NOTE Confidence: 0.9471657

00:59:17.210 --> 00:59:18.510 you know, along the way,
NOTE Confidence: 0.9471657

00:59:18.730 --> 00:59:20.250 that valve biology has helped
NOTE Confidence: 0.9471657

00:59:20.250 --> 00:59:22.329 us understand how things work
NOTE Confidence: 0.9471657

00:59:22.329 --> 00:59:23.210 or don't work in the
NOTE Confidence: 0.9471657

00:59:23.210 --> 00:59:24.910 operating room. And so
NOTE Confidence: 0.92990655

00:59:25.210 --> 00:59:26.510 when we're trying to repair

NOTE Confidence: 0.93686324
00:59:26.890 --> 00:59:28.109 a diseased valve.
NOTE Confidence: 0.99194086
00:59:28.569 --> 00:59:30.685 So you never can quite
NOTE Confidence: 0.9533827
00:59:31.065 --> 00:59:31.565 always
NOTE Confidence: 0.93618965
00:59:31.865 --> 00:59:33.085 make a straight line,
NOTE Confidence: 0.96223646
00:59:33.385 --> 00:59:34.505 and I if there's no
NOTE Confidence: 0.96223646
00:59:34.505 --> 00:59:36.045 other message in this whole
NOTE Confidence: 0.96223646
00:59:36.105 --> 00:59:37.165 discussion, it's
NOTE Confidence: 0.9534694
00:59:37.945 --> 00:59:39.305 don't don't fall into the
NOTE Confidence: 0.9534694
00:59:39.305 --> 00:59:40.505 straight line. At least that
NOTE Confidence: 0.9534694
00:59:40.505 --> 00:59:41.565 would be my advice.
NOTE Confidence: 0.99872386
00:59:45.890 --> 00:59:47.670 Any other last minute questions?
NOTE Confidence: 0.962
00:59:50.290 --> 00:59:51.329 Alright. Now we can thank
NOTE Confidence: 0.962
00:59:51.329 --> 00:59:52.150 doctor Meyer.
NOTE Confidence: 0.88966995
01:00:03.234 --> 01:00:04.835 Good. Thank you. Thanks for
NOTE Confidence: 0.88966995
01:00:04.835 --> 01:00:05.335 coming.
NOTE Confidence: 0.7974266

01:00:05.635 --> 01:00:06.994 You're coming. Really good talk.

NOTE Confidence: 0.7974266

01:00:06.994 --> 01:00:08.855 Oh, okay. Great. Good.

NOTE Confidence: 0.99633133

01:00:09.474 --> 01:00:09.974 Okay.

NOTE Confidence: 0.9032999

01:00:10.950 --> 01:00:12.869 Very good. Yes. Alright. I'm

NOTE Confidence: 0.9032999

01:00:12.869 --> 01:00:13.670 gonna sit and have some

NOTE Confidence: 0.9032999

01:00:13.670 --> 01:00:14.550 lunch, and then I'm gonna

NOTE Confidence: 0.9032999

01:00:14.550 --> 01:00:15.770 go get on the train.

NOTE Confidence: 0.9032999

01:00:15.830 --> 01:00:16.630 What time is your shift

NOTE Confidence: 0.9032999

01:00:16.630 --> 01:00:17.130 at?

NOTE Confidence: 0.88061076

01:00:17.670 --> 01:00:18.950 I've got a reservation. I

NOTE Confidence: 0.88061076

01:00:18.950 --> 01:00:20.150 don't know. Four o'clock, but

NOTE Confidence: 0.88061076

01:00:20.150 --> 01:00:21.430 I'll probably see if I

NOTE Confidence: 0.88061076

01:00:21.430 --> 01:00:23.430 can get earlier one. So

NOTE Confidence: 0.88061076

01:00:23.430 --> 01:00:23.930 it's

NOTE Confidence: 0.8855614

01:00:24.335 --> 01:00:25.535 one o'clock out there. I

NOTE Confidence: 0.8855614

01:00:25.535 --> 01:00:26.335 think it might be one

NOTE Confidence: 0.8855614

01:00:26.335 --> 01:00:27.295 at two, but I didn't

NOTE Confidence: 0.8855614

01:00:27.295 --> 01:00:28.414 wanna cut it too close.

NOTE Confidence: 0.8855614

01:00:28.414 --> 01:00:29.075 So Yeah.

NOTE Confidence: 0.6468837

01:00:29.454 --> 01:00:29.954 Yeah.

NOTE Confidence: 0.4448451

01:00:30.575 --> 01:00:31.634 If I go, I guess.

NOTE Confidence: 0.9242689

01:00:33.615 --> 01:00:34.755 Oh, yes. Thanks.

NOTE Confidence: 0.904812

01:00:35.375 --> 01:00:36.835 Oh, there you go.