

WEBVTT

NOTE duration:"01:32:04"

NOTE recognizability:0.669

NOTE language:en-us

NOTE Confidence: 0.4558106

00:00:00.000 --> 00:00:02.240 OK. Good evening.

NOTE Confidence: 0.4558106

00:00:02.240 --> 00:00:03.560 Let's go ahead and get started.

NOTE Confidence: 0.4558106

00:00:06.080 --> 00:00:09.032 My name is Mark Mercurio and you're

NOTE Confidence: 0.4558106

00:00:09.032 --> 00:00:10.568 at the Yale School of Medicine

NOTE Confidence: 0.4558106

00:00:10.568 --> 00:00:12.000 program for Biomedical Ethics.

NOTE Confidence: 0.4558106

00:00:12.000 --> 00:00:13.440 And we have our leadership here,

NOTE Confidence: 0.4558106

00:00:13.440 --> 00:00:15.360 Jen Miller and Sarah Hall and Jack Hughes,

NOTE Confidence: 0.4558106

00:00:15.360 --> 00:00:16.400 our manager, Karen Colb.

NOTE Confidence: 0.4558106

00:00:16.400 --> 00:00:18.947 On behalf of all of us, I welcome you.

NOTE Confidence: 0.4558106

00:00:18.947 --> 00:00:20.921 This is a pretty exciting evening

NOTE Confidence: 0.4558106

00:00:20.921 --> 00:00:23.318 for the program and I and I hope

NOTE Confidence: 0.4558106

00:00:23.318 --> 00:00:25.317 that that you'll find it the same.

NOTE Confidence: 0.4558106

00:00:25.320 --> 00:00:27.288 It was some time ago that

NOTE Confidence: 0.4558106

00:00:27.288 --> 00:00:28.272 Doctor Eric Thompson,
NOTE Confidence: 0.4558106

00:00:28.280 --> 00:00:30.200 an old friend of mine,
NOTE Confidence: 0.4558106

00:00:30.200 --> 00:00:31.880 reached out to me to talk about
NOTE Confidence: 0.4558106

00:00:31.880 --> 00:00:32.600 this particular topic,
NOTE Confidence: 0.4558106

00:00:32.600 --> 00:00:36.320 normal thermic regional perfusion
NOTE Confidence: 0.4558106

00:00:36.320 --> 00:00:38.320 as it relates to heart transplant.
NOTE Confidence: 0.4558106

00:00:38.320 --> 00:00:41.080 And in our conversations I thought,
NOTE Confidence: 0.4558106

00:00:41.080 --> 00:00:43.078 wouldn't this be a fantastic topic?
NOTE Confidence: 0.4558106

00:00:43.080 --> 00:00:45.600 I did not think I would be so lucky.
NOTE Confidence: 0.4558106

00:00:45.600 --> 00:00:47.400 We would be so lucky as to get
NOTE Confidence: 0.4558106

00:00:47.400 --> 00:00:48.957 not only Eric to come here,
NOTE Confidence: 0.4558106

00:00:48.960 --> 00:00:50.608 but also to get to the people who
NOTE Confidence: 0.4558106

00:00:50.608 --> 00:00:52.620 want a national level are leading the
NOTE Confidence: 0.4558106

00:00:52.620 --> 00:00:54.543 conversation 'cause this is a pretty
NOTE Confidence: 0.4558106

00:00:54.543 --> 00:00:56.475 important conversation and to have Bob
NOTE Confidence: 0.4558106

00:00:56.475 --> 00:00:58.973 Trug and Brendan Parent here as well is

NOTE Confidence: 0.4558106

00:00:58.973 --> 00:01:00.677 a is a tremendous treat for the program.

NOTE Confidence: 0.4558106

00:01:00.680 --> 00:01:02.200 So I think it's going to be a great night.

NOTE Confidence: 0.4558106

00:01:02.200 --> 00:01:04.251 Let me just tell you how the

NOTE Confidence: 0.4558106

00:01:04.251 --> 00:01:05.879 night is going to unfold.

NOTE Confidence: 0.4558106

00:01:05.880 --> 00:01:06.780 I'm going to introduce the

NOTE Confidence: 0.4558106

00:01:06.780 --> 00:01:07.680 speakers one at a time.

NOTE Confidence: 0.4558106

00:01:07.680 --> 00:01:09.005 So first I'm going to

NOTE Confidence: 0.4558106

00:01:09.005 --> 00:01:09.800 introduce Doctor Thompson.

NOTE Confidence: 0.4558106

00:01:09.800 --> 00:01:12.005 He's going to speak for a little

NOTE Confidence: 0.4558106

00:01:12.005 --> 00:01:14.800 bit about the technology and about

NOTE Confidence: 0.4558106

00:01:14.800 --> 00:01:17.600 the Physiology and about the issue.

NOTE Confidence: 0.4558106

00:01:17.600 --> 00:01:20.575 Then I'm going to come up and

NOTE Confidence: 0.4558106

00:01:20.575 --> 00:01:22.065 introduce Doctor Bob Trug.

NOTE Confidence: 0.4558106

00:01:22.065 --> 00:01:24.195 And then after Bob's done speaking,

NOTE Confidence: 0.4558106

00:01:24.200 --> 00:01:27.440 I'm going to introduce Brendan Parent.

NOTE Confidence: 0.4558106

00:01:27.440 --> 00:01:29.035 And each one of them, as you'll see,
NOTE Confidence: 0.4558106

00:01:29.035 --> 00:01:29.960 is a very special guest.
NOTE Confidence: 0.4558106

00:01:29.960 --> 00:01:31.436 So it's quite an exciting night.
NOTE Confidence: 0.4558106

00:01:31.440 --> 00:01:33.996 So that that will last for
NOTE Confidence: 0.4558106

00:01:34.000 --> 00:01:35.518 on the order of 45 minutes.
NOTE Confidence: 0.4558106

00:01:35.520 --> 00:01:37.193 It's not an exact science, lads.
NOTE Confidence: 0.4558106

00:01:37.193 --> 00:01:39.158 It'll be what it'll be.
NOTE Confidence: 0.4558106

00:01:39.160 --> 00:01:40.968 And then and then they're going to come
NOTE Confidence: 0.4558106

00:01:40.968 --> 00:01:42.717 up here and answer your questions.
NOTE Confidence: 0.4558106

00:01:42.720 --> 00:01:44.280 They're going to have a conversation.
NOTE Confidence: 0.4558106

00:01:44.280 --> 00:01:45.039 We will stop.
NOTE Confidence: 0.4558106

00:01:45.039 --> 00:01:46.304 And that clock's looking pretty
NOTE Confidence: 0.4558106

00:01:46.304 --> 00:01:47.820 good for a change. It's right.
NOTE Confidence: 0.4558106

00:01:47.820 --> 00:01:50.311 So we will stop at 6:30.
NOTE Confidence: 0.4558106

00:01:50.311 --> 00:01:51.004 So I apologize.
NOTE Confidence: 0.4558106

00:01:51.004 --> 00:01:52.700 I suspect there may be many people

NOTE Confidence: 0.4558106

00:01:52.700 --> 00:01:54.478 who have something they want to say.

NOTE Confidence: 0.4558106

00:01:54.480 --> 00:01:57.056 We have leaders of the Yale transplant

NOTE Confidence: 0.4558106

00:01:57.056 --> 00:01:58.545 program and leaders of UNOS,

NOTE Confidence: 0.4558106

00:01:58.545 --> 00:01:59.840 and we have all sorts of folks

NOTE Confidence: 0.4558106

00:01:59.840 --> 00:02:00.640 in the audience.

NOTE Confidence: 0.4558106

00:02:00.640 --> 00:02:02.026 So I think going to contribute

NOTE Confidence: 0.4558106

00:02:02.026 --> 00:02:02.719 to the conversation.

NOTE Confidence: 0.4558106

00:02:02.720 --> 00:02:05.080 And we do hope we get to everybody.

NOTE Confidence: 0.4558106

00:02:05.080 --> 00:02:06.208 There's going to be a microphone

NOTE Confidence: 0.4558106

00:02:06.208 --> 00:02:06.960 when the time comes.

NOTE Confidence: 0.4558106

00:02:06.960 --> 00:02:08.992 I'm going to ask you to wait until

NOTE Confidence: 0.4558106

00:02:08.992 --> 00:02:10.860 you have a microphone to speak

NOTE Confidence: 0.4558106

00:02:10.860 --> 00:02:12.572 like the talking stick so that

NOTE Confidence: 0.4558106

00:02:12.572 --> 00:02:14.014 we can make sure the folks on

NOTE Confidence: 0.4558106

00:02:14.014 --> 00:02:15.598 Zoom can hear what we're saying.

NOTE Confidence: 0.4558106

00:02:15.600 --> 00:02:17.280 So we will have the talks,
NOTE Confidence: 0.4558106

00:02:17.280 --> 00:02:18.948 then we'll have the panel discussion
NOTE Confidence: 0.4558106

00:02:18.948 --> 00:02:20.599 with the audience question and answer.
NOTE Confidence: 0.4558106

00:02:20.600 --> 00:02:22.000 And then at 6:30,
NOTE Confidence: 0.4558106

00:02:22.000 --> 00:02:23.400 we will say goodnight.
NOTE Confidence: 0.4558106

00:02:23.400 --> 00:02:24.450 So that said,
NOTE Confidence: 0.4558106

00:02:24.450 --> 00:02:26.550 let me go ahead and introduce
NOTE Confidence: 0.4558106

00:02:26.550 --> 00:02:28.917 our first speaker for tonight.
NOTE Confidence: 0.4558106

00:02:28.920 --> 00:02:29.788 This thing keeps stinging.
NOTE Confidence: 0.4558106

00:02:29.788 --> 00:02:31.524 I'm going to go ahead and guess that
NOTE Confidence: 0.4558106

00:02:31.524 --> 00:02:33.092 this is Karen trying to remind me to
NOTE Confidence: 0.46441522

00:02:33.136 --> 00:02:34.140 say something. What are the
NOTE Confidence: 0.46441522

00:02:34.140 --> 00:02:35.680 chances of that? No, it's not. OK,
NOTE Confidence: 0.46441522

00:02:38.760 --> 00:02:43.596 so the first speaker is Doctor Eric Thompson.
NOTE Confidence: 0.46441522

00:02:43.600 --> 00:02:45.300 Eric practiced adult cardiac and
NOTE Confidence: 0.46441522

00:02:45.300 --> 00:02:47.000 thoracic surgery for 31 years,

NOTE Confidence: 0.46441522

00:02:47.000 --> 00:02:49.088 most recently at the Mid America

NOTE Confidence: 0.46441522

00:02:49.088 --> 00:02:50.924 Heart Institute of Saint Luke's

NOTE Confidence: 0.46441522

00:02:50.924 --> 00:02:52.440 Hospital in Kansas City.

NOTE Confidence: 0.46441522

00:02:52.440 --> 00:02:54.198 So what exactly does he know

NOTE Confidence: 0.46441522

00:02:54.198 --> 00:02:55.077 about heart transplant?

NOTE Confidence: 0.46441522

00:02:55.080 --> 00:02:57.252 Well, he was present for Saint

NOTE Confidence: 0.46441522

00:02:57.252 --> 00:02:58.700 Luke's second heart transplant

NOTE Confidence: 0.46441522

00:02:58.761 --> 00:03:01.688 in 1985 and was a participant in

NOTE Confidence: 0.46441522

00:03:01.688 --> 00:03:04.403 transplant #950 In the fall of 2021,

NOTE Confidence: 0.46441522

00:03:04.403 --> 00:03:05.818 just before he retired after

NOTE Confidence: 0.46441522

00:03:05.818 --> 00:03:07.640 moving back home to Connecticut,

NOTE Confidence: 0.46441522

00:03:07.640 --> 00:03:09.025 Doctor Thompson took a part

NOTE Confidence: 0.46441522

00:03:09.025 --> 00:03:10.760 time job with the ex vivo.

NOTE Confidence: 0.46441522

00:03:10.760 --> 00:03:12.776 Is that how we pronounce that ex vivo

NOTE Confidence: 0.46441522

00:03:12.776 --> 00:03:14.623 with ex vivo procurement services

NOTE Confidence: 0.46441522

00:03:14.623 --> 00:03:17.197 retrieving hearts and lungs for transplant.
NOTE Confidence: 0.46441522

00:03:17.200 --> 00:03:18.064 Since early 2022,
NOTE Confidence: 0.46441522

00:03:18.064 --> 00:03:20.760 he has travelled from his base at the Oxford,
NOTE Confidence: 0.46441522

00:03:20.760 --> 00:03:24.064 CT airport on more than 120 organ retrievals.
NOTE Confidence: 0.46441522

00:03:24.064 --> 00:03:26.892 He has a Bachelor of Science in Computer
NOTE Confidence: 0.46441522

00:03:26.892 --> 00:03:29.034 Science and a Doctor of Medicine degree,
NOTE Confidence: 0.46441522

00:03:29.040 --> 00:03:30.316 both from Washington University.
NOTE Confidence: 0.46441522

00:03:30.316 --> 00:03:31.911 He trained in surgery at
NOTE Confidence: 0.46441522

00:03:31.911 --> 00:03:33.318 Mayo Clinic in Rochester,
NOTE Confidence: 0.46441522

00:03:33.320 --> 00:03:35.600 MN and in thoracic surgery
NOTE Confidence: 0.7727477

00:03:40.600 --> 00:03:43.078 at Saint Luke's Hospital in Kansas City.
NOTE Confidence: 0.7727477

00:03:43.080 --> 00:03:45.132 We are old friends and I've been looking for
NOTE Confidence: 0.7727477

00:03:45.132 --> 00:03:47.394 a way to get him here and I have found it.
NOTE Confidence: 0.7727477

00:03:47.400 --> 00:03:49.836 And Eric's extensive experience with heart
NOTE Confidence: 0.7727477

00:03:49.840 --> 00:03:51.334 transplant makes him just the right
NOTE Confidence: 0.7727477

00:03:51.334 --> 00:03:52.960 person to begin this conversation.

NOTE Confidence: 0.7727477

00:03:52.960 --> 00:03:53.959 Welcome, Doctor Thompson.

NOTE Confidence: 0.7727477

00:03:56.080 --> 00:03:57.238 So what, Mark

NOTE Confidence: 0.7727477

00:03:57.240 --> 00:03:58.997 didn't tell you about the pinnacle of

NOTE Confidence: 0.7727477

00:03:59.520 --> 00:04:01.200 my academic career, which

NOTE Confidence: 0.7727477

00:04:01.200 --> 00:04:04.600 was that I was his high school classmate.

NOTE Confidence: 0.7727477

00:04:04.600 --> 00:04:06.400 In fact, I've known him since 5th grade,

NOTE Confidence: 0.7727477

00:04:08.560 --> 00:04:11.520 so isn't that right? That's right. So

NOTE Confidence: 0.6899602

00:04:13.640 --> 00:04:15.080 the topic is normal thermic

NOTE Confidence: 0.6899602

00:04:15.080 --> 00:04:16.644 regional perfusion that doesn't

NOTE Confidence: 0.6899602

00:04:16.644 --> 00:04:18.599 exactly roll off the tongue.

NOTE Confidence: 0.6899602

00:04:18.600 --> 00:04:20.595 So let's just start calling it NRP.

NOTE Confidence: 0.6899602

00:04:20.600 --> 00:04:23.336 The rest of the for the rest of the

NOTE Confidence: 0.6899602

00:04:23.336 --> 00:04:27.588 night and I have I have reservation

NOTE Confidence: 0.6899602

00:04:27.588 --> 00:04:29.640 and not just me there's a lot of other

NOTE Confidence: 0.6899602

00:04:29.640 --> 00:04:31.669 you know there's a lot of people have

NOTE Confidence: 0.6899602

00:04:31.669 --> 00:04:33.184 reservations about this both from
NOTE Confidence: 0.6899602

00:04:33.184 --> 00:04:35.740 an ethical standpoint and a legal
NOTE Confidence: 0.6899602

00:04:35.740 --> 00:04:37.644 standpoint and I'm I'm genuinely
NOTE Confidence: 0.6899602

00:04:37.644 --> 00:04:40.242 interested to hear what my Co panelists
NOTE Confidence: 0.6899602

00:04:40.242 --> 00:04:43.130 have to say about this and and I'm
NOTE Confidence: 0.6899602

00:04:43.130 --> 00:04:46.201 hoping that all of you will be asking
NOTE Confidence: 0.6899602

00:04:46.201 --> 00:04:48.684 questions because it it it's it's
NOTE Confidence: 0.6899602

00:04:48.684 --> 00:04:50.839 an important topic to consider.
NOTE Confidence: 0.6899602

00:04:50.840 --> 00:04:52.916 So I'm going to start with
NOTE Confidence: 0.6899602

00:04:52.920 --> 00:04:54.880 what Well couple things one is
NOTE Confidence: 0.64918494

00:04:56.360 --> 00:04:57.480 I'm going to show some
NOTE Confidence: 0.64918494

00:04:57.880 --> 00:05:00.808 slides some pictures of in the operating room
NOTE Confidence: 0.64918494

00:05:00.808 --> 00:05:03.720 and some videos from the operating room.
NOTE Confidence: 0.64918494

00:05:03.720 --> 00:05:05.720 So if any of you are thrown to
NOTE Confidence: 0.64918494

00:05:05.720 --> 00:05:07.598 faint at the sight of blood,
NOTE Confidence: 0.64918494

00:05:07.600 --> 00:05:09.340 you might consider Watson the

NOTE Confidence: 0.64918494

00:05:09.340 --> 00:05:11.080 talk like this or something.

NOTE Confidence: 0.64918494

00:05:11.080 --> 00:05:14.600 And also, I don't, I don't want

NOTE Confidence: 0.64918494

00:05:14.600 --> 00:05:18.106 anybody to leave here thinking that

NOTE Confidence: 0.64918494

00:05:18.106 --> 00:05:20.158 heart transplantation is unethical.

NOTE Confidence: 0.64918494

00:05:20.160 --> 00:05:21.844 That's not the issue.

NOTE Confidence: 0.64918494

00:05:21.844 --> 00:05:23.949 It's it's this one specific

NOTE Confidence: 0.64918494

00:05:23.949 --> 00:05:26.158 technique for organ retrieval that

NOTE Confidence: 0.64918494

00:05:26.160 --> 00:05:29.560 is an issue I want to start with,

NOTE Confidence: 0.38558823

00:05:31.640 --> 00:05:35.120 with my conclusions

NOTE Confidence: 0.6965361

00:05:38.040 --> 00:05:39.920 and if you understand this,

NOTE Confidence: 0.6965361

00:05:39.920 --> 00:05:41.080 you can skip my talk.

NOTE Confidence: 0.6965361

00:05:41.080 --> 00:05:42.360 You can go take a break for 15

NOTE Confidence: 0.6965361

00:05:42.360 --> 00:05:43.448 minutes and then come back and

NOTE Confidence: 0.6965361

00:05:43.448 --> 00:05:44.720 hear what the others have to say,

NOTE Confidence: 0.6965361

00:05:44.720 --> 00:05:47.000 'cause this is what I'm going to end up at

NOTE Confidence: 0.6965361

00:05:49.200 --> 00:05:50.580 the ethical issue.
NOTE Confidence: 0.6965361

00:05:50.580 --> 00:05:52.916 There's two basically you're we're
NOTE Confidence: 0.6965361

00:05:52.916 --> 00:05:56.262 reanimating a heart that was that was
NOTE Confidence: 0.6965361

00:05:56.262 --> 00:05:59.359 said to have irreversibly stopped.
NOTE Confidence: 0.6965361

00:05:59.360 --> 00:06:02.181 And the second issue is during the
NOTE Confidence: 0.6965361

00:06:02.181 --> 00:06:04.586 operation you clamp the the head
NOTE Confidence: 0.6965361

00:06:04.586 --> 00:06:06.340 vessels so that you substitute
NOTE Confidence: 0.6965361

00:06:06.340 --> 00:06:08.090 brain death for circulatory death.
NOTE Confidence: 0.6965361

00:06:08.090 --> 00:06:09.851 If you understand what this means
NOTE Confidence: 0.6965361

00:06:09.851 --> 00:06:11.640 you don't have to you you don't need
NOTE Confidence: 0.6965361

00:06:11.640 --> 00:06:14.336 to hear the rest of what I'm gonna
NOTE Confidence: 0.6965361

00:06:14.336 --> 00:06:17.879 say I before I get going I think
NOTE Confidence: 0.6965361

00:06:17.880 --> 00:06:19.585 you'll appreciate this picture.
NOTE Confidence: 0.6965361

00:06:19.585 --> 00:06:22.792 This is from our senior prom 1974.
NOTE Confidence: 0.6965361

00:06:22.792 --> 00:06:25.256 And I know we haven't changed at
NOTE Confidence: 0.6965361

00:06:25.256 --> 00:06:29.072 all but this is this is me and

NOTE Confidence: 0.6965361

00:06:29.072 --> 00:06:30.480 this is Doctor Mercurio.

NOTE Confidence: 0.48602045

00:06:35.200 --> 00:06:36.960 You can't you can't pay cancel

NOTE Confidence: 0.48602045

00:06:39.640 --> 00:06:42.049 and Mark mentioned I was at the Mid America

NOTE Confidence: 0.48602045

00:06:42.049 --> 00:06:44.080 Heart Institute and I'm going back there.

NOTE Confidence: 0.48602045

00:06:44.080 --> 00:06:46.432 I'm flying back there Saturday they're

NOTE Confidence: 0.48602045

00:06:46.432 --> 00:06:48.336 having a gala to celebrate their now

NOTE Confidence: 0.48602045

00:06:48.336 --> 00:06:51.800 one thousandth heart transplant.

NOTE Confidence: 0.48602045

00:06:51.800 --> 00:06:54.683 So the job I have now is is kind

NOTE Confidence: 0.48602045

00:06:54.683 --> 00:06:57.159 of a unique job and I I made this,

NOTE Confidence: 0.48602045

00:06:57.160 --> 00:07:00.634 I put this map together and I'm

NOTE Confidence: 0.48602045

00:07:00.634 --> 00:07:02.993 working for a company called Ex Vivo.

NOTE Confidence: 0.48602045

00:07:03.000 --> 00:07:04.964 It's a Swedish company.

NOTE Confidence: 0.48602045

00:07:04.964 --> 00:07:07.419 Their business focuses around different

NOTE Confidence: 0.48602045

00:07:07.419 --> 00:07:09.760 aspects of organ transplantation and

NOTE Confidence: 0.48602045

00:07:09.760 --> 00:07:12.119 the division of the company that I'm

NOTE Confidence: 0.48602045

00:07:12.119 --> 00:07:14.135 working for does retrieval services.
NOTE Confidence: 0.48602045

00:07:14.135 --> 00:07:16.360 We retrieve hearts and lungs.
NOTE Confidence: 0.48602045

00:07:16.360 --> 00:07:19.170 So currently there are the I put
NOTE Confidence: 0.48602045

00:07:19.170 --> 00:07:21.355 red dots where the surgeons are
NOTE Confidence: 0.48602045

00:07:21.355 --> 00:07:24.009 located and I put blue dots where
NOTE Confidence: 0.48602045

00:07:24.009 --> 00:07:25.584 the transplant centers that we're
NOTE Confidence: 0.48602045

00:07:25.584 --> 00:07:27.266 working for are located.
NOTE Confidence: 0.48602045

00:07:27.266 --> 00:07:28.320 And so
NOTE Confidence: 0.6679444

00:07:31.200 --> 00:07:33.824 so I'm here in Connecticut and
NOTE Confidence: 0.6679444

00:07:33.824 --> 00:07:35.619 you can see the other the other
NOTE Confidence: 0.6679444

00:07:35.619 --> 00:07:37.150 four are scattered around.
NOTE Confidence: 0.6679444

00:07:37.150 --> 00:07:40.760 So what'll happen is like say that say
NOTE Confidence: 0.6679444

00:07:40.760 --> 00:07:44.245 Christ hospital in Cincinnati accepts
NOTE Confidence: 0.6679444

00:07:44.245 --> 00:07:47.165 a heart and the and the donor operation
NOTE Confidence: 0.6679444

00:07:47.165 --> 00:07:49.799 is scheduled for tomorrow morning
NOTE Confidence: 0.6679444

00:07:49.800 --> 00:07:51.760 and the and the donors in Chicago.

NOTE Confidence: 0.6679444

00:07:51.760 --> 00:07:54.555 So what what would happen is a plane

NOTE Confidence: 0.6679444

00:07:54.555 --> 00:07:57.360 picks us up here in Connecticut,

NOTE Confidence: 0.6679444

00:07:57.360 --> 00:07:59.324 we fly to Chicago,

NOTE Confidence: 0.6679444

00:07:59.324 --> 00:08:02.288 we do the the procurement operation.

NOTE Confidence: 0.6679444

00:08:02.288 --> 00:08:05.760 Then we take the heart to Cincinnati

NOTE Confidence: 0.6679444

00:08:05.760 --> 00:08:08.704 and a Courier would take it on to the

NOTE Confidence: 0.6679444

00:08:08.704 --> 00:08:10.920 hospital and then we'd fly back home.

NOTE Confidence: 0.6679444

00:08:10.920 --> 00:08:12.072 And in the last,

NOTE Confidence: 0.6679444

00:08:12.072 --> 00:08:13.800 since the beginning of last year,

NOTE Confidence: 0.6679444

00:08:13.800 --> 00:08:15.840 I've done this 120 Times Now

NOTE Confidence: 0.5341728

00:08:18.440 --> 00:08:20.440 then this, this shows

NOTE Confidence: 0.5341728

00:08:24.720 --> 00:08:25.470 it's not working.

NOTE Confidence: 0.5341728

00:08:25.470 --> 00:08:28.542 This heat map shows where

NOTE Confidence: 0.5341728

00:08:28.542 --> 00:08:32.397 the donors are have been,

NOTE Confidence: 0.5341728

00:08:32.400 --> 00:08:33.515 so they're scattered all over

NOTE Confidence: 0.5341728

00:08:33.515 --> 00:08:34.800 the eastern half of the US.
NOTE Confidence: 0.5341728

00:08:34.800 --> 00:08:37.680 I've gone as far as from Connecticut,
NOTE Confidence: 0.5341728

00:08:37.680 --> 00:08:39.480 I've gone as far as Dallas,
NOTE Confidence: 0.5341728

00:08:39.480 --> 00:08:40.720 and I've gone to Minot,
NOTE Confidence: 0.5341728

00:08:40.720 --> 00:08:42.800 ND to get Oregon's.
NOTE Confidence: 0.37746108

00:08:45.720 --> 00:08:47.400 This is the Waterbury Oxford Airport.
NOTE Confidence: 0.37746108

00:08:47.400 --> 00:08:49.038 It's just 15 miles from here.
NOTE Confidence: 0.37746108

00:08:49.040 --> 00:08:52.029 The pilots love it because has that
NOTE Confidence: 0.37746108

00:08:52.029 --> 00:08:54.656 long runway with ILS landing capability.
NOTE Confidence: 0.37746108

00:08:54.656 --> 00:08:58.212 And we we love it because this
NOTE Confidence: 0.37746108

00:08:58.212 --> 00:09:01.040 hanger right here, we have a space
NOTE Confidence: 0.37746108

00:09:01.040 --> 00:09:03.240 in there where all our supplies are.
NOTE Confidence: 0.37746108

00:09:03.240 --> 00:09:07.596 So here's this is my assistant Kareem.
NOTE Confidence: 0.37746108

00:09:07.600 --> 00:09:08.930 He's got all the supplies that we
NOTE Confidence: 0.37746108

00:09:08.930 --> 00:09:10.560 take on a retrieval and this Jed,
NOTE Confidence: 0.37746108

00:09:10.560 --> 00:09:13.600 is typical of the ones that we fly.

NOTE Confidence: 0.37746108

00:09:13.600 --> 00:09:15.240 This was from the retrieval

NOTE Confidence: 0.37746108

00:09:15.240 --> 00:09:16.552 we did Friday night.

NOTE Confidence: 0.37746108

00:09:16.560 --> 00:09:19.395 It's typical that there that there's a,

NOTE Confidence: 0.37746108

00:09:19.400 --> 00:09:21.020 you know, cast of thousands

NOTE Confidence: 0.37746108

00:09:21.020 --> 00:09:22.316 in the operating room.

NOTE Confidence: 0.37746108

00:09:22.320 --> 00:09:24.300 If you if you stripped it down to the

NOTE Confidence: 0.37746108

00:09:24.300 --> 00:09:26.464 people that are really just the just the

NOTE Confidence: 0.37746108

00:09:26.464 --> 00:09:28.280 essential people you could do this with,

NOTE Confidence: 0.37746108

00:09:28.280 --> 00:09:29.760 you could retrieve a heart,

NOTE Confidence: 0.37746108

00:09:29.760 --> 00:09:30.488 lungs, liver,

NOTE Confidence: 0.37746108

00:09:30.488 --> 00:09:32.672 kidneys and pancreas with just two

NOTE Confidence: 0.37746108

00:09:32.672 --> 00:09:35.080 surgeons and maybe a total of 10 people.

NOTE Confidence: 0.9255376

00:09:38.640 --> 00:09:41.237 This this shows the heart being exposed

NOTE Confidence: 0.9255376

00:09:41.237 --> 00:09:44.874 and up at the top of the screen you

NOTE Confidence: 0.9255376

00:09:44.874 --> 00:09:46.984 can see simultaneously while we're

NOTE Confidence: 0.9255376

00:09:46.984 --> 00:09:49.110 working in the chest other surgeons
NOTE Confidence: 0.9255376

00:09:49.110 --> 00:09:50.760 are working down in the abdomen.
NOTE Confidence: 0.71331805

00:09:56.200 --> 00:09:58.335 And then on every case we take
NOTE Confidence: 0.71331805

00:09:58.335 --> 00:10:00.523 a video of the heart to send
NOTE Confidence: 0.71331805

00:10:00.523 --> 00:10:02.119 to the an implanting surgeon.
NOTE Confidence: 0.71331805

00:10:02.119 --> 00:10:04.273 So they get a sense of they
NOTE Confidence: 0.71331805

00:10:04.273 --> 00:10:05.344 get a sense of the size of
NOTE Confidence: 0.71331805

00:10:05.344 --> 00:10:06.398 the heart they're going to be
NOTE Confidence: 0.71331805

00:10:06.400 --> 00:10:08.140 implanting and that that and
NOTE Confidence: 0.71331805

00:10:08.140 --> 00:10:09.880 that the quality is good.
NOTE Confidence: 0.71331805

00:10:12.280 --> 00:10:13.360 So normal heart
NOTE Confidence: 0.71331805

00:10:13.480 --> 00:10:15.076 you can see up here the
NOTE Confidence: 0.71331805

00:10:15.076 --> 00:10:15.874 livers being mobilized.
NOTE Confidence: 0.71331805

00:10:18.000 --> 00:10:19.200 So this schematic
NOTE Confidence: 0.71331805

00:10:21.400 --> 00:10:23.638 I've tried to simplify what's done
NOTE Confidence: 0.71331805

00:10:23.638 --> 00:10:26.020 during the operation and I've and I've

NOTE Confidence: 0.71331805

00:10:26.020 --> 00:10:28.280 done it partly just by showing the

NOTE Confidence: 0.71331805

00:10:28.280 --> 00:10:30.648 heart and the liver and you can add

NOTE Confidence: 0.71331805

00:10:30.648 --> 00:10:33.096 other organs in to but but the heart

NOTE Confidence: 0.71331805

00:10:33.096 --> 00:10:35.240 and the liver tell most of the story.

NOTE Confidence: 0.71331805

00:10:35.240 --> 00:10:38.756 So the the blood each of the organs

NOTE Confidence: 0.71331805

00:10:38.756 --> 00:10:41.710 is mobilized and the blood vessels

NOTE Confidence: 0.71331805

00:10:41.710 --> 00:10:44.080 are isolated And then a like

NOTE Confidence: 0.71331805

00:10:44.080 --> 00:10:45.409 in the abdomen A cannula,

NOTE Confidence: 0.71331805

00:10:45.409 --> 00:10:48.058 1 cannula is put into the portal vein

NOTE Confidence: 0.71331805

00:10:48.058 --> 00:10:50.277 and another cannula is put into the

NOTE Confidence: 0.71331805

00:10:50.280 --> 00:10:53.838 abdominal aorta and in the in the chest

NOTE Confidence: 0.71331805

00:10:53.838 --> 00:10:56.359 canulus put in the ascending aorta.

NOTE Confidence: 0.71331805

00:10:56.360 --> 00:10:58.112 And then when when everybody's ready

NOTE Confidence: 0.71331805

00:10:58.112 --> 00:11:01.108 to go you make a cut into the inferior

NOTE Confidence: 0.71331805

00:11:01.108 --> 00:11:04.160 vena cava that that vents vents the

NOTE Confidence: 0.71331805

00:11:04.249 --> 00:11:07.275 venous return and you put clamps on the
NOTE Confidence: 0.71331805

00:11:07.275 --> 00:11:10.000 ascending aorta and the abdominal aorta.
NOTE Confidence: 0.71331805

00:11:10.000 --> 00:11:12.024 And then the preservation solution
NOTE Confidence: 0.71331805

00:11:12.024 --> 00:11:14.472 to the liver and abdominal organs
NOTE Confidence: 0.71331805

00:11:14.472 --> 00:11:16.932 goes in through these two blood
NOTE Confidence: 0.71331805

00:11:16.932 --> 00:11:18.520 vessels and the cardioplegia,
NOTE Confidence: 0.71331805

00:11:18.520 --> 00:11:19.980 the solution that stops
NOTE Confidence: 0.71331805

00:11:19.980 --> 00:11:21.440 and protects the heart,
NOTE Confidence: 0.71331805

00:11:21.440 --> 00:11:24.880 it goes in into the ascending aorta.
NOTE Confidence: 0.71331805

00:11:24.880 --> 00:11:26.665 And then once that once that
NOTE Confidence: 0.71331805

00:11:26.665 --> 00:11:27.997 infusion has been completed,
NOTE Confidence: 0.71331805

00:11:28.000 --> 00:11:29.638 then you can cut the heart
NOTE Confidence: 0.71331805

00:11:29.640 --> 00:11:30.956 the the organs out.
NOTE Confidence: 0.71331805

00:11:30.956 --> 00:11:32.930 So here's here's a heart that's
NOTE Confidence: 0.71331805

00:11:32.994 --> 00:11:34.848 been removed and it's ready to
NOTE Confidence: 0.71331805

00:11:34.848 --> 00:11:36.800 go in the sterile packaging.

NOTE Confidence: 0.71331805

00:11:36.800 --> 00:11:39.200 You've probably seen these trucks

NOTE Confidence: 0.71331805

00:11:39.200 --> 00:11:42.081 around that this one had just taken us

NOTE Confidence: 0.71331805

00:11:42.081 --> 00:11:46.120 from the hospital back to the airport.

NOTE Confidence: 0.71331805

00:11:46.120 --> 00:11:49.800 Here's this is a this cardboard box has

NOTE Confidence: 0.71331805

00:11:49.800 --> 00:11:52.326 Styrofoam lining it so it's insulated

NOTE Confidence: 0.71331805

00:11:52.326 --> 00:11:54.840 and the heart's sitting in there in

NOTE Confidence: 0.71331805

00:11:54.840 --> 00:11:56.856 sterile bags containing saline,

NOTE Confidence: 0.71331805

00:11:56.856 --> 00:11:59.376 and then surrounding the bags

NOTE Confidence: 0.71331805

00:11:59.376 --> 00:12:01.360 is ice to keep it cold.

NOTE Confidence: 0.70875365

00:12:03.600 --> 00:12:07.271 Now here here's a part right after

NOTE Confidence: 0.70875365

00:12:07.271 --> 00:12:09.893 implantation so you can see right

NOTE Confidence: 0.70875365

00:12:09.893 --> 00:12:12.956 here is the suture line of the aorta.

NOTE Confidence: 0.70875365

00:12:12.960 --> 00:12:15.319 And here's the suture line of the

NOTE Confidence: 0.70875365

00:12:15.319 --> 00:12:16.663 pulmonary artery and you might

NOTE Confidence: 0.70875365

00:12:16.663 --> 00:12:17.989 be able to appreciate this heart

NOTE Confidence: 0.70875365

00:12:17.989 --> 00:12:19.480 as sitting inside a big space.

NOTE Confidence: 0.70875365

00:12:19.480 --> 00:12:22.070 And the the reason for that is the the

NOTE Confidence: 0.70875365

00:12:22.070 --> 00:12:25.080 sick old heart was enormous and this,

NOTE Confidence: 0.70875365

00:12:25.080 --> 00:12:28.080 this is heart as normal size.

NOTE Confidence: 0.70875365

00:12:28.080 --> 00:12:32.067 And what's amazing is I had just taken the

NOTE Confidence: 0.70875365

00:12:32.067 --> 00:12:34.758 clamp off and it's already in sinus rhythm.

NOTE Confidence: 0.70875365

00:12:34.760 --> 00:12:37.040 It's just it's just incredible how that,

NOTE Confidence: 0.70875365

00:12:37.040 --> 00:12:38.480 how how that works.

NOTE Confidence: 0.70875365

00:12:38.480 --> 00:12:40.083 And this was like less than a

NOTE Confidence: 0.70875365

00:12:40.083 --> 00:12:41.560 minute after taking the clamp off.

NOTE Confidence: 0.69150466

00:12:44.280 --> 00:12:45.078 OK. So everything

NOTE Confidence: 0.69150466

00:12:45.080 --> 00:12:47.978 I've talked about so far pertains to

NOTE Confidence: 0.69150466

00:12:47.978 --> 00:12:50.120 heart procurement after brain death.

NOTE Confidence: 0.69150466

00:12:50.120 --> 00:12:50.895 But that's not what we're

NOTE Confidence: 0.69150466

00:12:50.895 --> 00:12:51.515 going to talk about.

NOTE Confidence: 0.69150466

00:12:51.520 --> 00:12:53.770 We're going to talk about donation

NOTE Confidence: 0.69150466

00:12:53.770 --> 00:12:57.160 after circulatory death, DCD.

NOTE Confidence: 0.69150466

00:12:57.160 --> 00:12:59.274 And to understand that you have to,

NOTE Confidence: 0.69150466

00:12:59.280 --> 00:13:01.330 you have to understand there's

NOTE Confidence: 0.69150466

00:13:01.330 --> 00:13:04.339 two defined ways modes of death.

NOTE Confidence: 0.69150466

00:13:04.339 --> 00:13:06.546 There's brain death and

NOTE Confidence: 0.69150466

00:13:06.546 --> 00:13:08.920 there's circulatory death.

NOTE Confidence: 0.69150466

00:13:08.920 --> 00:13:10.000 And if you

NOTE Confidence: 0.6075845

00:13:13.080 --> 00:13:15.162 brain death is irreversible cessation of

NOTE Confidence: 0.6075845

00:13:15.162 --> 00:13:17.742 all function of the entire brain including

NOTE Confidence: 0.6075845

00:13:17.742 --> 00:13:21.690 the brain stem and circulatory death

NOTE Confidence: 0.6075845

00:13:21.690 --> 00:13:24.120 is defined as irreversible cessation of

NOTE Confidence: 0.6075845

00:13:24.120 --> 00:13:26.159 circulatory and respiratory function.

NOTE Confidence: 0.6075845

00:13:26.160 --> 00:13:29.460 And you know just remember

NOTE Confidence: 0.6075845

00:13:29.460 --> 00:13:31.440 the word irreversible.

NOTE Confidence: 0.6075845

00:13:31.440 --> 00:13:34.040 So we're going to talk about two ways,

NOTE Confidence: 0.6075845

00:13:34.040 --> 00:13:38.594 two ways to procure hearts, FDCD hearts.
NOTE Confidence: 0.6075845

00:13:38.594 --> 00:13:42.056 One is using Transmatic Organ Care
NOTE Confidence: 0.6075845

00:13:42.056 --> 00:13:44.356 system and the other is using NRP.
NOTE Confidence: 0.5449615

00:13:46.760 --> 00:13:48.222 So this is the,
NOTE Confidence: 0.5449615

00:13:48.222 --> 00:13:50.373 this is the Transmedix machine.
NOTE Confidence: 0.5449615

00:13:50.373 --> 00:13:53.264 It it contains some of the same
NOTE Confidence: 0.5449615

00:13:53.264 --> 00:13:56.156 features that I'm going to show for NRP.
NOTE Confidence: 0.5449615

00:13:56.160 --> 00:13:58.160 There's a pump, there's a
NOTE Confidence: 0.5449615

00:13:58.160 --> 00:14:01.680 reservoir and a gas exchanger.
NOTE Confidence: 0.5449615

00:14:01.680 --> 00:14:04.491 But the difference is the heart,
NOTE Confidence: 0.5449615

00:14:04.491 --> 00:14:08.150 the heart is is resuscitated
NOTE Confidence: 0.5449615

00:14:08.150 --> 00:14:11.240 inside this machine,
NOTE Confidence: 0.5449615

00:14:11.240 --> 00:14:12.776 so outside the body.
NOTE Confidence: 0.5449615

00:14:12.776 --> 00:14:14.716 Whereas with NRP the resuscitation
NOTE Confidence: 0.5449615

00:14:14.716 --> 00:14:16.760 occurs inside the donor's body.
NOTE Confidence: 0.43664122

00:14:19.040 --> 00:14:21.476 So there's a sequence of events that

NOTE Confidence: 0.43664122

00:14:21.476 --> 00:14:23.476 there's a sequence of steps that

NOTE Confidence: 0.43664122

00:14:23.476 --> 00:14:25.555 you follow in doing an ADCD case,

NOTE Confidence: 0.43664122

00:14:25.560 --> 00:14:29.436 the pay the donors, the donor.

NOTE Confidence: 0.43664122

00:14:29.440 --> 00:14:30.180 Let me just talk about

NOTE Confidence: 0.43664122

00:14:30.180 --> 00:14:30.955 the donor a little bit.

NOTE Confidence: 0.43664122

00:14:30.960 --> 00:14:34.145 It's a the donor has some non

NOTE Confidence: 0.43664122

00:14:34.145 --> 00:14:38.560 survivable problem, usually usually

NOTE Confidence: 0.43664122

00:14:38.560 --> 00:14:41.038 a brain problem but not always.

NOTE Confidence: 0.43664122

00:14:41.040 --> 00:14:44.096 And they they're they're expected

NOTE Confidence: 0.43664122

00:14:44.096 --> 00:14:46.112 to die shortly after supports with

NOTE Confidence: 0.43664122

00:14:46.112 --> 00:14:48.498 a decision has been made to withdraw

NOTE Confidence: 0.43664122

00:14:48.498 --> 00:14:50.478 support and they're expected to die

NOTE Confidence: 0.785517

00:14:50.600 --> 00:14:52.560 shortly after support is withdrawn.

NOTE Confidence: 0.785517

00:14:53.400 --> 00:14:55.320 So they're they're consented

NOTE Confidence: 0.785517

00:14:55.320 --> 00:14:57.720 for as an organ donor.

NOTE Confidence: 0.785517

00:14:57.720 --> 00:14:59.160 They're brought to the operating room,
NOTE Confidence: 0.785517

00:14:59.160 --> 00:15:01.519 they're given heparin so that the blood
NOTE Confidence: 0.785517

00:15:01.519 --> 00:15:03.424 doesn't clot when the circulation
NOTE Confidence: 0.785517

00:15:03.424 --> 00:15:05.152 stops and then supports withdrawn.
NOTE Confidence: 0.785517

00:15:05.152 --> 00:15:08.080 So they they take them off the ventilator,
NOTE Confidence: 0.785517

00:15:08.080 --> 00:15:10.640 they remove the endotracheal tube,
NOTE Confidence: 0.785517

00:15:10.640 --> 00:15:14.608 they stop all IV drugs and usually when
NOTE Confidence: 0.785517

00:15:14.608 --> 00:15:17.344 that happens an agonal phase begins
NOTE Confidence: 0.785517

00:15:17.344 --> 00:15:20.479 where their respirations are inadequate
NOTE Confidence: 0.785517

00:15:20.480 --> 00:15:21.998 and they have falling blood pressure.
NOTE Confidence: 0.785517

00:15:22.000 --> 00:15:23.700 Their oxygen levels fall.
NOTE Confidence: 0.785517

00:15:23.700 --> 00:15:27.150 Then when the heart stops and a
NOTE Confidence: 0.785517

00:15:27.150 --> 00:15:29.760 systole occurs at that point the
NOTE Confidence: 0.785517

00:15:29.760 --> 00:15:32.776 the clock starts ticking and they
NOTE Confidence: 0.785517

00:15:32.776 --> 00:15:35.878 you wait for it varies from place to
NOTE Confidence: 0.785517

00:15:35.878 --> 00:15:37.840 place and this is this is an issue.

NOTE Confidence: 0.785517

00:15:37.840 --> 00:15:40.120 The variation is to me is an issue,

NOTE Confidence: 0.785517

00:15:40.120 --> 00:15:43.560 but you wait typically for 5 minutes of

NOTE Confidence: 0.785517

00:15:43.560 --> 00:15:46.640 no cardiac, no cardiac activity at all.

NOTE Confidence: 0.785517

00:15:46.640 --> 00:15:48.920 And then so that's called the

NOTE Confidence: 0.785517

00:15:48.920 --> 00:15:49.680 standoff period.

NOTE Confidence: 0.785517

00:15:49.680 --> 00:15:52.074 At that point death is declared And

NOTE Confidence: 0.785517

00:15:52.074 --> 00:15:54.022 then the surgical teams, they say,

NOTE Confidence: 0.785517

00:15:54.022 --> 00:15:56.198 OK, you guys come on in and they have

NOTE Confidence: 0.785517

00:15:56.198 --> 00:15:58.074 us come in from from another room.

NOTE Confidence: 0.785517

00:15:58.080 --> 00:15:59.706 We haven't been involved at all

NOTE Confidence: 0.785517

00:15:59.706 --> 00:16:02.190 and we come in from another room

NOTE Confidence: 0.785517

00:16:02.190 --> 00:16:04.240 and then we start the operation.

NOTE Confidence: 0.785517

00:16:04.240 --> 00:16:07.200 So for the transmatic system,

NOTE Confidence: 0.785517

00:16:07.200 --> 00:16:10.159 what you would do is you would rapidly

NOTE Confidence: 0.785517

00:16:10.160 --> 00:16:13.676 open the chest and the abdomen,

NOTE Confidence: 0.785517

00:16:13.680 --> 00:16:16.124 infuse the preservation solutions,
NOTE Confidence: 0.785517

00:16:16.124 --> 00:16:17.957 excise the organs,
NOTE Confidence: 0.785517

00:16:17.960 --> 00:16:19.703 and then you would take the heart
NOTE Confidence: 0.785517

00:16:19.703 --> 00:16:21.079 and put it onto this,
NOTE Confidence: 0.785517

00:16:21.080 --> 00:16:25.560 this, this machine.
NOTE Confidence: 0.785517

00:16:25.560 --> 00:16:29.260 So it's the same as what I showed you before,
NOTE Confidence: 0.785517

00:16:29.260 --> 00:16:32.305 except that on a brain dead donor you
NOTE Confidence: 0.785517

00:16:32.305 --> 00:16:35.319 would do all this dissection preliminarily.
NOTE Confidence: 0.785517

00:16:35.320 --> 00:16:36.832 And on this, you don't do that at all.
NOTE Confidence: 0.785517

00:16:36.840 --> 00:16:39.400 You just go right in and you put
NOTE Confidence: 0.785517

00:16:39.400 --> 00:16:41.352 the cannulas in immediately and
NOTE Confidence: 0.785517

00:16:41.352 --> 00:16:43.800 start the infusion of the solutions.
NOTE Confidence: 0.785517

00:16:43.800 --> 00:16:45.576 And then you do the dissection
NOTE Confidence: 0.785517

00:16:45.576 --> 00:16:47.200 after you've excised the organs.
NOTE Confidence: 0.6846853

00:16:49.800 --> 00:16:52.488 So here's a here's a heart on the
NOTE Confidence: 0.6846853

00:16:52.488 --> 00:16:53.862 transmetic system. So oxygenated

NOTE Confidence: 0.6846853

00:16:53.862 --> 00:16:56.319 blood comes into the aorta up here.

NOTE Confidence: 0.6846853

00:17:00.760 --> 00:17:01.280 So

NOTE Confidence: 0.6846853

00:17:03.720 --> 00:17:04.998 one thing I want to emphasize

NOTE Confidence: 0.75033445

00:17:05.000 --> 00:17:11.920 about this this sequence is from step

NOTE Confidence: 0.75033445

00:17:11.920 --> 00:17:16.533 #2 to step #7 you have there's warm

NOTE Confidence: 0.75033445

00:17:16.533 --> 00:17:19.701 ischemia going on and that's that's

NOTE Confidence: 0.75033445

00:17:19.701 --> 00:17:22.708 damaging the organs and and the heart

NOTE Confidence: 0.75033445

00:17:22.708 --> 00:17:25.090 and of the organs the heart's the

NOTE Confidence: 0.75033445

00:17:25.090 --> 00:17:27.136 one that's the most sensitive to

NOTE Confidence: 0.75033445

00:17:27.136 --> 00:17:29.587 that so that so this this this but

NOTE Confidence: 0.75033445

00:17:29.587 --> 00:17:32.452 it but it that said it works and the

NOTE Confidence: 0.75033445

00:17:32.452 --> 00:17:35.160 hearts do well as a matter of fact.

NOTE Confidence: 0.75033445

00:17:35.160 --> 00:17:37.309 So we'll come to this So here's

NOTE Confidence: 0.75033445

00:17:37.309 --> 00:17:39.826 here's a picture of the of a heart

NOTE Confidence: 0.75033445

00:17:39.826 --> 00:17:42.272 on the transmetic system and you can

NOTE Confidence: 0.75033445

00:17:42.272 --> 00:17:45.135 see it's it it it was taken out of
NOTE Confidence: 0.75033445

00:17:45.135 --> 00:17:47.188 the chest just you know 10 minutes
NOTE Confidence: 0.75033445

00:17:47.188 --> 00:17:49.080 before this and here it is it's
NOTE Confidence: 0.75033445

00:17:49.080 --> 00:17:51.160 beating again looking pretty good.
NOTE Confidence: 0.5670332

00:17:54.360 --> 00:17:56.383 So this paper was published in the
NOTE Confidence: 0.5670332

00:17:56.383 --> 00:17:58.573 New England Journal in June and
NOTE Confidence: 0.5670332

00:17:58.573 --> 00:18:01.214 they randomized heart transplant
NOTE Confidence: 0.5670332

00:18:01.214 --> 00:18:03.776 recipients to either receive a brain
NOTE Confidence: 0.5670332

00:18:03.776 --> 00:18:06.588 dead donor heart or a heart that
NOTE Confidence: 0.5670332

00:18:06.588 --> 00:18:08.910 ADCD heart from a transmetic system
NOTE Confidence: 0.5670332

00:18:08.986 --> 00:18:11.986 and the outcomes are equivalent.
NOTE Confidence: 0.5670332

00:18:11.986 --> 00:18:13.636 So this works.
NOTE Confidence: 0.5670332

00:18:13.636 --> 00:18:16.920 So so I told you there's two ways to
NOTE Confidence: 0.5670332

00:18:16.920 --> 00:18:19.590 to to currently to there's there's
NOTE Confidence: 0.5670332

00:18:19.590 --> 00:18:22.180 some stuff on the horizon but there's
NOTE Confidence: 0.5670332

00:18:22.254 --> 00:18:24.516 two ways to procure DCD hearts

NOTE Confidence: 0.5670332

00:18:24.516 --> 00:18:26.360 this transmetic system and NRP.

NOTE Confidence: 0.5670332

00:18:26.360 --> 00:18:28.395 And the key difference between

NOTE Confidence: 0.5670332

00:18:28.395 --> 00:18:30.804 the two things is transmetics is

NOTE Confidence: 0.5670332

00:18:30.804 --> 00:18:33.050 is outside the body and while

NOTE Confidence: 0.5670332

00:18:33.050 --> 00:18:36.200 NRP is inside the donor's body.

NOTE Confidence: 0.5670332

00:18:36.200 --> 00:18:37.984 And that distinction has,

NOTE Confidence: 0.5670332

00:18:37.984 --> 00:18:40.080 you know, some ethical

NOTE Confidence: 0.9026764

00:18:42.480 --> 00:18:44.160 issues with it.

NOTE Confidence: 0.9026764

00:18:44.160 --> 00:18:48.038 So NRPNRP is actually not a new thing.

NOTE Confidence: 0.9026764

00:18:48.040 --> 00:18:50.488 The first heart transplant done by

NOTE Confidence: 0.9026764

00:18:50.488 --> 00:18:53.283 Christian Barnard in 1967 in South

NOTE Confidence: 0.9026764

00:18:53.283 --> 00:18:57.240 Africa was done with a technique that is

NOTE Confidence: 0.9026764

00:18:57.240 --> 00:19:01.037 almost identical to what we now call NRP.

NOTE Confidence: 0.9026764

00:19:01.040 --> 00:19:03.266 They the donor was a young woman

NOTE Confidence: 0.9026764

00:19:03.266 --> 00:19:05.000 who was crossing the street,

NOTE Confidence: 0.9026764

00:19:05.000 --> 00:19:06.596 was hit by a drunk driver.
NOTE Confidence: 0.9026764

00:19:06.600 --> 00:19:09.261 She had a a non survivable brain injury.
NOTE Confidence: 0.9026764

00:19:09.261 --> 00:19:12.558 So they she was going to be an organ donor.
NOTE Confidence: 0.9026764

00:19:12.560 --> 00:19:15.430 At the time, the concept of brain
NOTE Confidence: 0.9026764

00:19:15.430 --> 00:19:18.240 death had not been established.
NOTE Confidence: 0.9026764

00:19:18.240 --> 00:19:19.766 So what they did was they took
NOTE Confidence: 0.9026764

00:19:19.766 --> 00:19:21.280 her to the operating room.
NOTE Confidence: 0.9026764

00:19:21.280 --> 00:19:23.600 They cannulated her for
NOTE Confidence: 0.9026764

00:19:23.600 --> 00:19:25.920 the heart lung machine.
NOTE Confidence: 0.9026764

00:19:25.920 --> 00:19:28.996 They withdrew support when her heart stopped.
NOTE Confidence: 0.9026764

00:19:29.000 --> 00:19:30.626 They immediately turned on the heart
NOTE Confidence: 0.9026764

00:19:30.626 --> 00:19:32.000 lung machine resuscitated her heart,
NOTE Confidence: 0.9026764

00:19:32.000 --> 00:19:34.375 And then they and then
NOTE Confidence: 0.9026764

00:19:34.375 --> 00:19:36.275 they implanted the heart.
NOTE Confidence: 0.9026764

00:19:36.280 --> 00:19:39.936 And this, this book is fascinating.
NOTE Confidence: 0.9026764

00:19:39.936 --> 00:19:43.216 It describes the intrigue surrounding

NOTE Confidence: 0.9026764

00:19:43.216 --> 00:19:45.840 the first heart transplants.

NOTE Confidence: 0.9026764

00:19:45.840 --> 00:19:49.048 And it it's not, it's not technical at all.

NOTE Confidence: 0.9026764

00:19:49.048 --> 00:19:51.160 It reads it even though it's not fiction.

NOTE Confidence: 0.9026764

00:19:51.160 --> 00:19:54.489 It reads like a novel and and it

NOTE Confidence: 0.9026764

00:19:54.489 --> 00:19:55.941 describes the ethical dilemmas

NOTE Confidence: 0.9026764

00:19:55.941 --> 00:19:58.198 that they were facing back then.

NOTE Confidence: 0.9026764

00:19:58.200 --> 00:20:00.918 And the story also is interesting

NOTE Confidence: 0.9026764

00:20:00.918 --> 00:20:03.825 because it features big doses of

NOTE Confidence: 0.9026764

00:20:03.825 --> 00:20:06.400 scandalous behavior mostly by Christian

NOTE Confidence: 0.9026764

00:20:06.400 --> 00:20:08.880 Barnard about things like piracy and

NOTE Confidence: 0.5444239

00:20:11.760 --> 00:20:15.316 greed. And also he had a steamy affair

NOTE Confidence: 0.5444239

00:20:15.316 --> 00:20:19.160 with Gina Lola Bridgeta, which is.

NOTE Confidence: 0.5444239

00:20:19.160 --> 00:20:23.080 So another thing that's in there is that.

NOTE Confidence: 0.5444239

00:20:23.080 --> 00:20:25.150 And he Barnard himself never

NOTE Confidence: 0.5444239

00:20:25.150 --> 00:20:27.400 acknowledged this while he was alive.

NOTE Confidence: 0.5444239

00:20:27.400 --> 00:20:30.704 But in there, they, the patient, the donor,
NOTE Confidence: 0.5444239

00:20:30.704 --> 00:20:33.656 was surreptitiously given a bolus of
NOTE Confidence: 0.5444239

00:20:33.656 --> 00:20:36.640 potassium to speed the cardiac arrest.
NOTE Confidence: 0.7548868

00:20:39.000 --> 00:20:42.260 So this, this schematic shows NRP,
NOTE Confidence: 0.7548868

00:20:42.260 --> 00:20:45.495 the NRP, with, with, and it's different
NOTE Confidence: 0.7548868

00:20:45.495 --> 00:20:47.280 than what I've shown you before.
NOTE Confidence: 0.7548868

00:20:47.280 --> 00:20:50.680 So what you do is you you open the chest,
NOTE Confidence: 0.7548868

00:20:50.680 --> 00:20:53.410 you put a cannula into the right
NOTE Confidence: 0.7548868

00:20:53.410 --> 00:20:55.480 atrium and you put a cannula.
NOTE Confidence: 0.7548868

00:20:55.480 --> 00:20:57.520 OK, I'll stop right there.
NOTE Confidence: 0.7548868

00:20:57.520 --> 00:20:59.200 I I skipped a step.
NOTE Confidence: 0.7548868

00:20:59.200 --> 00:21:00.773 You open the chest and you put this
NOTE Confidence: 0.7548868

00:21:00.773 --> 00:21:02.984 clamp across the arch vessels so
NOTE Confidence: 0.7548868

00:21:02.984 --> 00:21:05.300 that there's no there's going to
NOTE Confidence: 0.7548868

00:21:05.377 --> 00:21:07.680 be no blood going to the brain.
NOTE Confidence: 0.7548868

00:21:07.680 --> 00:21:09.507 And then you put the cannula in

NOTE Confidence: 0.7548868

00:21:09.507 --> 00:21:11.258 the right atrium and you and you

NOTE Confidence: 0.7548868

00:21:11.258 --> 00:21:13.120 drain the blood out of the patient.

NOTE Confidence: 0.7548868

00:21:13.120 --> 00:21:14.982 And then you put a cannula in

NOTE Confidence: 0.7548868

00:21:14.982 --> 00:21:16.957 the aorta and then that it goes,

NOTE Confidence: 0.7548868

00:21:16.960 --> 00:21:19.320 it's connected to an ECMO machine.

NOTE Confidence: 0.7548868

00:21:19.320 --> 00:21:21.678 And this is all done just through the chest,

NOTE Confidence: 0.7548868

00:21:21.680 --> 00:21:22.880 and it can be done rapidly.

NOTE Confidence: 0.7548868

00:21:22.880 --> 00:21:24.662 The the center with the most

NOTE Confidence: 0.7548868

00:21:24.662 --> 00:21:25.553 experience is Vanderbilt,

NOTE Confidence: 0.7548868

00:21:25.560 --> 00:21:28.560 and they can can pretty consistently

NOTE Confidence: 0.7548868

00:21:28.560 --> 00:21:30.880 have the patient on the pump 3 minutes

NOTE Confidence: 0.7548868

00:21:30.880 --> 00:21:32.599 after making the chest incision.

NOTE Confidence: 0.51523453

00:21:35.280 --> 00:21:38.610 So the sequence of events is exactly

NOTE Confidence: 0.51523453

00:21:38.610 --> 00:21:42.897 the same as what I showed you for the

NOTE Confidence: 0.51523453

00:21:42.897 --> 00:21:46.342 transmetic system up until #5 through #5,

NOTE Confidence: 0.51523453

00:21:46.342 --> 00:21:48.398 and then things diverge.
NOTE Confidence: 0.51523453

00:21:48.400 --> 00:21:51.640 So on NRP it's only a chest incision.
NOTE Confidence: 0.51523453

00:21:51.640 --> 00:21:53.000 You clamp the arch vessels,
NOTE Confidence: 0.51523453

00:21:53.000 --> 00:21:55.368 you establish cardio pulmonary
NOTE Confidence: 0.51523453

00:21:55.368 --> 00:21:57.480 bypass and this reperfuses all
NOTE Confidence: 0.51523453

00:21:57.480 --> 00:21:59.760 the organs except for the brain.
NOTE Confidence: 0.51523453

00:21:59.760 --> 00:22:02.125 And then after the heart's
NOTE Confidence: 0.51523453

00:22:02.125 --> 00:22:05.000 resuscitated and and and the other
NOTE Confidence: 0.51523453

00:22:05.000 --> 00:22:06.920 organ dissection is completed,
NOTE Confidence: 0.51523453

00:22:06.920 --> 00:22:08.755 then you infuse the preservation
NOTE Confidence: 0.51523453

00:22:08.755 --> 00:22:10.590 solutions and you excise the
NOTE Confidence: 0.51523453

00:22:10.654 --> 00:22:12.279 heart and the other organs.
NOTE Confidence: 0.51523453

00:22:12.280 --> 00:22:15.232 So here's a photograph from Vanderbilt
NOTE Confidence: 0.51523453

00:22:15.232 --> 00:22:17.200 showing the heart cannulated.
NOTE Confidence: 0.51523453

00:22:17.200 --> 00:22:20.128 So right here is the cannula
NOTE Confidence: 0.51523453

00:22:20.128 --> 00:22:22.080 in the right atrium,

NOTE Confidence: 0.51523453

00:22:22.080 --> 00:22:24.192 here's the cannula in the aorta and then

NOTE Confidence: 0.51523453

00:22:24.192 --> 00:22:28.800 these two clamps are on the arch vessels.

NOTE Confidence: 0.51523453

00:22:28.800 --> 00:22:30.564 Here's the pump that's used.

NOTE Confidence: 0.51523453

00:22:30.564 --> 00:22:32.700 It's familiar to any any of you

NOTE Confidence: 0.51523453

00:22:32.700 --> 00:22:35.415 that work in the ICU as a a typical

NOTE Confidence: 0.51523453

00:22:35.415 --> 00:22:37.265 ECMO machine with one important

NOTE Confidence: 0.51523453

00:22:37.265 --> 00:22:39.418 addition is that there's a reservoir

NOTE Confidence: 0.51523453

00:22:39.418 --> 00:22:41.702 so that when you when you put

NOTE Confidence: 0.51523453

00:22:41.702 --> 00:22:43.274 the cannula in the right atrium,

NOTE Confidence: 0.51523453

00:22:43.280 --> 00:22:45.152 you you drain the blood out of the heart.

NOTE Confidence: 0.51523453

00:22:45.160 --> 00:22:48.746 So the heart's completely emptied and this,

NOTE Confidence: 0.51523453

00:22:48.746 --> 00:22:49.259 this,

NOTE Confidence: 0.51523453

00:22:49.259 --> 00:22:50.798 this step is,

NOTE Confidence: 0.51523453

00:22:50.800 --> 00:22:53.600 is one of the key reasons why this

NOTE Confidence: 0.51523453

00:22:53.600 --> 00:22:56.279 this system works as well as it does.

NOTE Confidence: 0.51523453

00:22:56.280 --> 00:22:58.359 Here's a simplified version of the circuit.
NOTE Confidence: 0.51523453

00:22:58.360 --> 00:23:00.952 So the venous blood comes out and it
NOTE Confidence: 0.51523453

00:23:00.952 --> 00:23:03.791 goes into this reservoir and then a
NOTE Confidence: 0.51523453

00:23:03.791 --> 00:23:05.519 centrifugal pump passes it through
NOTE Confidence: 0.51523453

00:23:05.519 --> 00:23:07.277 the oxygenator and then the oxygenated
NOTE Confidence: 0.51523453

00:23:07.277 --> 00:23:09.120 blood comes back into the aorta.
NOTE Confidence: 0.6415641

00:23:11.160 --> 00:23:15.437 So in conclusion, the NRP definitely works.
NOTE Confidence: 0.6415641

00:23:15.440 --> 00:23:16.960 It's the I haven't shown you the data,
NOTE Confidence: 0.6415641

00:23:16.960 --> 00:23:19.492 but the outcomes with this are excellent.
NOTE Confidence: 0.6415641

00:23:19.492 --> 00:23:22.100 In fact, Vanderbilt is of the opinion
NOTE Confidence: 0.6415641

00:23:22.100 --> 00:23:24.406 that the outcomes from this are better
NOTE Confidence: 0.6415641

00:23:24.406 --> 00:23:26.555 than the superior to the outcomes for
NOTE Confidence: 0.5312258

00:23:26.560 --> 00:23:27.520 a brain dead donor.
NOTE Confidence: 0.5312258

00:23:28.640 --> 00:23:31.986 Also, because of rapid reperfusion and also
NOTE Confidence: 0.5312258

00:23:31.986 --> 00:23:34.920 decompression of the circulatory system,
NOTE Confidence: 0.5312258

00:23:34.920 --> 00:23:36.748 it's beneficial for the organs other

NOTE Confidence: 0.5312258

00:23:36.748 --> 00:23:38.831 than the heart, specifically the patient.

NOTE Confidence: 0.5312258

00:23:38.831 --> 00:23:41.693 The livers and the kidneys taken

NOTE Confidence: 0.5312258

00:23:41.693 --> 00:23:45.570 this way do do better than than than

NOTE Confidence: 0.5312258

00:23:45.570 --> 00:23:48.509 they do with the other approaches.

NOTE Confidence: 0.5312258

00:23:48.509 --> 00:23:51.750 It saves A NRP saves a substantial

NOTE Confidence: 0.5312258

00:23:51.836 --> 00:23:53.159 amount of money.

NOTE Confidence: 0.5312258

00:23:53.160 --> 00:23:56.282 The the disposable cost for the Transmedics

NOTE Confidence: 0.5312258

00:23:56.282 --> 00:24:00.000 pump are in excess of \$65,000 per case.

NOTE Confidence: 0.5312258

00:24:00.000 --> 00:24:05.240 The disposable cost for NRP are around \$1500.

NOTE Confidence: 0.5312258

00:24:05.240 --> 00:24:07.760 So we're back to the ethical and

NOTE Confidence: 0.5312258

00:24:07.760 --> 00:24:09.855 legal issues that so that you you

NOTE Confidence: 0.5312258

00:24:09.855 --> 00:24:11.689 said the patient was dead because

NOTE Confidence: 0.5312258

00:24:11.689 --> 00:24:13.679 their heart irreversibly stopped and

NOTE Confidence: 0.5312258

00:24:13.679 --> 00:24:15.652 yet you restart the heart and you're

NOTE Confidence: 0.5312258

00:24:15.652 --> 00:24:18.520 going to use it in somebody else.

NOTE Confidence: 0.5312258

00:24:18.520 --> 00:24:20.536 NRP is done in site to inside
NOTE Confidence: 0.5312258

00:24:20.536 --> 00:24:21.400 the donor's body.
NOTE Confidence: 0.5312258

00:24:21.400 --> 00:24:23.234 So you not only have the heart,
NOTE Confidence: 0.5312258

00:24:23.240 --> 00:24:25.718 it's like it's maybe there's a distinction.
NOTE Confidence: 0.5312258

00:24:25.720 --> 00:24:27.639 The heart in this machine has been
NOTE Confidence: 0.5312258

00:24:27.640 --> 00:24:29.494 restarted versus the heart is in
NOTE Confidence: 0.5312258

00:24:29.494 --> 00:24:31.719 the donor and has been restarted.
NOTE Confidence: 0.5312258

00:24:31.720 --> 00:24:32.878 So you're back to square one.
NOTE Confidence: 0.5312258

00:24:32.880 --> 00:24:34.952 You're back to right where you were
NOTE Confidence: 0.5312258

00:24:34.952 --> 00:24:36.559 before you started the process.
NOTE Confidence: 0.5312258

00:24:36.560 --> 00:24:38.555 And the third thing is you clamp
NOTE Confidence: 0.5312258

00:24:38.555 --> 00:24:40.145 the arch vessels to substitute
NOTE Confidence: 0.5312258

00:24:40.145 --> 00:24:42.440 brain death for cardiac death.
NOTE Confidence: 0.5312258

00:24:42.440 --> 00:24:43.798 And as a surgeon I would my,
NOTE Confidence: 0.5312258

00:24:43.800 --> 00:24:44.940 you know my reaction to that
NOTE Confidence: 0.5312258

00:24:44.940 --> 00:24:46.240 is it's just a little bit,

NOTE Confidence: 0.5312258

00:24:46.240 --> 00:24:49.998 it's kind of a creepy thing to be doing.

NOTE Confidence: 0.5312258

00:24:50.000 --> 00:24:53.119 So I I don't want to obviously I'm

NOTE Confidence: 0.5312258

00:24:53.119 --> 00:24:54.755 not going to answer any questions

NOTE Confidence: 0.5312258

00:24:54.755 --> 00:24:55.995 about the ethics right,

NOTE Confidence: 0.5312258

00:24:56.000 --> 00:24:58.052 because these guys are going to cover that.

NOTE Confidence: 0.5312258

00:24:58.052 --> 00:24:59.116 But if are there,

NOTE Confidence: 0.5312258

00:24:59.120 --> 00:25:00.758 if there are any questions about the

NOTE Confidence: 0.2881369

00:25:00.800 --> 00:25:03.360 procedure, I can answer those right now. So

NOTE Confidence: 0.2881369

00:25:06.120 --> 00:25:08.800 OK, sounds good. I

NOTE Confidence: 0.2881369

00:25:08.800 --> 00:25:10.038 think that's that's great. Thank you.

NOTE Confidence: 0.38793692

00:25:14.280 --> 00:25:16.176 Yeah, thanks. I'm sure that there may well

NOTE Confidence: 0.38793692

00:25:16.176 --> 00:25:18.159 have been some questions and I I apologize.

NOTE Confidence: 0.38793692

00:25:18.160 --> 00:25:19.602 It will do the questions if any

NOTE Confidence: 0.38793692

00:25:19.602 --> 00:25:20.914 questions you have for all the

NOTE Confidence: 0.38793692

00:25:20.914 --> 00:25:21.994 all the panelists will answer.

NOTE Confidence: 0.38793692

00:25:22.000 --> 00:25:23.848 And how about that my prom
NOTE Confidence: 0.38793692

00:25:23.848 --> 00:25:25.080 picture in Gina Lolo,
NOTE Confidence: 0.38793692

00:25:25.080 --> 00:25:27.630 Bridget in the same talk and most are
NOTE Confidence: 0.38793692

00:25:27.630 --> 00:25:28.996 saying who the hell is Gina Lolo.
NOTE Confidence: 0.38793692

00:25:29.000 --> 00:25:31.359 Bridget. But she wasn't at that prom.
NOTE Confidence: 0.38793692

00:25:31.360 --> 00:25:32.356 I don't know. Who is she?
NOTE Confidence: 0.38793692

00:25:32.360 --> 00:25:35.217 The the Kim Kardashian of 1965?
NOTE Confidence: 0.38793692

00:25:35.217 --> 00:25:37.239 I don't know, something like that.
NOTE Confidence: 0.38793692

00:25:37.240 --> 00:25:39.466 Well, when Eric first reached out to
NOTE Confidence: 0.38793692

00:25:39.466 --> 00:25:42.170 me to talk about this, I thought, well,
NOTE Confidence: 0.38793692

00:25:42.170 --> 00:25:45.535 why don't I talk to to my personal
NOTE Confidence: 0.38793692

00:25:45.535 --> 00:25:48.560 favorite pediatric ethicist about this?
NOTE Confidence: 0.38793692

00:25:48.560 --> 00:25:51.772 And so I contacted Bob True and it turns out
NOTE Confidence: 0.38793692

00:25:51.772 --> 00:25:53.800 Bob was very familiar with the situation,
NOTE Confidence: 0.38793692

00:25:53.800 --> 00:25:54.941 was actually doing some work on it
NOTE Confidence: 0.38793692

00:25:54.941 --> 00:25:56.039 with others on a national level.

NOTE Confidence: 0.38793692

00:25:56.040 --> 00:25:57.759 And I'm going to let him talk about that.

NOTE Confidence: 0.38793692

00:25:57.760 --> 00:25:59.320 So to introduce our next speaker,

NOTE Confidence: 0.38793692

00:25:59.320 --> 00:26:00.720 we have heard here before.

NOTE Confidence: 0.38793692

00:26:00.720 --> 00:26:02.560 I get him down here as often as I can.

NOTE Confidence: 0.38793692

00:26:02.560 --> 00:26:04.160 This is Doctor Robert True,

NOTE Confidence: 0.38793692

00:26:04.160 --> 00:26:06.040 who's the Francis Glessner Lee

NOTE Confidence: 0.38793692

00:26:06.040 --> 00:26:07.920 Distinguished Professor of Medical Ethics,

NOTE Confidence: 0.38793692

00:26:07.920 --> 00:26:10.392 Anaesthesia and Pediatrics at Harvard Medical

NOTE Confidence: 0.38793692

00:26:10.392 --> 00:26:12.600 School and Boston Children's Hospital.

NOTE Confidence: 0.38793692

00:26:12.600 --> 00:26:14.268 He received the medical degree from

NOTE Confidence: 0.38793692

00:26:14.268 --> 00:26:15.981 University of California in Los Angeles

NOTE Confidence: 0.38793692

00:26:15.981 --> 00:26:17.637 and his board certified in Pediatrics,

NOTE Confidence: 0.38793692

00:26:17.640 --> 00:26:20.400 anaesthesiology and pediatric critical care.

NOTE Confidence: 0.38793692

00:26:20.400 --> 00:26:22.703 He also holds a master's degree in

NOTE Confidence: 0.38793692

00:26:22.703 --> 00:26:24.400 philosophy from Brown University.

NOTE Confidence: 0.38793692

00:26:24.400 --> 00:26:26.032 We actually had the same mentor
NOTE Confidence: 0.38793692

00:26:26.032 --> 00:26:28.008 just a couple years apart and he's
NOTE Confidence: 0.38793692

00:26:28.008 --> 00:26:29.712 a senior associate in critical care
NOTE Confidence: 0.38793692

00:26:29.712 --> 00:26:31.215 medicine at Boston Children's where
NOTE Confidence: 0.38793692

00:26:31.215 --> 00:26:33.273 he's worked for more than 35 years
NOTE Confidence: 0.38793692

00:26:33.328 --> 00:26:35.281 including a decade as chief of the
NOTE Confidence: 0.38793692

00:26:35.281 --> 00:26:36.433 Division of Critical Care.
NOTE Confidence: 0.38793692

00:26:36.433 --> 00:26:38.937 In 90 two 1992 he Co founded the
NOTE Confidence: 0.38793692

00:26:38.937 --> 00:26:40.561 fellowship program in medical
NOTE Confidence: 0.38793692

00:26:40.561 --> 00:26:42.636 ethics at Harvard Medical School.
NOTE Confidence: 0.38793692

00:26:42.640 --> 00:26:45.188 In 99 he Co founded the Harvard
NOTE Confidence: 0.38793692

00:26:45.188 --> 00:26:45.916 Ethics Consortium.
NOTE Confidence: 0.38793692

00:26:45.920 --> 00:26:47.522 And I could go on he has been a
NOTE Confidence: 0.38793692

00:26:47.522 --> 00:26:48.943 leader on certainly in Boston and
NOTE Confidence: 0.38793692

00:26:48.943 --> 00:26:50.559 then on a national level as well.
NOTE Confidence: 0.38793692

00:26:50.560 --> 00:26:51.436 I'm in 2004,

NOTE Confidence: 0.38793692

00:26:51.436 --> 00:26:52.896 he was recruited at Harvard

NOTE Confidence: 0.38793692

00:26:52.896 --> 00:26:54.160 to join Dan Brock,

NOTE Confidence: 0.38793692

00:26:54.160 --> 00:26:56.995 who was the his mentor and mind

NOTE Confidence: 0.38793692

00:26:56.995 --> 00:26:58.552 actually in building the Division

NOTE Confidence: 0.38793692

00:26:58.552 --> 00:26:59.992 of Medical Ethics at Harvard.

NOTE Confidence: 0.38793692

00:27:00.000 --> 00:27:00.975 And in 2014,

NOTE Confidence: 0.38793692

00:27:00.975 --> 00:27:02.275 when Doctor Brock retired,

NOTE Confidence: 0.38793692

00:27:02.280 --> 00:27:04.720 Doctor Shrug became director and

NOTE Confidence: 0.6804405

00:27:13.430 --> 00:27:15.145 reorganize into what is known now as

NOTE Confidence: 0.6804405

00:27:15.145 --> 00:27:16.948 the Center for Bioethics at Harvard,

NOTE Confidence: 0.6804405

00:27:16.950 --> 00:27:20.190 which is a most impressive operation.

NOTE Confidence: 0.6804405

00:27:20.190 --> 00:27:21.359 And he just this year stepped down

NOTE Confidence: 0.6804405

00:27:21.359 --> 00:27:22.630 as his role as director of that.

NOTE Confidence: 0.6804405

00:27:22.630 --> 00:27:26.010 So he's a tremendous thinker as

NOTE Confidence: 0.6804405

00:27:26.010 --> 00:27:27.510 well as an accomplished clinician.

NOTE Confidence: 0.6804405

00:27:27.510 --> 00:27:28.795 So it's my pleasure to
NOTE Confidence: 0.6804405

00:27:28.795 --> 00:27:29.823 introduce Doctor Bob True.
NOTE Confidence: 0.6804405

00:27:32.070 --> 00:27:33.750 Well, Mark, thank you
NOTE Confidence: 0.6804405

00:27:33.750 --> 00:27:34.950 very much for inviting me.
NOTE Confidence: 0.6804405

00:27:34.950 --> 00:27:36.306 It's always great to be here.
NOTE Confidence: 0.6804405

00:27:36.310 --> 00:27:37.570 Doctor Thompson, thank you for
NOTE Confidence: 0.6804405

00:27:37.570 --> 00:27:38.830 the really nice overview there.
NOTE Confidence: 0.6804405

00:27:38.830 --> 00:27:41.426 I learned a lot from from your explanation
NOTE Confidence: 0.6804405

00:27:41.426 --> 00:27:43.478 about what's going on with NRP.
NOTE Confidence: 0.6804405

00:27:43.480 --> 00:27:46.555 I'm going to talk a little bit about some
NOTE Confidence: 0.6804405

00:27:46.555 --> 00:27:49.600 of the ethical issues that are involved,
NOTE Confidence: 0.6804405

00:27:49.600 --> 00:27:53.031 and I want to start with this point
NOTE Confidence: 0.6804405

00:27:53.031 --> 00:27:55.893 that the fundamental challenge of organ
NOTE Confidence: 0.6804405

00:27:55.893 --> 00:27:58.874 procurement and transplantation is the
NOTE Confidence: 0.6804405

00:27:58.874 --> 00:28:01.559 necessity of obtaining living organs
NOTE Confidence: 0.6804405

00:28:01.560 --> 00:28:04.280 from patients who are deemed to be dead.

NOTE Confidence: 0.6804405

00:28:04.280 --> 00:28:06.224 And I'd I'd like you to keep this in

NOTE Confidence: 0.6804405

00:28:06.224 --> 00:28:08.434 the back of your mind as you listen

NOTE Confidence: 0.6804405

00:28:08.434 --> 00:28:10.080 to the conversation we have today.

NOTE Confidence: 0.6804405

00:28:10.080 --> 00:28:11.914 Because if the way you think about

NOTE Confidence: 0.6804405

00:28:11.914 --> 00:28:14.238 being dead is the way that most people

NOTE Confidence: 0.6804405

00:28:14.238 --> 00:28:16.426 think about being being dead, you know,

NOTE Confidence: 0.6804405

00:28:16.426 --> 00:28:19.840 a body that is cold and Gray and stiff,

NOTE Confidence: 0.6804405

00:28:19.840 --> 00:28:22.966 I mean, that understanding of death can

NOTE Confidence: 0.6804405

00:28:22.966 --> 00:28:24.596 never lead to transplantable organs.

NOTE Confidence: 0.6804405

00:28:24.600 --> 00:28:26.877 Those organs are just as dead as the body.

NOTE Confidence: 0.6804405

00:28:26.880 --> 00:28:29.754 So we're always struggling with this

NOTE Confidence: 0.6804405

00:28:29.754 --> 00:28:32.065 balance between wanting that body

NOTE Confidence: 0.6804405

00:28:32.065 --> 00:28:34.601 to be as alive as possible so that

NOTE Confidence: 0.6804405

00:28:34.601 --> 00:28:37.279 the organs are as good as possible.

NOTE Confidence: 0.6804405

00:28:37.280 --> 00:28:39.200 So let me I'm going to come back.

NOTE Confidence: 0.6804405

00:28:39.200 --> 00:28:40.475 I think this is kind of nice. Actually.
NOTE Confidence: 0.6804405

00:28:40.475 --> 00:28:43.315 I'll I'll reiterate some of what you covered.
NOTE Confidence: 0.6804405

00:28:43.320 --> 00:28:44.872 And I think it's,
NOTE Confidence: 0.6804405

00:28:44.872 --> 00:28:46.564 it's helpful because often times,
NOTE Confidence: 0.6804405

00:28:46.564 --> 00:28:47.088 you know,
NOTE Confidence: 0.6804405

00:28:47.088 --> 00:28:49.015 the whole thing about NRP is really
NOTE Confidence: 0.6804405

00:28:49.015 --> 00:28:51.136 convoluted and a lot of times the
NOTE Confidence: 0.6804405

00:28:51.136 --> 00:28:53.079 conversations seem to go down a rabbit hole.
NOTE Confidence: 0.6804405

00:28:53.080 --> 00:28:55.611 And so I'm hoping that we can lay
NOTE Confidence: 0.6804405

00:28:55.611 --> 00:28:57.870 it out in a way that is more clear
NOTE Confidence: 0.6804405

00:28:57.942 --> 00:28:59.200 and comprehensible.
NOTE Confidence: 0.6804405

00:28:59.200 --> 00:29:02.000 And so NRP is considered a version of
NOTE Confidence: 0.6804405

00:29:02.000 --> 00:29:03.595 donation after circulatory determination
NOTE Confidence: 0.6804405

00:29:03.595 --> 00:29:06.472 of death or what we call DCD,
NOTE Confidence: 0.6804405

00:29:06.480 --> 00:29:09.456 which has been used since the early 1990s
NOTE Confidence: 0.6804405

00:29:09.456 --> 00:29:12.678 and is generally pretty well accepted.

NOTE Confidence: 0.6804405

00:29:12.680 --> 00:29:14.968 And let me go through repeating to a

NOTE Confidence: 0.6804405

00:29:14.968 --> 00:29:16.997 certain extent what Doctor Thompson did,

NOTE Confidence: 0.6804405

00:29:17.000 --> 00:29:19.320 what that sequence looks like.

NOTE Confidence: 0.6804405

00:29:19.320 --> 00:29:21.580 So we have a patient who's terminally

NOTE Confidence: 0.6804405

00:29:21.580 --> 00:29:24.030 ill A decision has been made to

NOTE Confidence: 0.6804405

00:29:24.030 --> 00:29:26.061 withdraw life support with death

NOTE Confidence: 0.6804405

00:29:26.061 --> 00:29:28.076 being both inevitable and imminent.

NOTE Confidence: 0.6804405

00:29:28.080 --> 00:29:28.463 Typically,

NOTE Confidence: 0.6804405

00:29:28.463 --> 00:29:31.144 these are patients who are on a

NOTE Confidence: 0.6804405

00:29:31.144 --> 00:29:33.970 ventilator and we expect that when

NOTE Confidence: 0.6804405

00:29:33.970 --> 00:29:35.954 mechanical ventilation is discontinued,

NOTE Confidence: 0.6804405

00:29:35.960 --> 00:29:39.000 they will die within 30 minutes or so,

NOTE Confidence: 0.6804405

00:29:39.000 --> 00:29:42.360 certainly within an hour or two.

NOTE Confidence: 0.6804405

00:29:42.360 --> 00:29:45.120 The patient or the surrogate has

NOTE Confidence: 0.6804405

00:29:45.120 --> 00:29:47.285 given authorization for this patient

NOTE Confidence: 0.6804405

00:29:47.285 --> 00:29:49.360 to be an organ donor.
NOTE Confidence: 0.6804405

00:29:49.360 --> 00:29:51.072 Life support is withdrawn,
NOTE Confidence: 0.6804405

00:29:51.072 --> 00:29:52.356 typically a ventilator,
NOTE Confidence: 0.6804405

00:29:52.360 --> 00:29:54.852 but could also be medications that are
NOTE Confidence: 0.6804405

00:29:54.852 --> 00:29:56.586 supporting blood pressure, etcetera.
NOTE Confidence: 0.6804405

00:29:56.586 --> 00:29:59.916 Sedatives and analgesics are given,
NOTE Confidence: 0.6804405

00:29:59.920 --> 00:30:02.336 but only as much as is necessary to
NOTE Confidence: 0.6804405

00:30:02.336 --> 00:30:04.517 ensure the comfort of the patient,
NOTE Confidence: 0.6804405

00:30:04.520 --> 00:30:06.526 not to speed up the patient's
NOTE Confidence: 0.6804405

00:30:06.526 --> 00:30:07.338 death deliberately.
NOTE Confidence: 0.6804405

00:30:07.338 --> 00:30:10.252 In other words, this is not euthanasia.
NOTE Confidence: 0.6804405

00:30:10.252 --> 00:30:12.790 DCD is a passive process of
NOTE Confidence: 0.6804405

00:30:12.876 --> 00:30:15.196 allowing the patient to die,
NOTE Confidence: 0.6804405

00:30:15.200 --> 00:30:18.920 not causing the patient to die.
NOTE Confidence: 0.6804405

00:30:18.920 --> 00:30:21.880 Now, how do we determine death in DCD?
NOTE Confidence: 0.6804405

00:30:21.880 --> 00:30:22.066 Well,

NOTE Confidence: 0.6804405

00:30:22.066 --> 00:30:24.680 if and when the patient becomes pulseless,

NOTE Confidence: 0.6804405

00:30:24.680 --> 00:30:27.620 the five minute hands off period begins

NOTE Confidence: 0.6804405

00:30:27.620 --> 00:30:29.920 to observe for auto resuscitation.

NOTE Confidence: 0.6804405

00:30:29.920 --> 00:30:32.880 Where does this 5 minute interval come from?

NOTE Confidence: 0.6804405

00:30:32.880 --> 00:30:35.696 What we're looking for here is whether the

NOTE Confidence: 0.6804405

00:30:35.696 --> 00:30:38.675 heart is going to start again on its own,

NOTE Confidence: 0.857296

00:30:38.680 --> 00:30:41.668 On its own. And what we know is that

NOTE Confidence: 0.857296

00:30:41.668 --> 00:30:44.519 past five minutes of pulselessness,

NOTE Confidence: 0.857296

00:30:44.520 --> 00:30:47.035 it's exceedingly rare for a

NOTE Confidence: 0.857296

00:30:47.035 --> 00:30:50.080 heart to stop on its own.

NOTE Confidence: 0.857296

00:30:50.080 --> 00:30:53.293 But that does not mean that cardiac

NOTE Confidence: 0.857296

00:30:53.293 --> 00:30:56.000 arrest or pulselessness is irreversible.

NOTE Confidence: 0.857296

00:30:56.000 --> 00:30:57.840 After that 5 minute period,

NOTE Confidence: 0.857296

00:30:57.840 --> 00:30:59.700 many, indeed most patients

NOTE Confidence: 0.857296

00:30:59.700 --> 00:31:01.560 could still be resuscitated.

NOTE Confidence: 0.857296

00:31:01.560 --> 00:31:03.300 And this happens countless times

NOTE Confidence: 0.857296

00:31:03.300 --> 00:31:05.355 every day in hospitals where the

NOTE Confidence: 0.857296

00:31:05.355 --> 00:31:07.172 code team shows up and, you know,

NOTE Confidence: 0.857296

00:31:07.172 --> 00:31:08.236 the patient's already been

NOTE Confidence: 0.857296

00:31:08.236 --> 00:31:09.870 pulseless for five, 6-7 minutes.

NOTE Confidence: 0.857296

00:31:09.870 --> 00:31:11.115 They're very successful

NOTE Confidence: 0.857296

00:31:11.115 --> 00:31:12.360 at resuscitating people,

NOTE Confidence: 0.857296

00:31:12.360 --> 00:31:13.383 as are paramedics.

NOTE Confidence: 0.857296

00:31:13.383 --> 00:31:15.770 And so by no means is the

NOTE Confidence: 0.857296

00:31:15.853 --> 00:31:18.025 loss of circulatory function

NOTE Confidence: 0.857296

00:31:18.025 --> 00:31:20.197 irreversible at this point.

NOTE Confidence: 0.857296

00:31:20.200 --> 00:31:22.378 And that's why something that I

NOTE Confidence: 0.857296

00:31:22.378 --> 00:31:24.530 think is often overlooked is that

NOTE Confidence: 0.857296

00:31:24.530 --> 00:31:26.438 it's essential that the patient has

NOTE Confidence: 0.857296

00:31:26.438 --> 00:31:29.640 a DNR order in place that would

NOTE Confidence: 0.857296

00:31:29.640 --> 00:31:32.080 ethically and legally prohibit any

NOTE Confidence: 0.857296
00:31:32.080 --> 00:31:34.584 attempt to establish recirculation.
NOTE Confidence: 0.857296
00:31:34.584 --> 00:31:35.960 Because again,
NOTE Confidence: 0.857296
00:31:35.960 --> 00:31:37.520 if you do attempt it,
NOTE Confidence: 0.857296
00:31:37.520 --> 00:31:39.056 it's a pretty good chance you're
NOTE Confidence: 0.857296
00:31:39.056 --> 00:31:40.080 going to be successful.
NOTE Confidence: 0.857296
00:31:40.080 --> 00:31:41.424 And so you know you can't declare
NOTE Confidence: 0.857296
00:31:41.424 --> 00:31:42.664 the patient dead and then turn
NOTE Confidence: 0.857296
00:31:42.664 --> 00:31:43.906 around and have them have them
NOTE Confidence: 0.857296
00:31:43.906 --> 00:31:45.159 breathing and doing well after that.
NOTE Confidence: 0.857296
00:31:45.160 --> 00:31:47.560 That just doesn't make any sense.
NOTE Confidence: 0.857296
00:31:47.560 --> 00:31:48.505 In other words,
NOTE Confidence: 0.857296
00:31:48.505 --> 00:31:50.395 after 5 minutes the lingo that
NOTE Confidence: 0.857296
00:31:50.395 --> 00:31:52.260 we use is that pulselessness
NOTE Confidence: 0.857296
00:31:52.260 --> 00:31:54.115 is deemed to be permanent,
NOTE Confidence: 0.857296
00:31:54.120 --> 00:31:57.120 meaning that at that point we
NOTE Confidence: 0.857296

00:31:57.120 --> 00:31:58.961 expect if no efforts are made to
NOTE Confidence: 0.857296

00:31:58.961 --> 00:32:01.005 a step to re establish circulation
NOTE Confidence: 0.857296

00:32:01.005 --> 00:32:03.375 that the loss of cardiac function
NOTE Confidence: 0.857296

00:32:03.375 --> 00:32:05.038 will become irreversible within
NOTE Confidence: 0.857296

00:32:05.038 --> 00:32:07.038 the next period of time.
NOTE Confidence: 0.56741834

00:32:09.760 --> 00:32:11.872 At that point death is declared
NOTE Confidence: 0.56741834

00:32:11.872 --> 00:32:13.743 and then organ procurement begins
NOTE Confidence: 0.56741834

00:32:13.743 --> 00:32:15.718 as described by Doctor Thompson.
NOTE Confidence: 0.56741834

00:32:15.720 --> 00:32:18.270 So this is sort of the sequence and I think
NOTE Confidence: 0.56741834

00:32:18.339 --> 00:32:20.595 contains the main ethical issues here.
NOTE Confidence: 0.56741834

00:32:20.600 --> 00:32:23.672 So how does standard DCD differ
NOTE Confidence: 0.56741834

00:32:23.672 --> 00:32:26.366 from thorical abdominal NRP what
NOTE Confidence: 0.56741834

00:32:26.366 --> 00:32:29.116 Doctor Thompson described for us?
NOTE Confidence: 0.56741834

00:32:29.120 --> 00:32:30.648 So in standard DCD,
NOTE Confidence: 0.56741834

00:32:30.648 --> 00:32:32.940 the organs must be recovered as
NOTE Confidence: 0.56741834

00:32:33.022 --> 00:32:35.507 quickly as possible after the

NOTE Confidence: 0.56741834

00:32:35.507 --> 00:32:37.488 determination of death, right?

NOTE Confidence: 0.56741834

00:32:37.488 --> 00:32:39.440 Once the heart stops,

NOTE Confidence: 0.56741834

00:32:39.440 --> 00:32:41.477 those organs are no longer getting oxygen,

NOTE Confidence: 0.56741834

00:32:41.480 --> 00:32:42.878 they're no longer getting any blood.

NOTE Confidence: 0.56741834

00:32:42.880 --> 00:32:45.932 You got to get them out as

NOTE Confidence: 0.56741834

00:32:45.932 --> 00:32:47.240 quickly as possible.

NOTE Confidence: 0.56741834

00:32:47.240 --> 00:32:48.915 They in some circumstances might

NOTE Confidence: 0.56741834

00:32:48.915 --> 00:32:49.920 be immediately transplanted.

NOTE Confidence: 0.56741834

00:32:49.920 --> 00:32:52.200 But as Doctor Thompson said in

NOTE Confidence: 0.56741834

00:32:52.200 --> 00:32:53.778 the the sort of standard these

NOTE Confidence: 0.56741834

00:32:53.778 --> 00:32:55.921 days is that the organs are placed

NOTE Confidence: 0.56741834

00:32:55.921 --> 00:32:57.636 on ex vivo circulation devices.

NOTE Confidence: 0.56741834

00:32:57.640 --> 00:33:00.586 This allows the transplant team to

NOTE Confidence: 0.56741834

00:33:00.586 --> 00:33:03.145 assess their function and to improve

NOTE Confidence: 0.56741834

00:33:03.145 --> 00:33:06.240 their function before they are transplanted.

NOTE Confidence: 0.56741834

00:33:06.240 --> 00:33:09.714 Whereas in NRP the patient is placed on ECMO,

NOTE Confidence: 0.56741834

00:33:09.720 --> 00:33:11.235 restoring organs, sorry,

NOTE Confidence: 0.56741834

00:33:11.235 --> 00:33:13.255 restoring circulation to all

NOTE Confidence: 0.56741834

00:33:13.255 --> 00:33:16.387 of the vital organs in the body

NOTE Confidence: 0.56741834

00:33:16.387 --> 00:33:17.919 except for the brain.

NOTE Confidence: 0.56741834

00:33:17.920 --> 00:33:19.700 And ideally that organ

NOTE Confidence: 0.56741834

00:33:19.700 --> 00:33:21.480 function returns to normal.

NOTE Confidence: 0.56741834

00:33:21.480 --> 00:33:23.600 And in in perfect circumstances,

NOTE Confidence: 0.56741834

00:33:23.600 --> 00:33:25.632 ECMO support can actually

NOTE Confidence: 0.56741834

00:33:25.632 --> 00:33:27.156 be completely withdrawn.

NOTE Confidence: 0.56741834

00:33:27.160 --> 00:33:29.944 And So what you've got is a perfectly

NOTE Confidence: 0.56741834

00:33:29.944 --> 00:33:32.312 functioning body below the neck, OK?

NOTE Confidence: 0.56741834

00:33:32.312 --> 00:33:34.840 The heart's pumping blood,

NOTE Confidence: 0.56741834

00:33:34.840 --> 00:33:36.564 the liver's making bile,

NOTE Confidence: 0.56741834

00:33:36.564 --> 00:33:38.719 the kidneys are making urine,

NOTE Confidence: 0.56741834

00:33:38.720 --> 00:33:40.112 the intestines are pink,

NOTE Confidence: 0.56741834

00:33:40.112 --> 00:33:41.156 and they're functioning.

NOTE Confidence: 0.56741834

00:33:41.160 --> 00:33:41.860 I mean,

NOTE Confidence: 0.56741834

00:33:41.860 --> 00:33:42.560 everything's working

NOTE Confidence: 0.56741834

00:33:42.560 --> 00:33:43.960 perfectly below the neck,

NOTE Confidence: 0.56741834

00:33:43.960 --> 00:33:46.185 which is the ideal situation

NOTE Confidence: 0.56741834

00:33:46.185 --> 00:33:49.054 for taking those organs out and

NOTE Confidence: 0.56741834

00:33:49.054 --> 00:33:51.839 transplanting them into somebody else.

NOTE Confidence: 0.56741834

00:33:51.840 --> 00:33:53.500 So what are the ethical and

NOTE Confidence: 0.56741834

00:33:53.500 --> 00:33:54.880 legal challenges to NRP?

NOTE Confidence: 0.56741834

00:33:54.880 --> 00:33:57.226 There's two first having to do

NOTE Confidence: 0.56741834

00:33:57.226 --> 00:33:59.165 with restoration of circulation and

NOTE Confidence: 0.56741834

00:33:59.165 --> 00:34:01.328 the second having to do with the

NOTE Confidence: 0.56741834

00:34:01.328 --> 00:34:03.398 occlusion of the cerebral arteries.

NOTE Confidence: 0.56741834

00:34:03.400 --> 00:34:05.836 So let's talk about the first one again.

NOTE Confidence: 0.56741834

00:34:05.836 --> 00:34:08.216 A prerequisite of death determination

NOTE Confidence: 0.56741834

00:34:08.216 --> 00:34:12.031 in DCD is that no attempt will be
NOTE Confidence: 0.56741834

00:34:12.031 --> 00:34:14.316 made to restore the circulation.
NOTE Confidence: 0.56741834

00:34:14.320 --> 00:34:15.718 I mean, that is the assumption.
NOTE Confidence: 0.56741834

00:34:15.720 --> 00:34:16.184 If.
NOTE Confidence: 0.56741834

00:34:16.184 --> 00:34:18.040 If that's not true,
NOTE Confidence: 0.56741834

00:34:18.040 --> 00:34:20.008 then you cannot pronounce the person
NOTE Confidence: 0.56741834

00:34:20.008 --> 00:34:22.957 dead after that 5 minute hands off interval.
NOTE Confidence: 0.56741834

00:34:22.960 --> 00:34:25.292 NRP violates this prerequisite,
NOTE Confidence: 0.56741834

00:34:25.292 --> 00:34:27.722 since NRP absolutely requires the
NOTE Confidence: 0.56741834

00:34:27.722 --> 00:34:30.080 restoration of the circulation.
NOTE Confidence: 0.56741834

00:34:30.080 --> 00:34:32.164 That's how NRP works.
NOTE Confidence: 0.56741834

00:34:32.164 --> 00:34:35.290 So I think it's pretty straightforward
NOTE Confidence: 0.56741834

00:34:35.378 --> 00:34:37.548 that in NRP the declaration
NOTE Confidence: 0.56741834

00:34:37.548 --> 00:34:39.718 of death is not valid.
NOTE Confidence: 0.56741834

00:34:39.720 --> 00:34:42.785 You violated that prohibition against
NOTE Confidence: 0.56741834

00:34:42.785 --> 00:34:46.760 an attempt to restart the circulation.

NOTE Confidence: 0.56741834
00:34:46.760 --> 00:34:47.106 Now,
NOTE Confidence: 0.56741834
00:34:47.106 --> 00:34:49.528 the way that this has been rebutted
NOTE Confidence: 0.56741834
00:34:49.528 --> 00:34:52.720 in the literature is to say that the
NOTE Confidence: 0.56741834
00:34:52.720 --> 00:34:54.844 intention and the intention in NRP
NOTE Confidence: 0.56741834
00:34:54.844 --> 00:34:57.076 is not to resuscitate the patient.
NOTE Confidence: 0.56741834
00:34:57.080 --> 00:34:59.040 That's not what they're trying to do.
NOTE Confidence: 0.56741834
00:34:59.040 --> 00:35:02.600 The intention is only to perfuse the organs.
NOTE Confidence: 0.56741834
00:35:02.600 --> 00:35:04.240 But regardless of the intention,
NOTE Confidence: 0.56741834
00:35:04.240 --> 00:35:05.640 the result is the same.
NOTE Confidence: 0.56741834
00:35:05.640 --> 00:35:07.176 Circulation is restored.
NOTE Confidence: 0.56741834
00:35:07.176 --> 00:35:10.248 And this was addressed in some
NOTE Confidence: 0.56741834
00:35:10.248 --> 00:35:12.290 detail a while back by two
NOTE Confidence: 0.56741834
00:35:12.290 --> 00:35:14.520 prominent healthcare lawyers,
NOTE Confidence: 0.56741834
00:35:14.520 --> 00:35:17.680 Alex Glazier and Alex Capron,
NOTE Confidence: 0.56741834
00:35:17.680 --> 00:35:19.339 in an article they wrote in the
NOTE Confidence: 0.56741834

00:35:19.339 --> 00:35:20.840 American Journal of Transplantation.
NOTE Confidence: 0.56741834

00:35:20.840 --> 00:35:23.120 And they addressed this point
NOTE Confidence: 0.56741834

00:35:23.120 --> 00:35:25.400 about the role of intention.
NOTE Confidence: 0.56741834

00:35:25.400 --> 00:35:26.615 Do intentions matter?
NOTE Confidence: 0.56741834

00:35:26.615 --> 00:35:28.640 And they wrote that although
NOTE Confidence: 0.56741834

00:35:28.640 --> 00:35:30.477 intentions may be important
NOTE Confidence: 0.56741834

00:35:30.477 --> 00:35:32.397 when evaluating the ethical
NOTE Confidence: 0.56741834

00:35:32.397 --> 00:35:34.317 acceptability of physicians actions,
NOTE Confidence: 0.56741834

00:35:34.320 --> 00:35:36.576 the legal standard for determining
NOTE Confidence: 0.56741834

00:35:36.576 --> 00:35:38.916 death is bare of intent.
NOTE Confidence: 0.9437477

00:35:38.920 --> 00:35:41.200 A patient is dead when circulation
NOTE Confidence: 0.9437477

00:35:41.200 --> 00:35:43.760 neither can nor will resume,
NOTE Confidence: 0.9437477

00:35:43.760 --> 00:35:46.760 regardless of what the intention was.
NOTE Confidence: 0.9437477

00:35:46.760 --> 00:35:48.590 It's important that circulation neither
NOTE Confidence: 0.9437477

00:35:48.590 --> 00:35:51.468 can nor will resume in order for that
NOTE Confidence: 0.9437477

00:35:51.468 --> 00:35:53.436 determination of death to be valid.

NOTE Confidence: 0.9437477

00:35:53.440 --> 00:35:56.797 They go on to say that even assumptions that,

NOTE Confidence: 0.9437477

00:35:56.800 --> 00:35:59.032 for example, the patient is in a state

NOTE Confidence: 0.9437477

00:35:59.032 --> 00:36:00.957 where meaningful existence is not possible,

NOTE Confidence: 0.9437477

00:36:00.960 --> 00:36:02.730 that trying to induce spontaneous

NOTE Confidence: 0.9437477

00:36:02.730 --> 00:36:04.920 resumption of circulation would be futile,

NOTE Confidence: 0.9437477

00:36:04.920 --> 00:36:06.908 or even that the NRP protocol is

NOTE Confidence: 0.9437477

00:36:06.908 --> 00:36:08.639 consistent with the donor's wishes.

NOTE Confidence: 0.9437477

00:36:08.640 --> 00:36:10.680 These are all irrelevant to whether

NOTE Confidence: 0.9437477

00:36:10.680 --> 00:36:13.080 the patient is deceased under U.S.

NOTE Confidence: 0.9437477

00:36:13.080 --> 00:36:16.615 law, which turns on the person's physical

NOTE Confidence: 0.9437477

00:36:16.615 --> 00:36:20.440 condition and not on anyone's intention.

NOTE Confidence: 0.9437477

00:36:20.440 --> 00:36:22.000 And so in my mind,

NOTE Confidence: 0.9437477

00:36:22.000 --> 00:36:25.012 I think it's pretty clear that

NOTE Confidence: 0.9437477

00:36:25.012 --> 00:36:27.020 the restoration of circulation

NOTE Confidence: 0.9437477

00:36:27.106 --> 00:36:28.896 in NRP means that the original

NOTE Confidence: 0.9437477

00:36:28.896 --> 00:36:30.840 determination of death was not valid.
NOTE Confidence: 0.9437477

00:36:30.840 --> 00:36:33.396 This patient was not dead at
NOTE Confidence: 0.9437477

00:36:33.396 --> 00:36:35.540 the time that cannulation was
NOTE Confidence: 0.9437477

00:36:35.540 --> 00:36:38.120 performed and was placed on ECMO.
NOTE Confidence: 0.9437477

00:36:38.120 --> 00:36:39.680 Problem #2 is occlusion
NOTE Confidence: 0.9437477

00:36:39.680 --> 00:36:41.240 of the cerebral arteries.
NOTE Confidence: 0.9437477

00:36:41.240 --> 00:36:43.118 Say a few things about that.
NOTE Confidence: 0.9437477

00:36:43.120 --> 00:36:44.740 The first little preamble here on
NOTE Confidence: 0.9437477

00:36:44.740 --> 00:36:46.399 what's called the dead donor rule,
NOTE Confidence: 0.9437477

00:36:46.400 --> 00:36:47.795 I'm sure many of you are familiar with it.
NOTE Confidence: 0.9437477

00:36:47.800 --> 00:36:50.638 It's it's not an actual law,
NOTE Confidence: 0.9437477

00:36:50.640 --> 00:36:52.964 but it's this sort of ethical presumption
NOTE Confidence: 0.9437477

00:36:52.964 --> 00:36:55.708 that underlies all of our practices about
NOTE Confidence: 0.9437477

00:36:55.708 --> 00:36:57.396 organ procurement and transplantation.
NOTE Confidence: 0.9437477

00:36:57.400 --> 00:36:59.640 You can put it in a couple of different ways.
NOTE Confidence: 0.9437477

00:36:59.640 --> 00:37:01.596 Either vital organs may not be

NOTE Confidence: 0.9437477

00:37:01.596 --> 00:37:03.480 procured from patients who are dead,

NOTE Confidence: 0.9437477

00:37:03.480 --> 00:37:05.979 or you can say that physicians may

NOTE Confidence: 0.9437477

00:37:05.979 --> 00:37:08.271 not cause death when procuring

NOTE Confidence: 0.9437477

00:37:08.271 --> 00:37:10.559 vital organs for transplantation.

NOTE Confidence: 0.9437477

00:37:10.560 --> 00:37:10.956 Now,

NOTE Confidence: 0.9437477

00:37:10.956 --> 00:37:12.936 standard DCD is compliant with

NOTE Confidence: 0.9437477

00:37:12.936 --> 00:37:14.520 the dead donor rule.

NOTE Confidence: 0.9437477

00:37:14.520 --> 00:37:14.898 Why?

NOTE Confidence: 0.9437477

00:37:14.898 --> 00:37:16.788 Because the organs are removed

NOTE Confidence: 0.9437477

00:37:16.788 --> 00:37:19.302 only after death is declared and

NOTE Confidence: 0.9437477

00:37:19.302 --> 00:37:21.594 the patients are allowed to die.

NOTE Confidence: 0.9437477

00:37:21.600 --> 00:37:23.720 They're not caused to die.

NOTE Confidence: 0.8631241

00:37:26.320 --> 00:37:28.692 The problem with occlusion of the cerebral

NOTE Confidence: 0.8631241

00:37:28.692 --> 00:37:32.167 arteries in DC in NRP is that occlusion

NOTE Confidence: 0.8631241

00:37:32.167 --> 00:37:35.555 is absolutely a necessary step for NRP.

NOTE Confidence: 0.8631241

00:37:35.560 --> 00:37:38.925 Why? They've done experiments in
NOTE Confidence: 0.8631241

00:37:38.925 --> 00:37:42.696 pigs where they did NRP but without
NOTE Confidence: 0.8631241

00:37:42.696 --> 00:37:44.760 clamping the cerebral arteries.
NOTE Confidence: 0.8631241

00:37:44.760 --> 00:37:46.560 And some of those pigs started
NOTE Confidence: 0.8631241

00:37:46.560 --> 00:37:48.759 to move and to breathe again.
NOTE Confidence: 0.8631241

00:37:48.760 --> 00:37:51.140 So clearly if you don't clamp these
NOTE Confidence: 0.8631241

00:37:51.140 --> 00:37:53.872 in a human, you'd have the completely
NOTE Confidence: 0.8631241

00:37:53.872 --> 00:37:55.680 unacceptable situation of, you know,
NOTE Confidence: 0.8631241

00:37:55.680 --> 00:37:57.240 taking out the heart for transplantation
NOTE Confidence: 0.8631241

00:37:57.240 --> 00:37:59.307 at a time that the person may be
NOTE Confidence: 0.8631241

00:37:59.307 --> 00:38:00.880 actually starting to move or breathe.
NOTE Confidence: 0.8631241

00:38:00.880 --> 00:38:03.256 So it's absolutely necessary
NOTE Confidence: 0.8631241

00:38:03.256 --> 00:38:05.038 for performing NRP.
NOTE Confidence: 0.8631241

00:38:05.040 --> 00:38:06.690 It's also sufficient to actually cause
NOTE Confidence: 0.8631241

00:38:06.690 --> 00:38:08.542 the death of the patient, right?
NOTE Confidence: 0.8631241

00:38:08.542 --> 00:38:10.354 We haven't declared the patient dead,

NOTE Confidence: 0.8631241

00:38:10.360 --> 00:38:12.766 but occlusion of the cerebral arteries

NOTE Confidence: 0.8631241

00:38:12.766 --> 00:38:15.280 causes a non survivable brain injury.

NOTE Confidence: 0.8631241

00:38:15.280 --> 00:38:18.480 It causes the patient's death.

NOTE Confidence: 0.8631241

00:38:18.480 --> 00:38:20.505 And so I would say in my mind pretty

NOTE Confidence: 0.8631241

00:38:20.505 --> 00:38:22.720 clear that it violates the dead donor rule

NOTE Confidence: 0.87311363

00:38:24.960 --> 00:38:26.694 that physicians must not 'cause the

NOTE Confidence: 0.87311363

00:38:26.694 --> 00:38:28.240 death that will actually in NRP,

NOTE Confidence: 0.87311363

00:38:28.240 --> 00:38:30.406 physicians must cause the death of

NOTE Confidence: 0.87311363

00:38:30.406 --> 00:38:33.009 the patient in order to procure the

NOTE Confidence: 0.87311363

00:38:33.009 --> 00:38:35.193 organs through this process of NRP.

NOTE Confidence: 0.87311363

00:38:35.200 --> 00:38:37.013 So that's kind of the summary of

NOTE Confidence: 0.87311363

00:38:37.013 --> 00:38:38.816 the ethics of it up to a point.

NOTE Confidence: 0.87311363

00:38:38.816 --> 00:38:40.878 And you'll see what I mean in a moment

NOTE Confidence: 0.87311363

00:38:40.878 --> 00:38:42.558 is that the two challenges is that

NOTE Confidence: 0.87311363

00:38:42.617 --> 00:38:44.405 the original determination of death is

NOTE Confidence: 0.87311363

00:38:44.405 --> 00:38:46.776 not valid and that occlusion of the
NOTE Confidence: 0.87311363

00:38:46.776 --> 00:38:49.128 cerebral arteries causes the death of
NOTE Confidence: 0.87311363

00:38:49.128 --> 00:38:52.158 the patient violating the dead donor rule.
NOTE Confidence: 0.87311363

00:38:52.160 --> 00:38:54.374 So does this mean that NRP
NOTE Confidence: 0.87311363

00:38:54.374 --> 00:38:56.440 is not ethical or legal?
NOTE Confidence: 0.87311363

00:38:56.440 --> 00:38:58.825 I mean, for many people, what I just
NOTE Confidence: 0.87311363

00:38:58.825 --> 00:39:00.475 said answers this question very clearly.
NOTE Confidence: 0.87311363

00:39:00.480 --> 00:39:02.598 No, it's not ethical or legal,
NOTE Confidence: 0.87311363

00:39:02.600 --> 00:39:04.310 but I'd like to explore this
NOTE Confidence: 0.87311363

00:39:04.310 --> 00:39:06.318 just a little bit more and say,
NOTE Confidence: 0.87311363

00:39:06.320 --> 00:39:08.368 well, not necessarily the case.
NOTE Confidence: 0.87311363

00:39:08.368 --> 00:39:11.226 And let me give you what I think is
NOTE Confidence: 0.87311363

00:39:11.226 --> 00:39:13.994 maybe the best argument in favor of NRP.
NOTE Confidence: 0.87311363

00:39:14.000 --> 00:39:15.736 And it has to do with the ethical
NOTE Confidence: 0.87311363

00:39:15.736 --> 00:39:17.159 theory known as consequentialism,
NOTE Confidence: 0.87311363

00:39:17.160 --> 00:39:18.872 which evaluates the rightness

NOTE Confidence: 0.87311363

00:39:18.872 --> 00:39:21.440 or wrongness of acts solely in

NOTE Confidence: 0.87311363

00:39:21.519 --> 00:39:23.519 terms of their consequences.

NOTE Confidence: 0.87311363

00:39:23.520 --> 00:39:25.152 OK, and consequences matter

NOTE Confidence: 0.87311363

00:39:25.152 --> 00:39:27.192 a lot in moral theory.

NOTE Confidence: 0.87311363

00:39:27.200 --> 00:39:29.195 And in fact, most of us are

NOTE Confidence: 0.87311363

00:39:29.195 --> 00:39:30.600 consequentialist most of the time.

NOTE Confidence: 0.87311363

00:39:30.600 --> 00:39:31.775 When we think about what

NOTE Confidence: 0.87311363

00:39:31.775 --> 00:39:33.160 is the right thing to do,

NOTE Confidence: 0.87311363

00:39:33.160 --> 00:39:34.798 the way our brains typically work is,

NOTE Confidence: 0.87311363

00:39:34.800 --> 00:39:37.520 well, what will lead to the best outcomes.

NOTE Confidence: 0.87311363

00:39:37.520 --> 00:39:39.144 And under a consequentialist analysis,

NOTE Confidence: 0.87311363

00:39:39.144 --> 00:39:43.158 I think NRP fares pretty well.

NOTE Confidence: 0.87311363

00:39:43.160 --> 00:39:43.912 Here's the key points.

NOTE Confidence: 0.87311363

00:39:43.912 --> 00:39:45.040 The death of the patient is

NOTE Confidence: 0.87311363

00:39:45.082 --> 00:39:45.760 virtually certain.

NOTE Confidence: 0.87311363

00:39:45.760 --> 00:39:47.800 This is somebody who has said,

NOTE Confidence: 0.87311363

00:39:47.800 --> 00:39:49.036 you know, I'm going to die,

NOTE Confidence: 0.87311363

00:39:49.040 --> 00:39:51.357 you're going to take away the ventilator,

NOTE Confidence: 0.87311363

00:39:51.360 --> 00:39:52.518 and I'm going to be dead.

NOTE Confidence: 0.87311363

00:39:52.520 --> 00:39:54.795 So there's not a doubt about that.

NOTE Confidence: 0.87311363

00:39:54.800 --> 00:39:56.065 The patient has expressed a

NOTE Confidence: 0.87311363

00:39:56.065 --> 00:39:57.840 desire to be an organ donor and,

NOTE Confidence: 0.87311363

00:39:57.840 --> 00:39:58.640 like most organ donors,

NOTE Confidence: 0.87311363

00:39:58.640 --> 00:40:01.104 want to help as many other people

NOTE Confidence: 0.87311363

00:40:01.104 --> 00:40:02.160 as they can.

NOTE Confidence: 0.87311363

00:40:02.160 --> 00:40:03.846 If the occlusion of the cerebral

NOTE Confidence: 0.87311363

00:40:03.846 --> 00:40:05.493 arteries is effective and there's more

NOTE Confidence: 0.87311363

00:40:05.493 --> 00:40:07.357 work that needs to be done on this,

NOTE Confidence: 0.87311363

00:40:07.360 --> 00:40:09.382 but if it is effective after

NOTE Confidence: 0.87311363

00:40:09.382 --> 00:40:11.440 preventing blood flow to the brain,

NOTE Confidence: 0.87311363

00:40:11.440 --> 00:40:13.449 then we can be pretty confident that

NOTE Confidence: 0.87311363

00:40:13.449 --> 00:40:15.432 the patient is insensate and won't

NOTE Confidence: 0.87311363

00:40:15.432 --> 00:40:17.202 experience any pain or suffering

NOTE Confidence: 0.87311363

00:40:17.202 --> 00:40:19.439 during the organ procurement process.

NOTE Confidence: 0.87311363

00:40:19.440 --> 00:40:20.312 And finally,

NOTE Confidence: 0.87311363

00:40:20.312 --> 00:40:23.364 NRP optimizes both the number and the

NOTE Confidence: 0.87311363

00:40:23.364 --> 00:40:26.516 quality of the organs that can be obtained.

NOTE Confidence: 0.87311363

00:40:26.520 --> 00:40:27.150 I mean,

NOTE Confidence: 0.87311363

00:40:27.150 --> 00:40:29.040 it's amazingly successful in that regard.

NOTE Confidence: 0.87311363

00:40:29.040 --> 00:40:30.678 And most donors, if you asked them,

NOTE Confidence: 0.87311363

00:40:30.680 --> 00:40:31.379 they'd probably say,

NOTE Confidence: 0.87311363

00:40:31.379 --> 00:40:31.612 yeah,

NOTE Confidence: 0.87311363

00:40:31.612 --> 00:40:33.505 I want to save as many lives as

NOTE Confidence: 0.87311363

00:40:33.505 --> 00:40:35.066 possible and I would like my organs

NOTE Confidence: 0.87311363

00:40:35.066 --> 00:40:36.958 to be used in the way that gives the,

NOTE Confidence: 0.87311363

00:40:36.960 --> 00:40:40.000 you know, the most benefit.

NOTE Confidence: 0.87311363

00:40:40.000 --> 00:40:40.705 So, you know,
NOTE Confidence: 0.87311363

00:40:40.705 --> 00:40:42.115 from a from a consequentialist perspective,
NOTE Confidence: 0.87311363

00:40:42.120 --> 00:40:45.312 we should say there's got NRP must be OK.
NOTE Confidence: 0.87311363

00:40:45.312 --> 00:40:46.016 I mean,
NOTE Confidence: 0.87311363

00:40:46.016 --> 00:40:48.128 how could something do so much
NOTE Confidence: 0.87311363

00:40:48.128 --> 00:40:49.736 good and have a problem?
NOTE Confidence: 0.87311363

00:40:49.736 --> 00:40:51.192 And the problem, of course,
NOTE Confidence: 0.87311363

00:40:51.192 --> 00:40:51.960 is, you know,
NOTE Confidence: 0.87311363

00:40:51.960 --> 00:40:54.480 most of us have thought that isn't it wrong,
NOTE Confidence: 0.87311363

00:40:54.480 --> 00:40:55.226 always wrong,
NOTE Confidence: 0.87311363

00:40:55.226 --> 00:40:57.837 for a physician to kill a patient?
NOTE Confidence: 0.7252172

00:40:58.960 --> 00:41:00.200 And I would say yes,
NOTE Confidence: 0.7252172

00:41:00.640 --> 00:41:02.912 but I'd I'd like to say a qualified
NOTE Confidence: 0.7252172

00:41:02.912 --> 00:41:04.742 yes because I think the strength of
NOTE Confidence: 0.7252172

00:41:04.742 --> 00:41:06.702 this rule and the number of exceptions
NOTE Confidence: 0.7252172

00:41:06.702 --> 00:41:08.753 to it have been changing over time.

NOTE Confidence: 0.7252172

00:41:08.760 --> 00:41:12.315 And let me quickly give you a few examples.

NOTE Confidence: 0.7252172

00:41:12.320 --> 00:41:15.008 So in the 1970s, withdrawal of a ventilator

NOTE Confidence: 0.7252172

00:41:15.008 --> 00:41:17.835 or any other form of life support

NOTE Confidence: 0.7252172

00:41:17.835 --> 00:41:19.920 was considered killing the patient.

NOTE Confidence: 0.7252172

00:41:19.920 --> 00:41:21.304 Back in the 1970s,

NOTE Confidence: 0.7252172

00:41:21.304 --> 00:41:23.034 physicians never took patients off

NOTE Confidence: 0.7252172

00:41:23.034 --> 00:41:24.400 ventilators because they believed

NOTE Confidence: 0.7252172

00:41:24.400 --> 00:41:26.000 it would kill the patient,

NOTE Confidence: 0.7252172

00:41:26.000 --> 00:41:28.880 and it took the Quinlan case and other

NOTE Confidence: 0.7252172

00:41:28.880 --> 00:41:31.785 cases to reframe that as not killing

NOTE Confidence: 0.7252172

00:41:31.785 --> 00:41:34.280 but allowing the patient to die.

NOTE Confidence: 0.7252172

00:41:34.280 --> 00:41:37.040 In the Up until the 1990s,

NOTE Confidence: 0.7252172

00:41:37.040 --> 00:41:38.504 physicians were very reluctant

NOTE Confidence: 0.7252172

00:41:38.504 --> 00:41:40.334 to provide medications to dying

NOTE Confidence: 0.7252172

00:41:40.334 --> 00:41:42.039 patients to make them comfortable,

NOTE Confidence: 0.7252172

00:41:42.040 --> 00:41:43.960 for fear that this would be
NOTE Confidence: 0.7252172

00:41:43.960 --> 00:41:44.920 seen as euthanasia.
NOTE Confidence: 0.7252172

00:41:44.920 --> 00:41:46.822 And there were some Supreme Court
NOTE Confidence: 0.7252172

00:41:46.822 --> 00:41:48.878 cases through the 1990s that said no,
NOTE Confidence: 0.7252172

00:41:48.880 --> 00:41:51.449 no, it's OK to use these medications
NOTE Confidence: 0.7252172

00:41:51.449 --> 00:41:52.840 in dosages that may
NOTE Confidence: 0.8006233

00:41:52.840 --> 00:41:54.520 actually speed up the death of the patient,
NOTE Confidence: 0.8006233

00:41:55.080 --> 00:41:56.928 so long as your intention is to
NOTE Confidence: 0.8006233

00:41:56.928 --> 00:41:58.440 make the patient comfortable,
NOTE Confidence: 0.8006233

00:41:58.440 --> 00:42:01.360 not to cause their death.
NOTE Confidence: 0.8006233

00:42:01.360 --> 00:42:03.061 In the 1990s, we saw the emergence
NOTE Confidence: 0.8006233

00:42:03.061 --> 00:42:04.319 of physician aid and dying,
NOTE Confidence: 0.8006233

00:42:04.320 --> 00:42:06.960 beginning in Oregon.
NOTE Confidence: 0.8006233

00:42:06.960 --> 00:42:08.773 Physician aid and dying could be looked
NOTE Confidence: 0.8006233

00:42:08.773 --> 00:42:10.800 at very much as physician euthanasia,
NOTE Confidence: 0.8006233

00:42:10.800 --> 00:42:11.734 physician killing,

NOTE Confidence: 0.8006233

00:42:11.734 --> 00:42:14.536 with the caveat that it's important

NOTE Confidence: 0.8006233

00:42:14.536 --> 00:42:16.879 that the patient themselves

NOTE Confidence: 0.8006233

00:42:16.880 --> 00:42:18.217 swallow the lethal medication,

NOTE Confidence: 0.8006233

00:42:18.217 --> 00:42:21.233 not that it be administered by the physician.

NOTE Confidence: 0.8006233

00:42:21.240 --> 00:42:21.848 And today,

NOTE Confidence: 0.8006233

00:42:21.848 --> 00:42:24.255 more than 20% of the US population has

NOTE Confidence: 0.8006233

00:42:24.255 --> 00:42:26.160 access to physician aid and dying.

NOTE Confidence: 0.8006233

00:42:26.160 --> 00:42:27.354 And then finally,

NOTE Confidence: 0.8006233

00:42:27.354 --> 00:42:29.742 even that last little prohibition has

NOTE Confidence: 0.8006233

00:42:29.742 --> 00:42:32.399 gone away with our neighbors in Canada

NOTE Confidence: 0.8006233

00:42:32.400 --> 00:42:34.600 who have fully legalized euthanasia,

NOTE Confidence: 0.8006233

00:42:34.600 --> 00:42:37.400 and not just for the terminally ill.

NOTE Confidence: 0.8006233

00:42:37.400 --> 00:42:39.241 My point here is to say that

NOTE Confidence: 0.8006233

00:42:39.241 --> 00:42:41.159 in the past several decades,

NOTE Confidence: 0.8006233

00:42:41.160 --> 00:42:43.792 all of these things have been seen

NOTE Confidence: 0.8006233

00:42:43.792 --> 00:42:46.033 as completely prohibited because they

NOTE Confidence: 0.8006233

00:42:46.033 --> 00:42:48.117 involve physicians killing patients.

NOTE Confidence: 0.8006233

00:42:48.120 --> 00:42:49.440 And I'm saying that you can

NOTE Confidence: 0.8006233

00:42:49.440 --> 00:42:50.320 see how there's been

NOTE Confidence: 0.94445723

00:42:50.320 --> 00:42:53.120 a shift towards weakening

NOTE Confidence: 0.94445723

00:42:53.120 --> 00:42:54.960 that prohibition and in some

NOTE Confidence: 0.94445723

00:42:54.960 --> 00:42:56.432 cases totally eliminating it.

NOTE Confidence: 0.94445723

00:42:56.440 --> 00:42:58.040 And so the question I would ask is,

NOTE Confidence: 0.94445723

00:42:58.040 --> 00:43:01.001 can NRP also gain acceptance as a

NOTE Confidence: 0.94445723

00:43:01.001 --> 00:43:03.483 legitimate exception to the prohibition

NOTE Confidence: 0.94445723

00:43:03.483 --> 00:43:05.759 against killing by physicians?

NOTE Confidence: 0.94445723

00:43:05.760 --> 00:43:07.132 I think it's hard to get away

NOTE Confidence: 0.94445723

00:43:07.132 --> 00:43:08.639 from the fact that it is killing.

NOTE Confidence: 0.94445723

00:43:08.640 --> 00:43:10.516 But, you know, like many other things,

NOTE Confidence: 0.94445723

00:43:10.520 --> 00:43:12.842 maybe we could reframe it or

NOTE Confidence: 0.94445723

00:43:12.842 --> 00:43:15.200 consider it a legitimate exception.

NOTE Confidence: 0.94445723

00:43:15.200 --> 00:43:17.280 So just to come back here, you know,

NOTE Confidence: 0.94445723

00:43:17.280 --> 00:43:18.980 the fundamental challenge of organ

NOTE Confidence: 0.94445723

00:43:18.980 --> 00:43:20.000 procurement and transplantation,

NOTE Confidence: 0.94445723

00:43:20.000 --> 00:43:21.854 the necessity of obtaining living organs

NOTE Confidence: 0.94445723

00:43:21.854 --> 00:43:24.038 from patients who are deemed to be dead.

NOTE Confidence: 0.94445723

00:43:24.040 --> 00:43:27.742 And we continue to pair away

NOTE Confidence: 0.94445723

00:43:27.742 --> 00:43:30.280 that distinction so that we can

NOTE Confidence: 0.94445723

00:43:30.280 --> 00:43:32.200 get the best possible organs.

NOTE Confidence: 0.94445723

00:43:32.200 --> 00:43:33.950 And, you know,

NOTE Confidence: 0.94445723

00:43:33.950 --> 00:43:36.310 this does remind me of the the quote

NOTE Confidence: 0.94445723

00:43:36.383 --> 00:43:38.482 from Miracle Max and The Princess Bride

NOTE Confidence: 0.94445723

00:43:38.482 --> 00:43:40.687 where he says there's a big difference

NOTE Confidence: 0.94445723

00:43:40.687 --> 00:43:42.517 between mostly dead and all dead.

NOTE Confidence: 0.94445723

00:43:42.520 --> 00:43:45.040 Mostly dead is slightly alive.

NOTE Confidence: 0.94445723

00:43:45.040 --> 00:43:46.872 And you know, I say it not really

NOTE Confidence: 0.94445723

00:43:46.872 --> 00:43:48.559 tongue in cheek because in fact,
NOTE Confidence: 0.94445723

00:43:48.560 --> 00:43:50.535 it is important that organ
NOTE Confidence: 0.94445723

00:43:50.535 --> 00:43:51.720 donors be somewhat,
NOTE Confidence: 0.94445723

00:43:51.720 --> 00:43:52.900 at least slightly alive,
NOTE Confidence: 0.94445723

00:43:52.900 --> 00:43:54.080 because if they're not,
NOTE Confidence: 0.94445723

00:43:54.080 --> 00:43:56.552 those organs are not going to
NOTE Confidence: 0.94445723

00:43:56.552 --> 00:43:58.200 be usable for transplantation.
NOTE Confidence: 0.94445723

00:43:58.200 --> 00:44:00.078 So let me finish up here.
NOTE Confidence: 0.94445723

00:44:00.080 --> 00:44:02.822 NRP donors are not dead by
NOTE Confidence: 0.94445723

00:44:02.822 --> 00:44:04.193 standard DCD criteria.
NOTE Confidence: 0.94445723

00:44:04.200 --> 00:44:06.712 NRP causes the death of the donor by
NOTE Confidence: 0.94445723

00:44:06.712 --> 00:44:08.517 occlusion of the cerebral arteries
NOTE Confidence: 0.94445723

00:44:08.517 --> 00:44:11.114 in violation of the dead donor rule.
NOTE Confidence: 0.94445723

00:44:11.120 --> 00:44:13.622 But NRP is a very compelling
NOTE Confidence: 0.94445723

00:44:13.622 --> 00:44:15.545 way to maximize respect for the
NOTE Confidence: 0.94445723

00:44:15.545 --> 00:44:17.377 altruism of the donors who want

NOTE Confidence: 0.94445723

00:44:17.377 --> 00:44:19.274 to save the most lives as possible

NOTE Confidence: 0.94445723

00:44:19.280 --> 00:44:20.720 and the needs of recipients.

NOTE Confidence: 0.94445723

00:44:20.720 --> 00:44:23.376 We are our waiting lists are far beyond

NOTE Confidence: 0.94445723

00:44:23.376 --> 00:44:26.440 what what we can provide in terms of organs.

NOTE Confidence: 0.94445723

00:44:26.440 --> 00:44:27.496 And NRP is,

NOTE Confidence: 0.94445723

00:44:27.496 --> 00:44:28.200 you know,

NOTE Confidence: 0.94445723

00:44:28.200 --> 00:44:28.902 sort of,

NOTE Confidence: 0.94445723

00:44:28.902 --> 00:44:30.657 from an all things considered

NOTE Confidence: 0.94445723

00:44:30.657 --> 00:44:31.359 consequentialist perspective,

NOTE Confidence: 0.94445723

00:44:31.360 --> 00:44:32.186 pretty attractive.

NOTE Confidence: 0.94445723

00:44:32.186 --> 00:44:35.490 But I think where are my biggest concern

NOTE Confidence: 0.94445723

00:44:35.568 --> 00:44:38.312 is I think that we need to represent

NOTE Confidence: 0.94445723

00:44:38.312 --> 00:44:41.320 NRP honestly and transparently to the public.

NOTE Confidence: 0.94445723

00:44:41.320 --> 00:44:43.840 I need, I think we need to be open

NOTE Confidence: 0.94445723

00:44:43.840 --> 00:44:45.840 about what it actually involves.

NOTE Confidence: 0.94445723

00:44:45.840 --> 00:44:48.608 And I worry a little bit that among
NOTE Confidence: 0.94445723

00:44:48.608 --> 00:44:50.120 some transplant professionals,
NOTE Confidence: 0.94445723

00:44:50.120 --> 00:44:51.374 there's a little bit of gaslighting
NOTE Confidence: 0.94445723

00:44:51.374 --> 00:44:52.679 going on here with the public.
NOTE Confidence: 0.94445723

00:44:52.680 --> 00:44:54.502 It's like, oh, you know, no,
NOTE Confidence: 0.94445723

00:44:54.502 --> 00:44:56.074 no, this is just like DCD.
NOTE Confidence: 0.94445723

00:44:56.080 --> 00:44:57.760 There's nothing different going on here.
NOTE Confidence: 0.94445723

00:44:57.760 --> 00:44:59.412 We don't really need to explain to
NOTE Confidence: 0.94445723

00:44:59.412 --> 00:45:00.639 you what's different about this.
NOTE Confidence: 0.94445723

00:45:00.640 --> 00:45:01.840 I think it is different.
NOTE Confidence: 0.94445723

00:45:01.840 --> 00:45:02.720 I think it is different.
NOTE Confidence: 0.94445723

00:45:02.720 --> 00:45:04.832 And I think individuals should be
NOTE Confidence: 0.94445723

00:45:04.832 --> 00:45:07.080 fully informed about what NRP involves,
NOTE Confidence: 0.813486

00:45:12.450 --> 00:45:14.424 should be free to refuse organ
NOTE Confidence: 0.813486

00:45:14.424 --> 00:45:16.580 donation by NRP even if they
NOTE Confidence: 0.813486

00:45:16.580 --> 00:45:18.128 are authorized organ donors,

NOTE Confidence: 0.813486

00:45:18.130 --> 00:45:19.355 even if they've checked that

NOTE Confidence: 0.813486

00:45:19.355 --> 00:45:21.610 box on their driver's license.

NOTE Confidence: 0.813486

00:45:21.610 --> 00:45:23.320 So I think we're going to hear a little

NOTE Confidence: 0.813486

00:45:23.320 --> 00:45:24.529 different perspective from Brandon,

NOTE Confidence: 0.813486

00:45:24.530 --> 00:45:26.048 maybe, maybe not, I don't know.

NOTE Confidence: 0.813486

00:45:26.450 --> 00:45:27.926 But so that's sort of my,

NOTE Confidence: 0.813486

00:45:27.930 --> 00:45:29.562 my perspective on it.

NOTE Confidence: 0.813486

00:45:29.562 --> 00:45:30.690 And Mark, Brandon,

NOTE Confidence: 0.813486

00:45:32.970 --> 00:45:35.526 thank you, Bob. That was excellent.

NOTE Confidence: 0.813486

00:45:35.530 --> 00:45:38.707 So we hear from a from ACT surgeon greatly

NOTE Confidence: 0.813486

00:45:38.707 --> 00:45:40.958 experienced who knows whereof he speaks.

NOTE Confidence: 0.813486

00:45:40.960 --> 00:45:44.310 We hear from a bioethicist who is very

NOTE Confidence: 0.813486

00:45:44.310 --> 00:45:46.340 expert in the field of bioethics and

NOTE Confidence: 0.813486

00:45:46.407 --> 00:45:49.023 in particular with regard to organ

NOTE Confidence: 0.813486

00:45:49.023 --> 00:45:50.767 transplantation also very experienced

NOTE Confidence: 0.813486

00:45:50.828 --> 00:45:52.760 and I think we haven't we've set the
NOTE Confidence: 0.813486

00:45:52.760 --> 00:45:54.140 table very well. But, but again,
NOTE Confidence: 0.813486

00:45:54.140 --> 00:45:55.960 my good fortune I share with you.
NOTE Confidence: 0.813486

00:45:55.960 --> 00:45:57.680 My good fortune was is knowing Eric and
NOTE Confidence: 0.813486

00:45:57.680 --> 00:45:59.397 Bob and getting them here and then.
NOTE Confidence: 0.813486

00:45:59.400 --> 00:46:00.392 But folks said to me, well,
NOTE Confidence: 0.813486

00:46:00.392 --> 00:46:01.736 if you want to have a conversation
NOTE Confidence: 0.813486

00:46:01.736 --> 00:46:03.005 about this, usually they get
NOTE Confidence: 0.813486

00:46:03.005 --> 00:46:04.480 Bob Trug or Brendan Parent.
NOTE Confidence: 0.813486

00:46:04.480 --> 00:46:05.640 And so I think, well, jeez,
NOTE Confidence: 0.813486

00:46:05.640 --> 00:46:07.812 why can't I get them both And and
NOTE Confidence: 0.813486

00:46:07.812 --> 00:46:09.674 why indeed And so here we are.
NOTE Confidence: 0.813486

00:46:09.680 --> 00:46:11.360 So I I just met Brendan today.
NOTE Confidence: 0.813486

00:46:11.360 --> 00:46:12.408 We've communicated about this.
NOTE Confidence: 0.813486

00:46:12.408 --> 00:46:14.489 He was kind enough to agree to come
NOTE Confidence: 0.813486

00:46:14.489 --> 00:46:15.875 and join us for the conversation.

NOTE Confidence: 0.813486

00:46:15.880 --> 00:46:16.852 I'm so grateful.

NOTE Confidence: 0.813486

00:46:16.852 --> 00:46:19.120 He is the director of transplant Ethics.

NOTE Confidence: 0.813486

00:46:19.120 --> 00:46:21.400 Brendan Parent JDI should point out

NOTE Confidence: 0.813486

00:46:21.400 --> 00:46:23.722 he's an attorney and director of

NOTE Confidence: 0.813486

00:46:23.722 --> 00:46:25.816 transplant ethics and Policy Research

NOTE Confidence: 0.813486

00:46:25.816 --> 00:46:28.196 and assistant professor of bioethics

NOTE Confidence: 0.813486

00:46:28.200 --> 00:46:30.108 in the Division of medical ethics

NOTE Confidence: 0.813486

00:46:30.108 --> 00:46:31.764 with joint appointment and surgery

NOTE Confidence: 0.813486

00:46:31.764 --> 00:46:33.720 at NYU Grossman School of Medicine.

NOTE Confidence: 0.813486

00:46:33.720 --> 00:46:36.090 He's PA on nonprofit and government

NOTE Confidence: 0.813486

00:46:36.090 --> 00:46:38.192 funded grants studying ethics and

NOTE Confidence: 0.813486

00:46:38.192 --> 00:46:40.036 regulation of transplant research.

NOTE Confidence: 0.813486

00:46:40.040 --> 00:46:41.380 Parents serves as an independent

NOTE Confidence: 0.813486

00:46:41.380 --> 00:46:41.916 living donor,

NOTE Confidence: 0.813486

00:46:41.920 --> 00:46:43.785 advocate and Advisory Board member

NOTE Confidence: 0.813486

00:46:43.785 --> 00:46:45.650 for the National Kidney Foundation
NOTE Confidence: 0.813486

00:46:45.706 --> 00:46:47.897 and a member of the National Donation
NOTE Confidence: 0.813486

00:46:47.897 --> 00:46:49.599 Research Council for the Alliance.
NOTE Confidence: 0.813486

00:46:49.600 --> 00:46:51.636 He provides ethics consultation
NOTE Confidence: 0.813486

00:46:51.636 --> 00:46:54.181 for transplant and medical research
NOTE Confidence: 0.813486

00:46:54.181 --> 00:46:56.440 programs across the United States.
NOTE Confidence: 0.813486

00:46:56.440 --> 00:46:58.474 He received his JD from Georgetown
NOTE Confidence: 0.813486

00:46:58.474 --> 00:47:00.311 University Law Center and Undergraduate
NOTE Confidence: 0.813486

00:47:00.311 --> 00:47:02.837 degree in Bioethics from the University
NOTE Confidence: 0.813486

00:47:02.837 --> 00:47:04.376 of California in Santa Cruz.
NOTE Confidence: 0.813486

00:47:04.376 --> 00:47:05.768 We are very grateful and very
NOTE Confidence: 0.813486

00:47:05.768 --> 00:47:07.159 fortunate to have you join us today.
NOTE Confidence: 0.813486

00:47:07.160 --> 00:47:07.840 Come on up, Brennan.
NOTE Confidence: 0.3330512

00:47:13.000 --> 00:47:13.960 There you go. It's all yours.
NOTE Confidence: 0.3330512

00:47:14.320 --> 00:47:15.316 I had to silence my phone.
NOTE Confidence: 0.3330512

00:47:15.320 --> 00:47:17.720 I'm so sorry it's been dinging.

NOTE Confidence: 0.3330512

00:47:17.720 --> 00:47:20.060 I want to start by saying thanks to

NOTE Confidence: 0.3330512

00:47:20.060 --> 00:47:21.800 setting the stage so incredibly well.

NOTE Confidence: 0.3330512

00:47:21.800 --> 00:47:23.396 I feel like my job is done.

NOTE Confidence: 0.3330512

00:47:23.400 --> 00:47:27.104 I mean that's this is to the point

NOTE Confidence: 0.3330512

00:47:27.104 --> 00:47:29.600 when we were first tapped to do this,

NOTE Confidence: 0.3330512

00:47:29.600 --> 00:47:31.832 it was Frank, hey you know why don't

NOTE Confidence: 0.3330512

00:47:31.832 --> 00:47:34.021 we do a pro and con discussion

NOTE Confidence: 0.3330512

00:47:34.021 --> 00:47:35.920 and you know battle it out.

NOTE Confidence: 0.3330512

00:47:35.920 --> 00:47:38.706 And I politely requested that we reframe

NOTE Confidence: 0.3330512

00:47:38.706 --> 00:47:41.186 because the nuance is significant and

NOTE Confidence: 0.3330512

00:47:41.186 --> 00:47:43.314 and we will obviously you can see this,

NOTE Confidence: 0.3330512

00:47:43.320 --> 00:47:45.182 Bob did such a great job of

NOTE Confidence: 0.3330512

00:47:45.182 --> 00:47:46.760 of describing the nuance here.

NOTE Confidence: 0.3330512

00:47:46.760 --> 00:47:49.640 So instead of saying pro let's

NOTE Confidence: 0.3330512

00:47:49.640 --> 00:47:51.560 do NRP go gangbusters.

NOTE Confidence: 0.3330512

00:47:51.560 --> 00:47:54.584 I do want to think about issues

NOTE Confidence: 0.3330512

00:47:54.584 --> 00:47:57.278 of death trust through the lenses

NOTE Confidence: 0.3330512

00:47:57.278 --> 00:48:00.074 of both ethics and the law.

NOTE Confidence: 0.3330512

00:48:00.080 --> 00:48:01.760 And here are my disclosures.

NOTE Confidence: 0.3330512

00:48:01.760 --> 00:48:03.386 And I think maybe the most

NOTE Confidence: 0.3330512

00:48:03.386 --> 00:48:05.200 important one for this is that NYU,

NOTE Confidence: 0.3330512

00:48:05.200 --> 00:48:06.250 my home base,

NOTE Confidence: 0.3330512

00:48:06.250 --> 00:48:09.010 was the first program to perform

NOTE Confidence: 0.3330512

00:48:09.010 --> 00:48:11.635 NRP in the United States.

NOTE Confidence: 0.3330512

00:48:11.640 --> 00:48:13.816 And the surgeons came to me in the

NOTE Confidence: 0.3330512

00:48:13.816 --> 00:48:15.821 Division of Medical Ethics and my

NOTE Confidence: 0.3330512

00:48:15.821 --> 00:48:17.915 senior colleague Art Kaplan and said,

NOTE Confidence: 0.3330512

00:48:17.920 --> 00:48:19.396 hey, we're thinking about doing this,

NOTE Confidence: 0.3330512

00:48:19.400 --> 00:48:20.646 but we want to make sure we

NOTE Confidence: 0.3330512

00:48:20.646 --> 00:48:21.719 do it the right way.

NOTE Confidence: 0.3330512

00:48:21.720 --> 00:48:25.816 So we spent a lot of time thinking

NOTE Confidence: 0.3330512

00:48:25.816 --> 00:48:28.610 about whether and then how to do

NOTE Confidence: 0.3330512

00:48:28.610 --> 00:48:30.704 this in the most ethically sound

NOTE Confidence: 0.3330512

00:48:30.704 --> 00:48:32.880 way with appropriate safeguards,

NOTE Confidence: 0.3330512

00:48:32.880 --> 00:48:35.394 and what kinds of empirical ethics

NOTE Confidence: 0.3330512

00:48:35.394 --> 00:48:38.599 research needs to be done to justify it.

NOTE Confidence: 0.3330512

00:48:38.600 --> 00:48:41.561 And I will now make very explicit that I

NOTE Confidence: 0.3330512

00:48:41.561 --> 00:48:44.879 sit separate from the Transplant Institute,

NOTE Confidence: 0.3330512

00:48:44.880 --> 00:48:45.170 which,

NOTE Confidence: 0.3330512

00:48:45.170 --> 00:48:47.200 after we wrote the sort of ethics

NOTE Confidence: 0.3330512

00:48:47.200 --> 00:48:49.004 and logistical concerns about NRP,

NOTE Confidence: 0.3330512

00:48:49.004 --> 00:48:50.514 went ahead and did it

NOTE Confidence: 0.9052156

00:48:52.680 --> 00:48:54.543 all right. So there's going to be a lot

NOTE Confidence: 0.9052156

00:48:54.543 --> 00:48:56.160 of stuff in here which is duplicative

NOTE Confidence: 0.9052156

00:48:56.160 --> 00:48:57.371 of what's already been covered.

NOTE Confidence: 0.9052156

00:48:57.371 --> 00:48:59.379 I'm going to race through it and get

NOTE Confidence: 0.9052156

00:48:59.379 --> 00:49:01.199 to hopefully the additive stuff.

NOTE Confidence: 0.9052156

00:49:01.200 --> 00:49:02.216 But the obvious thing,

NOTE Confidence: 0.9052156

00:49:02.216 --> 00:49:03.740 which was implied is that we

NOTE Confidence: 0.9052156

00:49:03.793 --> 00:49:05.037 don't have enough organs.

NOTE Confidence: 0.9052156

00:49:05.040 --> 00:49:05.838 And how do we do it?

NOTE Confidence: 0.9052156

00:49:05.840 --> 00:49:07.065 And there was a National

NOTE Confidence: 0.9052156

00:49:07.065 --> 00:49:07.800 Academies of Science,

NOTE Confidence: 0.9052156

00:49:07.800 --> 00:49:09.440 Engineering and Medicine report that

NOTE Confidence: 0.9052156

00:49:09.440 --> 00:49:12.158 came out and said one way to do a

NOTE Confidence: 0.9052156

00:49:12.158 --> 00:49:14.065 better job of getting more organs in

NOTE Confidence: 0.9052156

00:49:14.065 --> 00:49:16.284 this country is to do more recovery

NOTE Confidence: 0.9052156

00:49:16.284 --> 00:49:18.000 after circulatory determination of death.

NOTE Confidence: 0.9052156

00:49:18.000 --> 00:49:19.800 And as Bob pointed out,

NOTE Confidence: 0.9052156

00:49:19.800 --> 00:49:21.225 that's a challenge because when

NOTE Confidence: 0.9052156

00:49:21.225 --> 00:49:22.080 the heart stops,

NOTE Confidence: 0.9052156

00:49:22.080 --> 00:49:24.360 the organs start dying as well.

NOTE Confidence: 0.9052156
00:49:24.360 --> 00:49:25.683 So how do we do a better
NOTE Confidence: 0.9052156
00:49:25.683 --> 00:49:26.880 job of keeping those organs
NOTE Confidence: 0.8092196
00:49:28.960 --> 00:49:30.175 optimized for transplant?
NOTE Confidence: 0.8092196
00:49:30.175 --> 00:49:32.799 We can do it XC2 on machines
NOTE Confidence: 0.8092196
00:49:32.799 --> 00:49:34.797 or in C2 in the body.
NOTE Confidence: 0.8092196
00:49:34.800 --> 00:49:37.680 So the traditional method of rapid
NOTE Confidence: 0.8092196
00:49:37.680 --> 00:49:39.063 recovery is difficult because
NOTE Confidence: 0.8092196
00:49:39.063 --> 00:49:40.869 it leads to more ischemic time
NOTE Confidence: 0.8092196
00:49:40.869 --> 00:49:42.757 and the outcomes aren't as good.
NOTE Confidence: 0.8092196
00:49:42.760 --> 00:49:44.818 Then we have XC to perfusion the
NOTE Confidence: 0.8092196
00:49:44.818 --> 00:49:46.480 transmedics or X vivo systems
NOTE Confidence: 0.3718873
00:49:46.680 --> 00:49:48.520 which do a fantastic
NOTE Confidence: 0.3718873
00:49:48.520 --> 00:49:50.280 job but have their own
NOTE Confidence: 0.3718873
00:49:50.280 --> 00:49:52.040 limitations in terms of cost.
NOTE Confidence: 0.3718873
00:49:52.040 --> 00:49:53.408 We heard the estimates.
NOTE Confidence: 0.3718873

00:49:53.408 --> 00:49:55.810 I I you said that 65,000 for the

NOTE Confidence: 0.3718873

00:49:55.810 --> 00:49:58.386 one time uses for XC2 machines

NOTE Confidence: 0.3718873

00:49:58.386 --> 00:50:01.048 and what was it, 1500 for NC 2.

NOTE Confidence: 0.3718873

00:50:01.048 --> 00:50:03.108 And I've heard estimates for

NOTE Confidence: 0.3718873

00:50:03.108 --> 00:50:05.565 total costs for one instance of

NOTE Confidence: 0.3718873

00:50:05.565 --> 00:50:08.714 ** vivo around 90 or 100,000 for

NOTE Confidence: 0.3718873

00:50:08.714 --> 00:50:11.360 heart and around 5000 for NRP.

NOTE Confidence: 0.3718873

00:50:11.360 --> 00:50:13.298 Obviously cost alone is not a

NOTE Confidence: 0.3718873

00:50:13.298 --> 00:50:14.267 sufficient consideration because

NOTE Confidence: 0.3718873

00:50:14.267 --> 00:50:15.839 if something isn't ethical,

NOTE Confidence: 0.3718873

00:50:15.840 --> 00:50:17.779 it doesn't matter how little it costs

NOTE Confidence: 0.3718873

00:50:17.779 --> 00:50:20.011 or how good the outcomes are, right?

NOTE Confidence: 0.3718873

00:50:20.011 --> 00:50:22.237 So we can't just be consequentialist.

NOTE Confidence: 0.3718873

00:50:22.240 --> 00:50:25.360 We have to think about the rights of

NOTE Confidence: 0.3718873

00:50:25.360 --> 00:50:27.400 individuals and also issues of justice,

NOTE Confidence: 0.3718873

00:50:27.400 --> 00:50:28.244 etcetera. OK.

NOTE Confidence: 0.3718873

00:50:28.244 --> 00:50:30.354 So enter the NRP picture.

NOTE Confidence: 0.3718873

00:50:30.360 --> 00:50:32.040 We've talked about the process.

NOTE Confidence: 0.3718873

00:50:32.040 --> 00:50:34.920 I'm not going to go through it again.

NOTE Confidence: 0.3718873

00:50:34.920 --> 00:50:37.056 It can have these benefits of

NOTE Confidence: 0.3718873

00:50:37.056 --> 00:50:39.360 more time for organ evaluation,

NOTE Confidence: 0.3718873

00:50:39.360 --> 00:50:41.360 especially under physiologic conditions.

NOTE Confidence: 0.3718873

00:50:41.360 --> 00:50:43.360 The outcomes look great,

NOTE Confidence: 0.3718873

00:50:43.360 --> 00:50:44.800 but does undermine,

NOTE Confidence: 0.3718873

00:50:44.800 --> 00:50:48.160 does NRP undermine the definition of death?

NOTE Confidence: 0.3718873

00:50:48.160 --> 00:50:50.176 So we'll come back to this definition

NOTE Confidence: 0.3718873

00:50:50.176 --> 00:50:52.160 which you have already seen today.

NOTE Confidence: 0.3718873

00:50:52.160 --> 00:50:54.160 Irreversible cessation of all circulatory

NOTE Confidence: 0.3718873

00:50:54.160 --> 00:50:56.462 respiratory functions or irreversible

NOTE Confidence: 0.3718873

00:50:56.462 --> 00:50:58.639 cessation of all functions of the brain,

NOTE Confidence: 0.3718873

00:50:58.640 --> 00:51:01.564 including the brain stem.

NOTE Confidence: 0.3718873

00:51:01.564 --> 00:51:05.155 So does NRP undermine this definition,
NOTE Confidence: 0.3718873

00:51:05.155 --> 00:51:05.620 right?
NOTE Confidence: 0.3718873

00:51:05.620 --> 00:51:07.480 You declare them dead,
NOTE Confidence: 0.3718873

00:51:07.480 --> 00:51:10.168 you include brain blood flow and
NOTE Confidence: 0.3718873

00:51:10.168 --> 00:51:11.960 then you restart circulation,
NOTE Confidence: 0.3718873

00:51:11.960 --> 00:51:14.613 which is the one thing the definition
NOTE Confidence: 0.3718873

00:51:14.613 --> 00:51:17.475 says you cannot do in order to be dead.
NOTE Confidence: 0.3718873

00:51:17.480 --> 00:51:17.920 So
NOTE Confidence: 0.89726275

00:51:20.120 --> 00:51:22.496 I want to put this back in terms
NOTE Confidence: 0.89726275

00:51:22.496 --> 00:51:25.000 of the irreversibility standard
NOTE Confidence: 0.89726275

00:51:25.000 --> 00:51:26.808 versus the permanence standard
NOTE Confidence: 0.89726275

00:51:26.808 --> 00:51:29.520 which Bob put on the table.
NOTE Confidence: 0.89726275

00:51:29.520 --> 00:51:33.200 OK, so does it meet the letter of the law,
NOTE Confidence: 0.89726275

00:51:33.200 --> 00:51:35.876 right, that the heart has stopped?
NOTE Confidence: 0.89726275

00:51:35.880 --> 00:51:40.080 Right, and it cannot be restarted?
NOTE Confidence: 0.89726275

00:51:40.080 --> 00:51:41.240 It is physically impossible.

NOTE Confidence: 0.89726275

00:51:41.240 --> 00:51:43.389 And the answer and it's not just

NOTE Confidence: 0.89726275

00:51:43.389 --> 00:51:44.707 the heart circulation, right?

NOTE Confidence: 0.89726275

00:51:44.707 --> 00:51:45.775 Because the circulatory death

NOTE Confidence: 0.89726275

00:51:45.775 --> 00:51:47.440 is not just about the heart,

NOTE Confidence: 0.89726275

00:51:47.440 --> 00:51:49.880 It's about circulation writ large.

NOTE Confidence: 0.89726275

00:51:49.880 --> 00:51:52.120 That's not the case, right?

NOTE Confidence: 0.89726275

00:51:52.120 --> 00:51:55.080 Because when you restart circulation,

NOTE Confidence: 0.89726275

00:51:55.080 --> 00:51:58.678 you have proven that it's not irreversible.

NOTE Confidence: 0.89726275

00:51:58.680 --> 00:52:00.360 But does it meet the permanent standard,

NOTE Confidence: 0.89726275

00:52:00.360 --> 00:52:00.866 right?

NOTE Confidence: 0.89726275

00:52:00.866 --> 00:52:03.902 And permanence is what is employed

NOTE Confidence: 0.89726275

00:52:03.902 --> 00:52:06.672 in practice all across medicine,

NOTE Confidence: 0.89726275

00:52:06.672 --> 00:52:09.008 regardless of organ donation

NOTE Confidence: 0.89726275

00:52:09.008 --> 00:52:11.114 intentions or goals, right?

NOTE Confidence: 0.89726275

00:52:11.114 --> 00:52:13.592 If we had to use the irreversibility

NOTE Confidence: 0.89726275

00:52:13.592 --> 00:52:15.720 standard to declare someone dead,
NOTE Confidence: 0.89726275

00:52:15.720 --> 00:52:19.088 we would never declare anybody dead, right?
NOTE Confidence: 0.89726275

00:52:19.088 --> 00:52:22.032 So in practice, we use a permanent standard,
NOTE Confidence: 0.89726275

00:52:22.040 --> 00:52:24.560 which is that circulation has stopped,
NOTE Confidence: 0.89726275

00:52:24.560 --> 00:52:26.996 it cannot restart on its own,
NOTE Confidence: 0.89726275

00:52:27.000 --> 00:52:30.440 and we will not attempt to restart it.
NOTE Confidence: 0.89726275

00:52:30.440 --> 00:52:31.604 Now here's where I'm going to
NOTE Confidence: 0.89726275

00:52:31.604 --> 00:52:32.760 hopefully be a little additive.
NOTE Confidence: 0.89726275

00:52:32.760 --> 00:52:34.116 We just did the crash course.
NOTE Confidence: 0.89726275

00:52:34.120 --> 00:52:36.136 You would all ace the quiz on what NRP
NOTE Confidence: 0.89726275

00:52:36.136 --> 00:52:38.279 is and the legal definition of death.
NOTE Confidence: 0.89726275

00:52:38.280 --> 00:52:39.152 Congratulations, you're all ethicists.
NOTE Confidence: 0.89726275

00:52:39.152 --> 00:52:40.850 But now I'm going to try to add
NOTE Confidence: 0.89726275

00:52:40.850 --> 00:52:41.715 something a little bit more,
NOTE Confidence: 0.89726275

00:52:41.720 --> 00:52:43.720 which is,
NOTE Confidence: 0.89726275

00:52:43.720 --> 00:52:49.380 is NRP any less permanent in terms

NOTE Confidence: 0.89726275

00:52:49.380 --> 00:52:52.249 of the cessation of function than

NOTE Confidence: 0.89726275

00:52:52.249 --> 00:52:55.294 restarting some circulation of that

NOTE Confidence: 0.89726275

00:52:55.294 --> 00:52:58.480 part of that circulatory system,

NOTE Confidence: 0.89726275

00:52:58.480 --> 00:53:01.702 the heart, in either the recipient

NOTE Confidence: 0.89726275

00:53:01.702 --> 00:53:05.800 of that heart or on a machine?

NOTE Confidence: 0.89726275

00:53:05.800 --> 00:53:08.760 And so let's get back to these questions.

NOTE Confidence: 0.89726275

00:53:08.760 --> 00:53:09.220 OK.

NOTE Confidence: 0.89726275

00:53:09.220 --> 00:53:10.600 Does recirculation undermine

NOTE Confidence: 0.89726275

00:53:10.600 --> 00:53:12.440 the determination of death?

NOTE Confidence: 0.89726275

00:53:12.440 --> 00:53:13.840 You've heard the yes argument.

NOTE Confidence: 0.89726275

00:53:13.840 --> 00:53:15.392 You restarted the circulation.

NOTE Confidence: 0.89726275

00:53:15.392 --> 00:53:19.320 You saw Alex Capron's paper and Bob's very,

NOTE Confidence: 0.89726275

00:53:19.320 --> 00:53:22.282 very eloquent description.

NOTE Confidence: 0.89726275

00:53:22.282 --> 00:53:24.492 And it's clear you restart

NOTE Confidence: 0.89726275

00:53:24.492 --> 00:53:26.640 circulation inside the donor's body.

NOTE Confidence: 0.89726275

00:53:26.640 --> 00:53:28.335 So yes, you,
NOTE Confidence: 0.89726275

00:53:28.335 --> 00:53:30.595 you've undermined the definition.
NOTE Confidence: 0.89726275

00:53:30.600 --> 00:53:32.679 And then when you remove the organs,
NOTE Confidence: 0.89726275

00:53:32.680 --> 00:53:34.894 the dead donor rule is violated
NOTE Confidence: 0.89726275

00:53:34.894 --> 00:53:36.760 because that person wasn't dead.
NOTE Confidence: 0.89726275

00:53:36.760 --> 00:53:37.960 You take the organs out.
NOTE Confidence: 0.89726275

00:53:37.960 --> 00:53:40.832 You have caused death and so now you're
NOTE Confidence: 0.89726275

00:53:40.832 --> 00:53:43.558 liable for having killed that patient.
NOTE Confidence: 0.89726275

00:53:43.560 --> 00:53:44.440 But what about this?
NOTE Confidence: 0.5394423

00:53:46.760 --> 00:53:49.186 The circulation that is
NOTE Confidence: 0.5394423

00:53:49.186 --> 00:53:51.746 restored is not resuscitation,
NOTE Confidence: 0.5394423

00:53:51.746 --> 00:53:54.518 it's perfusion for donation.
NOTE Confidence: 0.5394423

00:53:54.520 --> 00:53:57.616 OK, Am I just doing some, you know,
NOTE Confidence: 0.5394423

00:53:57.616 --> 00:53:59.440 gerrymandering of language?
NOTE Confidence: 0.5394423

00:53:59.440 --> 00:54:01.104 The language says circulation,
NOTE Confidence: 0.5394423

00:54:01.104 --> 00:54:02.662 right, irreversible circulation.

NOTE Confidence: 0.5394423

00:54:02.662 --> 00:54:03.804 You recirculated.

NOTE Confidence: 0.5394423

00:54:03.804 --> 00:54:05.856 So that's enough, right?

NOTE Confidence: 0.5394423

00:54:05.856 --> 00:54:08.376 You've undermined the the, the definition.

NOTE Confidence: 0.5394423

00:54:08.376 --> 00:54:13.080 But if we are using the permanence standard,

NOTE Confidence: 0.5394423

00:54:13.080 --> 00:54:14.760 which we say is that the heart,

NOTE Confidence: 0.5394423

00:54:14.760 --> 00:54:16.288 the circulation has stopped,

NOTE Confidence: 0.5394423

00:54:16.288 --> 00:54:18.198 cannot restart on its own,

NOTE Confidence: 0.5394423

00:54:18.200 --> 00:54:21.040 and we will not attempt to restart it,

NOTE Confidence: 0.5394423

00:54:21.040 --> 00:54:23.632 then you have to ask why you are

NOTE Confidence: 0.5394423

00:54:23.632 --> 00:54:25.320 not attempting to restart it.

NOTE Confidence: 0.5394423

00:54:25.320 --> 00:54:26.484 Because otherwise it's meaningless.

NOTE Confidence: 0.5394423

00:54:26.484 --> 00:54:27.939 It doesn't matter why don't

NOTE Confidence: 0.5394423

00:54:27.939 --> 00:54:29.238 you attempt to restart it.

NOTE Confidence: 0.5394423

00:54:29.240 --> 00:54:31.646 And the answer is because doing

NOTE Confidence: 0.5394423

00:54:31.646 --> 00:54:33.835 so would be medically ineffective

NOTE Confidence: 0.5394423

00:54:33.835 --> 00:54:36.360 to save that patient's life.
NOTE Confidence: 0.5394423

00:54:36.360 --> 00:54:39.760 So the intention is inherent
NOTE Confidence: 0.5394423

00:54:39.760 --> 00:54:43.200 in the permanence standard. OK.
NOTE Confidence: 0.5394423

00:54:43.200 --> 00:54:44.064 Otherwise it's meaningless.
NOTE Confidence: 0.5394423

00:54:44.064 --> 00:54:46.032 And you talk to other lawyers, right?
NOTE Confidence: 0.5394423

00:54:46.032 --> 00:54:46.264 This.
NOTE Confidence: 0.5394423

00:54:46.264 --> 00:54:47.424 And there's an interesting little
NOTE Confidence: 0.5394423

00:54:47.424 --> 00:54:48.645 legal process theory for you, right.
NOTE Confidence: 0.5394423

00:54:48.645 --> 00:54:49.875 How many lawyers in the room?
NOTE Confidence: 0.5394423

00:54:49.880 --> 00:54:52.392 Not many. Yeah. Right.
NOTE Confidence: 0.5394423

00:54:52.392 --> 00:54:53.760 There you go.
NOTE Confidence: 0.5394423

00:54:53.760 --> 00:54:55.920 There are some who you know,
NOTE Confidence: 0.5394423

00:54:55.920 --> 00:54:58.240 certain judicial, you know,
NOTE Confidence: 0.5394423

00:54:58.240 --> 00:54:59.420 context will say, look,
NOTE Confidence: 0.5394423

00:54:59.420 --> 00:55:02.418 all we can do to make a decision in this
NOTE Confidence: 0.5394423

00:55:02.418 --> 00:55:05.398 case is look at the black letter of the law.

NOTE Confidence: 0.5394423

00:55:05.400 --> 00:55:07.234 We're not going to think about anything

NOTE Confidence: 0.5394423

00:55:07.234 --> 00:55:09.037 outside of the letters on the page.

NOTE Confidence: 0.5394423

00:55:09.040 --> 00:55:11.128 And if you use this strict

NOTE Confidence: 0.5394423

00:55:11.128 --> 00:55:13.000 determination of what is legal,

NOTE Confidence: 0.5394423

00:55:13.000 --> 00:55:14.800 of course this doesn't meet the

NOTE Confidence: 0.5394423

00:55:14.800 --> 00:55:15.760 irreversibility standard, right?

NOTE Confidence: 0.5394423

00:55:15.760 --> 00:55:17.200 But wait a minute,

NOTE Confidence: 0.5394423

00:55:17.200 --> 00:55:18.750 we're already using a different

NOTE Confidence: 0.5394423

00:55:18.750 --> 00:55:19.680 standard in practice,

NOTE Confidence: 0.5394423

00:55:19.680 --> 00:55:20.493 which is permanent.

NOTE Confidence: 0.5394423

00:55:20.493 --> 00:55:22.119 So maybe the law is broken.

NOTE Confidence: 0.5394423

00:55:22.120 --> 00:55:23.716 But also there are some cases and

NOTE Confidence: 0.5394423

00:55:23.716 --> 00:55:25.270 some judges who say you can never

NOTE Confidence: 0.5394423

00:55:25.270 --> 00:55:26.919 just look at the letter of the law,

NOTE Confidence: 0.5394423

00:55:26.920 --> 00:55:29.600 because letters of the law have

NOTE Confidence: 0.5394423

00:55:29.600 --> 00:55:31.040 no substance by themselves.
NOTE Confidence: 0.5394423

00:55:31.040 --> 00:55:32.800 So you have to think about the intention.
NOTE Confidence: 0.5394423

00:55:32.800 --> 00:55:34.557 What was the goal of the statute?
NOTE Confidence: 0.5394423

00:55:34.560 --> 00:55:35.905 What is the historical legal
NOTE Confidence: 0.5394423

00:55:35.905 --> 00:55:38.600 context in which the law grew here?
NOTE Confidence: 0.5394423

00:55:38.600 --> 00:55:39.944 And in this case,
NOTE Confidence: 0.5394423

00:55:39.944 --> 00:55:41.960 the definition of death exists to
NOTE Confidence: 0.5394423

00:55:42.032 --> 00:55:44.126 delineate a line between the rights
NOTE Confidence: 0.5394423

00:55:44.126 --> 00:55:46.520 that adhere for a living person,
NOTE Confidence: 0.5394423

00:55:46.520 --> 00:55:47.576 quality of life,
NOTE Confidence: 0.5394423

00:55:47.576 --> 00:55:50.060 the desire to continue living right
NOTE Confidence: 0.5394423

00:55:50.060 --> 00:55:53.000 and the capacity to live a life,
NOTE Confidence: 0.5394423

00:55:53.000 --> 00:55:56.360 and then the rights that no longer subsist.
NOTE Confidence: 0.5394423

00:55:56.360 --> 00:55:58.796 And then what occurs after death?
NOTE Confidence: 0.5394423

00:55:58.800 --> 00:56:00.016 OK, so regardless, OK,
NOTE Confidence: 0.5394423

00:56:00.016 --> 00:56:01.840 so now here's the other piece.

NOTE Confidence: 0.5394423

00:56:01.840 --> 00:56:04.600 Just because we can read intention

NOTE Confidence: 0.5394423

00:56:04.600 --> 00:56:07.274 into the definition and we can say,

NOTE Confidence: 0.5394423

00:56:07.280 --> 00:56:07.496 well,

NOTE Confidence: 0.5394423

00:56:07.496 --> 00:56:09.008 you didn't intend to kill the patient

NOTE Confidence: 0.5394423

00:56:09.008 --> 00:56:10.819 or to bring the patient back to life

NOTE Confidence: 0.5394423

00:56:10.819 --> 00:56:12.678 and then take their organs and kill them.

NOTE Confidence: 0.5394423

00:56:12.680 --> 00:56:13.736 You didn't mean to.

NOTE Confidence: 0.5394423

00:56:13.736 --> 00:56:15.062 Well, that's not enough,

NOTE Confidence: 0.5394423

00:56:15.062 --> 00:56:15.416 right?

NOTE Confidence: 0.5394423

00:56:15.416 --> 00:56:16.478 Because you can.

NOTE Confidence: 0.5394423

00:56:16.480 --> 00:56:17.792 And maybe you do,

NOTE Confidence: 0.5394423

00:56:17.792 --> 00:56:18.120 right.

NOTE Confidence: 0.5394423

00:56:18.120 --> 00:56:21.768 So take another like adjacent scenario

NOTE Confidence: 0.5394423

00:56:21.768 --> 00:56:25.248 where there is a patient who maybe

NOTE Confidence: 0.5394423

00:56:25.248 --> 00:56:27.720 doesn't quite meet the criteria for,

NOTE Confidence: 0.5394423

00:56:27.720 --> 00:56:28.576 you know,
NOTE Confidence: 0.5394423

00:56:28.576 --> 00:56:30.716 medical futility and you can
NOTE Confidence: 0.5394423

00:56:30.716 --> 00:56:33.210 withdraw support and you can have
NOTE Confidence: 0.5394423

00:56:33.210 --> 00:56:35.472 the intention not to bring that
NOTE Confidence: 0.5394423

00:56:35.472 --> 00:56:37.892 patient back to life and then kill
NOTE Confidence: 0.5394423

00:56:37.892 --> 00:56:39.768 them by taking the organs out.
NOTE Confidence: 0.5394423

00:56:39.768 --> 00:56:42.040 But you could very well do that right?
NOTE Confidence: 0.5394423

00:56:42.040 --> 00:56:43.440 Especially if you don't occlude
NOTE Confidence: 0.5394423

00:56:43.440 --> 00:56:45.200 blood flow to the brain.
NOTE Confidence: 0.5394423

00:56:45.200 --> 00:56:46.880 So intention is enough.
NOTE Confidence: 0.5394423

00:56:46.880 --> 00:56:47.720 Isn't enough,
NOTE Confidence: 0.943472

00:56:47.720 --> 00:56:50.200 right? There has to be, in fact,
NOTE Confidence: 0.943472

00:56:50.200 --> 00:56:54.688 whether whether the patient is dead,
NOTE Confidence: 0.943472

00:56:54.688 --> 00:56:58.478 So is the donor in fact resuscitated?
NOTE Confidence: 0.943472

00:56:58.480 --> 00:57:01.600 OK, so here's the difference between
NOTE Confidence: 0.943472

00:57:01.600 --> 00:57:03.160 recirculation and resuscitation.

NOTE Confidence: 0.943472

00:57:03.160 --> 00:57:06.136 And I would argue that under

NOTE Confidence: 0.943472

00:57:06.136 --> 00:57:08.120 the right NRP protocol,

NOTE Confidence: 0.943472

00:57:08.120 --> 00:57:10.874 there isn't resuscitation because of the

NOTE Confidence: 0.943472

00:57:10.874 --> 00:57:13.720 occlusion of blood flow to the brain.

NOTE Confidence: 0.943472

00:57:13.720 --> 00:57:16.100 Now, does preventing blood flow

NOTE Confidence: 0.943472

00:57:16.100 --> 00:57:18.480 to the brain 'cause death?

NOTE Confidence: 0.943472

00:57:18.480 --> 00:57:20.542 The one argument is yes, right?

NOTE Confidence: 0.943472

00:57:20.542 --> 00:57:23.554 The clinicians who are occluding blood

NOTE Confidence: 0.943472

00:57:23.560 --> 00:57:26.208 flow cause death by neurologic criteria.

NOTE Confidence: 0.943472

00:57:26.208 --> 00:57:28.200 And the answer is no, no, no,

NOTE Confidence: 0.943472

00:57:28.200 --> 00:57:30.600 wait a minute, the patient was already dead.

NOTE Confidence: 0.943472

00:57:30.600 --> 00:57:31.975 You declare them dead according

NOTE Confidence: 0.943472

00:57:31.975 --> 00:57:32.800 to circulatory criteria,

NOTE Confidence: 0.943472

00:57:32.800 --> 00:57:35.420 and everything afterward is just

NOTE Confidence: 0.943472

00:57:35.420 --> 00:57:38.040 perfusion and preservation and donation.

NOTE Confidence: 0.943472

00:57:38.040 --> 00:57:38.596 All right,
NOTE Confidence: 0.943472

00:57:38.596 --> 00:57:41.240 we won't have to go through this all again.
NOTE Confidence: 0.943472

00:57:41.240 --> 00:57:43.380 The problem is, look,
NOTE Confidence: 0.943472

00:57:43.380 --> 00:57:47.959 the dead donor rule is based on
NOTE Confidence: 0.943472

00:57:47.960 --> 00:57:50.040 an outdated definition of death.
NOTE Confidence: 0.943472

00:57:50.040 --> 00:57:52.880 It's not an actual law.
NOTE Confidence: 0.943472

00:57:52.880 --> 00:57:55.676 And maybe it's time to reconsider
NOTE Confidence: 0.943472

00:57:55.676 --> 00:57:59.267 the dead donor rule in at least
NOTE Confidence: 0.943472

00:57:59.267 --> 00:58:00.357 some circumstances.
NOTE Confidence: 0.943472

00:58:00.360 --> 00:58:03.840 Just because the heart is beating
NOTE Confidence: 0.943472

00:58:03.840 --> 00:58:07.725 right doesn't necessarily mean that
NOTE Confidence: 0.943472

00:58:07.725 --> 00:58:10.240 this patient has any meaningful
NOTE Confidence: 0.943472

00:58:10.240 --> 00:58:11.520 quality of life anymore.
NOTE Confidence: 0.943472

00:58:11.520 --> 00:58:15.472 So maybe some say, look, NRP is ethically OK,
NOTE Confidence: 0.943472

00:58:15.472 --> 00:58:19.200 it does violate the dead donor rule,
NOTE Confidence: 0.943472

00:58:19.200 --> 00:58:21.000 but maybe we should just abandoned

NOTE Confidence: 0.943472

00:58:21.000 --> 00:58:22.520 the dead donor rule, right,

NOTE Confidence: 0.943472

00:58:22.520 --> 00:58:24.120 and move on from it.

NOTE Confidence: 0.943472

00:58:24.120 --> 00:58:24.520 All right.

NOTE Confidence: 0.943472

00:58:24.520 --> 00:58:25.520 So I want to ask,

NOTE Confidence: 0.943472

00:58:25.520 --> 00:58:28.760 I want to ask here sort of at the end.

NOTE Confidence: 0.943472

00:58:28.760 --> 00:58:30.279 Let's forget the law for a moment.

NOTE Confidence: 0.943472

00:58:30.280 --> 00:58:32.080 It's very easy to go down the rabbit hole.

NOTE Confidence: 0.943472

00:58:32.080 --> 00:58:33.400 As Bob mentioned,

NOTE Confidence: 0.943472

00:58:33.400 --> 00:58:35.033 who's harmed, who has helped?

NOTE Confidence: 0.943472

00:58:35.033 --> 00:58:36.037 What are the consequences?

NOTE Confidence: 0.943472

00:58:36.040 --> 00:58:38.479 Here we have to think about the organ donors,

NOTE Confidence: 0.943472

00:58:38.480 --> 00:58:40.765 family members and consider their

NOTE Confidence: 0.943472

00:58:40.765 --> 00:58:43.465 experience of having just lost a

NOTE Confidence: 0.943472

00:58:43.465 --> 00:58:45.817 loved one and having to make a

NOTE Confidence: 0.943472

00:58:45.817 --> 00:58:47.921 decision about what that individual

NOTE Confidence: 0.943472

00:58:47.921 --> 00:58:50.186 would have wanted and how to
NOTE Confidence: 0.943472

00:58:50.186 --> 00:58:51.998 empower them to make this decision.
NOTE Confidence: 0.943472

00:58:52.000 --> 00:58:54.016 How much information do you give
NOTE Confidence: 0.943472

00:58:54.016 --> 00:58:56.040 them to make this decision?
NOTE Confidence: 0.943472

00:58:56.040 --> 00:58:59.554 And also the ability to realize
NOTE Confidence: 0.943472

00:58:59.554 --> 00:59:01.924 the family members desires to
NOTE Confidence: 0.943472

00:59:01.924 --> 00:59:04.918 see some good come out of this.
NOTE Confidence: 0.943472

00:59:04.920 --> 00:59:07.200 And NRP has good outcomes.
NOTE Confidence: 0.943472

00:59:07.200 --> 00:59:08.448 The recipients obviously can
NOTE Confidence: 0.943472

00:59:08.448 --> 00:59:10.320 do very well with these organs,
NOTE Confidence: 0.943472

00:59:10.320 --> 00:59:11.910 but it doesn't matter how well
NOTE Confidence: 0.943472

00:59:11.910 --> 00:59:13.440 they do if you're doing something
NOTE Confidence: 0.943472

00:59:13.440 --> 00:59:15.040 wrong in the first instance.
NOTE Confidence: 0.943472

00:59:15.040 --> 00:59:15.958 So let's get to the organ
NOTE Confidence: 0.943472

00:59:15.960 --> 00:59:17.840 donor for just a moment.
NOTE Confidence: 0.943472

00:59:17.840 --> 00:59:19.916 Their decision to be a donor.

NOTE Confidence: 0.943472

00:59:19.920 --> 00:59:22.363 For those of you who are

NOTE Confidence: 0.943472

00:59:22.363 --> 00:59:24.199 authorized donors in this room,

NOTE Confidence: 0.943472

00:59:24.200 --> 00:59:29.240 hopefully you feel that if and when you die,

NOTE Confidence: 0.943472

00:59:29.240 --> 00:59:31.976 your organs can save other people's

NOTE Confidence: 0.943472

00:59:31.976 --> 00:59:34.380 lives in optimal ways, right?

NOTE Confidence: 0.943472

00:59:34.380 --> 00:59:37.280 But at the same time,

NOTE Confidence: 0.943472

00:59:37.280 --> 00:59:39.896 you don't want the experience of

NOTE Confidence: 0.943472

00:59:39.896 --> 00:59:43.357 donation to be any way harmful to you.

NOTE Confidence: 0.943472

00:59:43.360 --> 00:59:45.145 So the occlusion of blood flow to

NOTE Confidence: 0.943472

00:59:45.145 --> 00:59:47.080 the brain is a critical question.

NOTE Confidence: 0.943472

00:59:47.080 --> 00:59:48.977 And we haven't talked about some of

NOTE Confidence: 0.943472

00:59:48.977 --> 00:59:50.960 the pushback on the current protocol,

NOTE Confidence: 0.943472

00:59:50.960 --> 00:59:53.851 which is the ligation of the aortic

NOTE Confidence: 0.943472

00:59:53.851 --> 00:59:56.039 arch vessels and the possibility

NOTE Confidence: 0.943472

00:59:56.039 --> 00:59:58.757 that there is some collateral flow

NOTE Confidence: 0.943472

00:59:58.760 --> 01:00:00.536 to the brain through other channels,
NOTE Confidence: 0.943472

01:00:00.536 --> 01:00:03.000 including through the spine.
NOTE Confidence: 0.943472

01:00:03.000 --> 01:00:05.292 And there's now this question about
NOTE Confidence: 0.943472

01:00:05.292 --> 01:00:07.339 whether the occlusion is sufficient
NOTE Confidence: 0.943472

01:00:07.339 --> 01:00:09.960 to prevent enough blood flow
NOTE Confidence: 0.9428858

01:00:09.960 --> 01:00:12.588 that could potentially lead to some
NOTE Confidence: 0.9428858

01:00:12.588 --> 01:00:15.040 sort of meaningful cerebral activity.
NOTE Confidence: 0.9428858

01:00:15.040 --> 01:00:16.822 And if we haven't answered that
NOTE Confidence: 0.9428858

01:00:16.822 --> 01:00:18.251 question, that's a problem.
NOTE Confidence: 0.9428858

01:00:18.251 --> 01:00:21.409 There was a paper that came out pretty
NOTE Confidence: 0.9428858

01:00:21.409 --> 01:00:24.043 recently from NYU that suggests based
NOTE Confidence: 0.9428858

01:00:24.043 --> 01:00:26.672 on 2 donors, there was no meaningful
NOTE Confidence: 0.9428858

01:00:26.672 --> 01:00:28.312 collateral flow to the brain.
NOTE Confidence: 0.9428858

01:00:28.320 --> 01:00:30.032 2 is not a big enough number to
NOTE Confidence: 0.9428858

01:00:30.032 --> 01:00:31.676 extrapolate and then just assume that
NOTE Confidence: 0.9428858

01:00:31.676 --> 01:00:33.055 this protocol works properly, right?

NOTE Confidence: 0.9428858

01:00:33.055 --> 01:00:34.345 So we need to find ways

NOTE Confidence: 0.9428858

01:00:34.345 --> 01:00:36.519 to replicate this study.

NOTE Confidence: 0.9428858

01:00:36.520 --> 01:00:37.895 There have been updates to

NOTE Confidence: 0.9428858

01:00:37.895 --> 01:00:39.451 the protocol which says, OK,

NOTE Confidence: 0.9428858

01:00:39.451 --> 01:00:42.157 let's not just ligate the vessels,

NOTE Confidence: 0.9428858

01:00:42.160 --> 01:00:44.536 let's sever the vessels so that if you

NOTE Confidence: 0.9428858

01:00:44.536 --> 01:00:46.679 open them to atmospheric pressure,

NOTE Confidence: 0.9428858

01:00:46.680 --> 01:00:48.884 the blood will drain out and there

NOTE Confidence: 0.9428858

01:00:48.884 --> 01:00:50.998 will be no chance of collateral flow.

NOTE Confidence: 0.9428858

01:00:51.000 --> 01:00:52.626 But then say, Oh well, wait a minute,

NOTE Confidence: 0.9428858

01:00:52.626 --> 01:00:54.460 there might be some blood clots because

NOTE Confidence: 0.9428858

01:00:54.516 --> 01:00:56.560 of the amount of time without circulation.

NOTE Confidence: 0.9428858

01:00:56.560 --> 01:00:59.888 So even that might not be sufficient to

NOTE Confidence: 0.9428858

01:00:59.888 --> 01:01:02.680 prevent collateral flow to the brain.

NOTE Confidence: 0.9428858

01:01:02.680 --> 01:01:04.276 So now I'm going to ask you,

NOTE Confidence: 0.9428858

01:01:04.280 --> 01:01:05.810 follow me down the philosophical ether
NOTE Confidence: 0.9428858

01:01:05.810 --> 01:01:08.336 rabbit hole for a moment and say, OK, well,
NOTE Confidence: 0.9428858

01:01:08.336 --> 01:01:11.440 if we're not sure that severing is enough,
NOTE Confidence: 0.9428858

01:01:11.440 --> 01:01:14.291 why not just decapitate the donor, right.
NOTE Confidence: 0.9428858

01:01:14.291 --> 01:01:15.440 And I said, Oh my God, watch.
NOTE Confidence: 0.9428858

01:01:15.440 --> 01:01:16.572 What are you talking about?
NOTE Confidence: 0.9428858

01:01:16.572 --> 01:01:17.476 That's crazy.
NOTE Confidence: 0.9428858

01:01:17.476 --> 01:01:20.640 But I'll say from an ethics perspective,
NOTE Confidence: 0.9428858

01:01:20.640 --> 01:01:23.560 we have to define what is morally different,
NOTE Confidence: 0.9428858

01:01:23.560 --> 01:01:24.253 right?
NOTE Confidence: 0.9428858

01:01:24.253 --> 01:01:27.718 Distinct from severing versus decapitating.
NOTE Confidence: 0.9428858

01:01:27.720 --> 01:01:28.306 Right. If.
NOTE Confidence: 0.9428858

01:01:28.306 --> 01:01:29.478 Well, it's going to,
NOTE Confidence: 0.9428858

01:01:29.480 --> 01:01:31.656 if that's going to maximize the goal and
NOTE Confidence: 0.9428858

01:01:31.656 --> 01:01:33.876 ensure that this donor experiences no harm,
NOTE Confidence: 0.9428858

01:01:33.880 --> 01:01:34.266 right.

NOTE Confidence: 0.9428858

01:01:34.266 --> 01:01:36.582 And and provide the best outcomes

NOTE Confidence: 0.9428858

01:01:36.582 --> 01:01:38.096 through NRP, well, then why not?

NOTE Confidence: 0.9428858

01:01:38.096 --> 01:01:40.198 We have to be able to answer that question,

NOTE Confidence: 0.9428858

01:01:40.200 --> 01:01:41.680 I think.

NOTE Confidence: 0.9428858

01:01:41.680 --> 01:01:41.986 All right.

NOTE Confidence: 0.9428858

01:01:41.986 --> 01:01:42.292 Last thing,

NOTE Confidence: 0.9428858

01:01:42.292 --> 01:01:44.340 back to the issue of what

NOTE Confidence: 0.9428858

01:01:44.340 --> 01:01:45.960 is informed authorization.

NOTE Confidence: 0.9428858

01:01:45.960 --> 01:01:49.200 What would you want to know?

NOTE Confidence: 0.9428858

01:01:49.200 --> 01:01:50.532 You already now you're all sorry

NOTE Confidence: 0.9428858

01:01:50.532 --> 01:01:52.105 you're all you took the red pill or

NOTE Confidence: 0.9428858

01:01:52.105 --> 01:01:54.240 whatever it is and now you're now

NOTE Confidence: 0.9428858

01:01:54.240 --> 01:01:56.439 you're you're in this this crazy world.

NOTE Confidence: 0.9428858

01:01:56.440 --> 01:01:58.320 What information would you want?

NOTE Confidence: 0.9428858

01:01:58.320 --> 01:02:00.994 What do we have to tell people?

NOTE Confidence: 0.9428858

01:02:01.000 --> 01:02:02.952 And what do you want to make sure
NOTE Confidence: 0.9428858

01:02:02.952 --> 01:02:04.520 happens during the actual protocol,
NOTE Confidence: 0.9428858

01:02:04.520 --> 01:02:04.845 right?
NOTE Confidence: 0.9428858

01:02:04.845 --> 01:02:07.445 We're about to start up a a a
NOTE Confidence: 0.9428858

01:02:07.445 --> 01:02:09.917 project to study donor perspectives,
NOTE Confidence: 0.9428858

01:02:09.920 --> 01:02:13.358 donor family member perspectives on NRP.
NOTE Confidence: 0.9428858

01:02:13.360 --> 01:02:16.040 Because even if all of this works great,
NOTE Confidence: 0.9428858

01:02:16.040 --> 01:02:18.154 and even if us ethicists in the
NOTE Confidence: 0.9428858

01:02:18.154 --> 01:02:19.795 ivory tower decide that this
NOTE Confidence: 0.9428858

01:02:19.795 --> 01:02:21.475 is ethical under some rubric,
NOTE Confidence: 0.9428858

01:02:21.480 --> 01:02:23.916 it doesn't matter if this abuses
NOTE Confidence: 0.9428858

01:02:23.916 --> 01:02:26.819 the trust of an already wary
NOTE Confidence: 0.9428858

01:02:26.819 --> 01:02:28.598 public about medicine,
NOTE Confidence: 0.9428858

01:02:28.600 --> 01:02:30.880 about organ transplant and so both,
NOTE Confidence: 0.9428858

01:02:30.880 --> 01:02:32.990 both from a deontological perspective
NOTE Confidence: 0.9428858

01:02:32.990 --> 01:02:34.678 and a consequences perspective,

NOTE Confidence: 0.9428858

01:02:34.680 --> 01:02:36.480 this could have massive blowback.

NOTE Confidence: 0.9428858

01:02:36.480 --> 01:02:37.440 So the issue is trust.

NOTE Confidence: 0.9428858

01:02:37.440 --> 01:02:39.240 And I want to end with just one point,

NOTE Confidence: 0.9428858

01:02:39.240 --> 01:02:41.228 which is we have to go back

NOTE Confidence: 0.9428858

01:02:41.228 --> 01:02:43.120 to this issue of permanence.

NOTE Confidence: 0.9428858

01:02:43.120 --> 01:02:47.146 And I think the most important ethics

NOTE Confidence: 0.9428858

01:02:47.146 --> 01:02:51.076 challenge is ensuring that upstream

NOTE Confidence: 0.9428858

01:02:51.080 --> 01:02:54.200 two donors who are otherwise similarly

NOTE Confidence: 0.9428858

01:02:54.200 --> 01:02:58.000 situated are not treated differently.

NOTE Confidence: 0.9428858

01:02:58.000 --> 01:02:58.342 I'm sorry,

NOTE Confidence: 0.9428858

01:02:58.342 --> 01:02:59.197 not donors at this point.

NOTE Confidence: 0.9428858

01:02:59.200 --> 01:03:01.040 But patients are not treated

NOTE Confidence: 0.9428858

01:03:01.040 --> 01:03:02.880 differently such that one is

NOTE Confidence: 0.9428858

01:03:02.948 --> 01:03:05.078 routed for continued medical care

NOTE Confidence: 0.9428858

01:03:05.078 --> 01:03:07.208 because there's a possibility we

NOTE Confidence: 0.8777135

01:03:07.277 --> 01:03:09.485 might be able to restore some
NOTE Confidence: 0.8777135

01:03:09.485 --> 01:03:10.957 meaningful quality of life.
NOTE Confidence: 0.8777135

01:03:10.960 --> 01:03:13.326 And then the other is routed for
NOTE Confidence: 0.8777135

01:03:13.326 --> 01:03:15.839 any kind of withdrawal of life
NOTE Confidence: 0.8777135

01:03:15.839 --> 01:03:18.194 support and an organ donation.
NOTE Confidence: 0.8777135

01:03:18.200 --> 01:03:20.350 Simply by virtue of the first
NOTE Confidence: 0.8777135

01:03:20.350 --> 01:03:22.520 patient being of a particular socio
NOTE Confidence: 0.8777135

01:03:22.520 --> 01:03:23.920 economic demographic being white,
NOTE Confidence: 0.8777135

01:03:23.920 --> 01:03:26.320 having family members to advocate for them,
NOTE Confidence: 0.8777135

01:03:26.320 --> 01:03:28.576 and another patient being poor and
NOTE Confidence: 0.8777135

01:03:28.576 --> 01:03:31.384 black and not having people to represent
NOTE Confidence: 0.8777135

01:03:31.384 --> 01:03:33.942 their wishes and wanting to, you know,
NOTE Confidence: 0.8777135

01:03:33.942 --> 01:03:35.719 empty out a hospital bed, right.
NOTE Confidence: 0.8777135

01:03:35.719 --> 01:03:38.833 And if we can create better
NOTE Confidence: 0.8777135

01:03:38.833 --> 01:03:41.360 objectivity around these decisions,
NOTE Confidence: 0.8777135

01:03:41.360 --> 01:03:43.558 then hopefully we can do a better

NOTE Confidence: 0.8777135
01:03:43.558 --> 01:03:45.737 job of trusting that the rest of
NOTE Confidence: 0.8777135
01:03:45.737 --> 01:03:47.880 this process is going to lead to
NOTE Confidence: 0.38107035
01:03:53.220 --> 01:03:55.285 decision that respects the donor
NOTE Confidence: 0.38107035
01:03:55.285 --> 01:03:56.540 wishes, respects the community
NOTE Confidence: 0.38107035
01:03:56.540 --> 01:03:59.300 and leads to good outcomes.
NOTE Confidence: 0.38107035
01:03:59.300 --> 01:04:00.140 All right, I'll stop there.
NOTE Confidence: 0.38107035
01:04:02.300 --> 01:04:03.239 Thank you, Brendan.
NOTE Confidence: 0.38107035
01:04:03.239 --> 01:04:04.792 That was fantastic. Let's find a
NOTE Confidence: 0.38107035
01:04:04.792 --> 01:04:06.220 pretty picture to put this on here.
NOTE Confidence: 0.38107035
01:04:06.220 --> 01:04:07.620 Back to Bob's pretty picture.
NOTE Confidence: 0.38107035
01:04:07.620 --> 01:04:08.976 Yeah. Bob has some artwork there
NOTE Confidence: 0.38107035
01:04:08.976 --> 01:04:11.820 for speak on Sound up there.
NOTE Confidence: 0.38107035
01:04:11.820 --> 01:04:13.458 There you go. That looks nice.
NOTE Confidence: 0.38107035
01:04:13.460 --> 01:04:14.072 We'll leave that up.
NOTE Confidence: 0.38107035
01:04:14.072 --> 01:04:15.860 Thank you. Thank you.
NOTE Confidence: 0.38107035

01:04:15.860 --> 01:04:18.198 I'm going to invite Eric and Bob

NOTE Confidence: 0.38107035

01:04:18.198 --> 01:04:20.420 and Brendan to have a seat here

NOTE Confidence: 0.38107035

01:04:20.420 --> 01:04:22.355 and we'll turn those mics on and

NOTE Confidence: 0.38107035

01:04:22.355 --> 01:04:23.275 we're going to open up to you guys.

NOTE Confidence: 0.38107035

01:04:23.280 --> 01:04:26.226 Now ordinarily I'll I I often

NOTE Confidence: 0.38107035

01:04:26.226 --> 01:04:27.316 take as moderator,

NOTE Confidence: 0.38107035

01:04:27.316 --> 01:04:28.806 I take my prerogative to

NOTE Confidence: 0.38107035

01:04:28.806 --> 01:04:30.280 ask the first question.

NOTE Confidence: 0.38107035

01:04:30.280 --> 01:04:31.654 I'm going to actually ask the

NOTE Confidence: 0.38107035

01:04:31.654 --> 01:04:32.813 second question because I want

NOTE Confidence: 0.38107035

01:04:32.813 --> 01:04:34.199 to open up to the first question.

NOTE Confidence: 0.38107035

01:04:34.200 --> 01:04:35.575 Was there a kindly offer

NOTE Confidence: 0.38107035

01:04:35.575 --> 01:04:36.675 to explain the technology.

NOTE Confidence: 0.38107035

01:04:36.680 --> 01:04:39.440 So before we get in to a conversation

NOTE Confidence: 0.38107035

01:04:39.440 --> 01:04:40.615 about the ethical and legal

NOTE Confidence: 0.38107035

01:04:40.615 --> 01:04:42.085 issues that have been so nicely

NOTE Confidence: 0.38107035

01:04:42.085 --> 01:04:43.555 laid out by all three speakers.

NOTE Confidence: 0.38107035

01:04:43.560 --> 01:04:44.120 In fact,

NOTE Confidence: 0.38107035

01:04:44.120 --> 01:04:45.800 I just want to be sure,

NOTE Confidence: 0.38107035

01:04:45.800 --> 01:04:48.441 is there someone in the audience And please,

NOTE Confidence: 0.38107035

01:04:48.441 --> 01:04:50.049 please feel free cause a lot of this

NOTE Confidence: 0.38107035

01:04:50.049 --> 01:04:51.410 stuff is technical and everybody's

NOTE Confidence: 0.38107035

01:04:51.410 --> 01:04:52.800 got varying degrees of expertise.

NOTE Confidence: 0.38107035

01:04:52.800 --> 01:04:55.320 If anybody in the audience has a

NOTE Confidence: 0.38107035

01:04:55.320 --> 01:04:57.060 question specifically about how the

NOTE Confidence: 0.38107035

01:04:57.060 --> 01:04:58.965 technique is done that they want to ask

NOTE Confidence: 0.38107035

01:04:58.965 --> 01:05:00.448 which Eric had offered to answer before,

NOTE Confidence: 0.38107035

01:05:00.448 --> 01:05:01.353 which we can do now.

NOTE Confidence: 0.38107035

01:05:01.353 --> 01:05:02.984 So anyone have a question they want

NOTE Confidence: 0.38107035

01:05:02.984 --> 01:05:04.119 to specifically ask about that?

NOTE Confidence: 0.38107035

01:05:04.120 --> 01:05:04.454 Yes Sir.

NOTE Confidence: 0.38107035

01:05:04.454 --> 01:05:04.788 So wait,
NOTE Confidence: 0.38107035

01:05:04.788 --> 01:05:06.080 wait for the mic if you would.
NOTE Confidence: 0.38107035

01:05:06.080 --> 01:05:07.837 So the folks on Zoom can also
NOTE Confidence: 0.38107035

01:05:07.837 --> 01:05:09.359 hear what you have to say.
NOTE Confidence: 0.52961653

01:05:13.640 --> 01:05:14.920 Yeah, I was just wondering.
NOTE Confidence: 0.52961653

01:05:15.360 --> 01:05:17.720 So you mentioned before with the with
NOTE Confidence: 0.52961653

01:05:17.720 --> 01:05:20.705 the ex vivo method that it's it's
NOTE Confidence: 0.52961653

01:05:20.705 --> 01:05:23.000 transferred like with the the cardboard
NOTE Confidence: 0.52961653

01:05:23.000 --> 01:05:24.477 box like you showed the pictures of
NOTE Confidence: 0.52961653

01:05:24.480 --> 01:05:26.860 how is it transferred in the case of
NOTE Confidence: 0.52961653

01:05:26.860 --> 01:05:29.000 NRP or is it like a patient in the
NOTE Confidence: 0.69472426

01:05:29.000 --> 01:05:30.975 same hospital which is a
NOTE Confidence: 0.69472426

01:05:30.975 --> 01:05:32.160 very specific scenario.
NOTE Confidence: 0.69472426

01:05:32.320 --> 01:05:34.162 So I'm just wondering how is
NOTE Confidence: 0.69472426

01:05:34.162 --> 01:05:35.640 it transferred in vivo in,
NOTE Confidence: 0.69472426

01:05:35.640 --> 01:05:37.719 in the case of in the case of NRP?

NOTE Confidence: 0.69472426

01:05:40.280 --> 01:05:42.115 Not sure I understand except that they're

NOTE Confidence: 0.69472426

01:05:42.115 --> 01:05:44.246 both done in the operating room like the if,

NOTE Confidence: 0.69472426

01:05:44.246 --> 01:05:47.238 if the if the donor was right here

NOTE Confidence: 0.69472426

01:05:47.240 --> 01:05:50.040 you're you're resuscitating the organs

NOTE Confidence: 0.41375446

01:05:50.160 --> 01:05:52.080 inside that donor. And if

NOTE Confidence: 0.41375446

01:05:52.360 --> 01:05:54.799 if, if you were going to use that transmedics

NOTE Confidence: 0.41375446

01:05:54.800 --> 01:05:56.360 machine, the machine's sitting right there.

NOTE Confidence: 0.41375446

01:05:56.360 --> 01:05:59.052 So I I think the I got it, I got it so.

NOTE Confidence: 0.41375446

01:05:59.052 --> 01:06:01.840 So when you get it has to go, it stays,

NOTE Confidence: 0.41375446

01:06:02.280 --> 01:06:03.800 it stays on that machine

NOTE Confidence: 0.41375446

01:06:04.280 --> 01:06:05.798 till it gets to its destination.

NOTE Confidence: 0.41375446

01:06:05.800 --> 01:06:08.320 But in NRP, yeah. So NRP

NOTE Confidence: 0.41375446

01:06:08.320 --> 01:06:09.636 it goes in that it goes in

NOTE Confidence: 0.41375446

01:06:09.640 --> 01:06:11.400 a cardboard box that's insulated

NOTE Confidence: 0.6020811

01:06:11.800 --> 01:06:13.879 potentially and the outcomes are still good,

NOTE Confidence: 0.6020811

01:06:13.880 --> 01:06:15.350 right, because you have improved
NOTE Confidence: 0.6020811

01:06:15.350 --> 01:06:17.087 after the ischemic time even though
NOTE Confidence: 0.6020811

01:06:17.087 --> 01:06:18.995 it has to go back in a cardboard box,
NOTE Confidence: 0.6020811

01:06:19.000 --> 01:06:21.616 but often the donor and recipient
NOTE Confidence: 0.6020811

01:06:21.616 --> 01:06:23.510 could be Co located, right.
NOTE Confidence: 0.6020811

01:06:23.510 --> 01:06:24.560 So your your point you said what
NOTE Confidence: 0.6020811

01:06:24.560 --> 01:06:25.437 if they're in the same place,
NOTE Confidence: 0.6020811

01:06:25.440 --> 01:06:27.312 so that can be done like the the
NOTE Confidence: 0.6020811

01:06:27.312 --> 01:06:29.232 original one and then you are still
NOTE Confidence: 0.6020811

01:06:29.232 --> 01:06:31.040 losing that that ischemic time, right.
NOTE Confidence: 0.6020811

01:06:31.040 --> 01:06:32.640 And the other possibility,
NOTE Confidence: 0.6020811

01:06:32.640 --> 01:06:34.400 something we didn't talk about
NOTE Confidence: 0.6020811

01:06:34.400 --> 01:06:37.228 is that often NRP will be used in
NOTE Confidence: 0.6020811

01:06:37.228 --> 01:06:38.821 conjunction with X vivo, right.
NOTE Confidence: 0.6020811

01:06:38.821 --> 01:06:40.909 So you do it inside the body and
NOTE Confidence: 0.6020811

01:06:40.909 --> 01:06:42.838 then you can put it on a machine

NOTE Confidence: 0.6020811

01:06:42.840 --> 01:06:45.720 for a little bit at least. Yeah.

NOTE Confidence: 0.6020811

01:06:45.720 --> 01:06:46.386 Thank you.

NOTE Confidence: 0.6020811

01:06:46.386 --> 01:06:46.719 Thank

NOTE Confidence: 0.92064226

01:06:46.720 --> 01:06:50.596 you very much. So let me,

NOTE Confidence: 0.92064226

01:06:50.600 --> 01:06:52.520 let me ask the first question.

NOTE Confidence: 0.92064226

01:06:52.520 --> 01:06:55.480 And and this would be to to

NOTE Confidence: 0.92064226

01:06:55.480 --> 01:06:57.400 anyone who wants to address it.

NOTE Confidence: 0.92064226

01:06:57.400 --> 01:06:59.713 I actually got a text in the middle of

NOTE Confidence: 0.92064226

01:06:59.713 --> 01:07:01.790 all this from a colleague halfway across

NOTE Confidence: 0.92064226

01:07:01.790 --> 01:07:03.200 the country who was watching this.

NOTE Confidence: 0.92064226

01:07:03.200 --> 01:07:04.600 This is the fun of doing a list of fun.

NOTE Confidence: 0.92064226

01:07:04.600 --> 01:07:06.118 Zoom was watching this and says,

NOTE Confidence: 0.92064226

01:07:06.120 --> 01:07:06.840 why don't you ask this?

NOTE Confidence: 0.92064226

01:07:06.840 --> 01:07:07.519 And I said I was going to,

NOTE Confidence: 0.92064226

01:07:07.520 --> 01:07:08.520 I'm going to ask all three of them.

NOTE Confidence: 0.92064226

01:07:08.520 --> 01:07:09.756 And of course the question is,
NOTE Confidence: 0.92064226

01:07:09.760 --> 01:07:10.404 and I think Bob,
NOTE Confidence: 0.92064226

01:07:10.404 --> 01:07:12.039 you and I have talked about this in the past,
NOTE Confidence: 0.92064226

01:07:12.040 --> 01:07:12.872 is that so?
NOTE Confidence: 0.92064226

01:07:12.872 --> 01:07:14.960 It seems to me that we're doing
NOTE Confidence: 0.92064226

01:07:14.960 --> 01:07:18.095 all sometimes we're doing a lot of
NOTE Confidence: 0.92064226

01:07:18.095 --> 01:07:19.547 calisthenics to convince ourselves
NOTE Confidence: 0.92064226

01:07:19.547 --> 01:07:21.362 that somebody's dead in order
NOTE Confidence: 0.92064226

01:07:21.362 --> 01:07:23.290 to make it OK to take the organs
NOTE Confidence: 0.92064226

01:07:23.357 --> 01:07:25.478 because we have the dead donor rule.
NOTE Confidence: 0.92064226

01:07:25.480 --> 01:07:26.920 And so another solution to this,
NOTE Confidence: 0.92064226

01:07:26.920 --> 01:07:28.845 rather than the the linguistic
NOTE Confidence: 0.92064226

01:07:28.845 --> 01:07:31.120 calisthenics to decide if somebody's dead,
NOTE Confidence: 0.92064226

01:07:31.120 --> 01:07:32.548 is what about just getting rid
NOTE Confidence: 0.92064226

01:07:32.548 --> 01:07:33.800 of the dead donor duel?
NOTE Confidence: 0.92064226

01:07:33.800 --> 01:07:35.292 The dead donor rule.

NOTE Confidence: 0.92064226

01:07:35.292 --> 01:07:36.038 Excuse me.

NOTE Confidence: 0.92064226

01:07:36.040 --> 01:07:37.320 What do you guys think about that again?

NOTE Confidence: 0.25249273

01:07:39.680 --> 01:07:42.400 Well, I well, Brennan, I think

NOTE Confidence: 0.25249273

01:07:42.400 --> 01:07:44.880 you you suggested this and

NOTE Confidence: 0.25249273

01:07:44.880 --> 01:07:49.451 I could be persuaded that that's not

NOTE Confidence: 0.25249273

01:07:49.451 --> 01:07:53.040 an unreasonable way of resolving this.

NOTE Confidence: 0.25249273

01:07:53.800 --> 01:07:54.560 And I mean, what

NOTE Confidence: 0.877189

01:07:55.120 --> 01:07:57.514 one of the big advantages of doing

NOTE Confidence: 0.877189

01:07:57.514 --> 01:08:00.368 that is that we would cut through all

NOTE Confidence: 0.877189

01:08:00.368 --> 01:08:02.672 of what many people would view as the

NOTE Confidence: 0.877189

01:08:02.672 --> 01:08:05.840 charade we go through to to be able to,

NOTE Confidence: 0.877189

01:08:05.840 --> 01:08:08.656 if not convince ourselves,

NOTE Confidence: 0.877189

01:08:08.656 --> 01:08:10.680 convince lawyers and other people

NOTE Confidence: 0.877189

01:08:10.680 --> 01:08:12.840 that that the person is dead.

NOTE Confidence: 0.877189

01:08:12.840 --> 01:08:14.112 Why not right at the beginning

NOTE Confidence: 0.877189

01:08:14.112 --> 01:08:14.960 of this whole thing,
NOTE Confidence: 0.877189

01:08:14.960 --> 01:08:17.630 just give the patient an anesthetic
NOTE Confidence: 0.877189

01:08:17.630 --> 01:08:20.770 dose of fentanyl and we wouldn't have to
NOTE Confidence: 0.877189

01:08:20.770 --> 01:08:23.496 worry about whatever happened after that.
NOTE Confidence: 0.877189

01:08:23.496 --> 01:08:26.280 I mean, the patient,
NOTE Confidence: 0.877189

01:08:26.280 --> 01:08:27.995 you wouldn't have to clamp the arteries.
NOTE Confidence: 0.877189

01:08:28.000 --> 01:08:29.755 And you know, the argument that look at this,
NOTE Confidence: 0.877189

01:08:29.760 --> 01:08:31.020 this was somebody who we know
NOTE Confidence: 0.877189

01:08:31.020 --> 01:08:32.240 is going to die anyway,
NOTE Confidence: 0.877189

01:08:32.240 --> 01:08:34.000 they want to donate their organs.
NOTE Confidence: 0.877189

01:08:34.000 --> 01:08:36.216 That seems to me the least we could do is
NOTE Confidence: 0.877189

01:08:36.216 --> 01:08:38.232 just absolutely guarantee that they're
NOTE Confidence: 0.877189

01:08:38.232 --> 01:08:41.048 not going to to suffer or feel any pain.
NOTE Confidence: 0.877189

01:08:41.048 --> 01:08:43.604 But all of this is kind of predicated
NOTE Confidence: 0.877189

01:08:43.604 --> 01:08:46.481 upon either getting rid of the dead
NOTE Confidence: 0.877189

01:08:46.481 --> 01:08:48.967 donor rule or or or viewing NRP

NOTE Confidence: 0.877189

01:08:48.967 --> 01:08:51.080 as kind of an exception that makes

NOTE Confidence: 0.877189

01:08:51.080 --> 01:08:53.198 sense where the dead donor rule can

NOTE Confidence: 0.877189

01:08:53.200 --> 01:08:54.639 be honored in the breach, if at all.

NOTE Confidence: 0.9418989

01:08:56.000 --> 01:08:58.184 So this is a very important question that

NOTE Confidence: 0.9418989

01:08:58.184 --> 01:09:00.519 I think we need to be asking right now.

NOTE Confidence: 0.9418989

01:09:00.520 --> 01:09:02.354 And I think one of the most

NOTE Confidence: 0.9418989

01:09:02.360 --> 01:09:03.857 significant potential consequences

NOTE Confidence: 0.9418989

01:09:03.857 --> 01:09:07.350 of doing away with the dead donor

NOTE Confidence: 0.9418989

01:09:07.426 --> 01:09:11.935 rule is the impact on trust, right.

NOTE Confidence: 0.9418989

01:09:11.935 --> 01:09:17.065 And this push, particularly in this

NOTE Confidence: 0.9418989

01:09:17.065 --> 01:09:20.158 country to try to get more organs,

NOTE Confidence: 0.9418989

01:09:20.160 --> 01:09:26.288 which is a good cause and the potential

NOTE Confidence: 0.9418989

01:09:26.288 --> 01:09:29.920 economic motivations to pursue

NOTE Confidence: 0.9418989

01:09:29.920 --> 01:09:32.448 organ transplant in some regards.

NOTE Confidence: 0.9418989

01:09:32.448 --> 01:09:36.055 And the lack of trust that already

NOTE Confidence: 0.9418989

01:09:36.055 --> 01:09:38.360 exists among many communities both in
NOTE Confidence: 0.9418989

01:09:38.360 --> 01:09:40.881 medicine and transplant and how a lot of
NOTE Confidence: 0.9418989

01:09:40.881 --> 01:09:42.701 people choose not to register as donors
NOTE Confidence: 0.9418989

01:09:42.762 --> 01:09:44.876 because they're afraid that if they do,
NOTE Confidence: 0.9418989

01:09:44.880 --> 01:09:47.679 you won't try as hard to save their life,
NOTE Confidence: 0.9418989

01:09:47.680 --> 01:09:48.000 right.
NOTE Confidence: 0.9418989

01:09:48.000 --> 01:09:49.920 And that's a really important consideration.
NOTE Confidence: 0.9418989

01:09:49.920 --> 01:09:51.040 So that now if we,
NOTE Confidence: 0.9418989

01:09:51.040 --> 01:09:53.920 if we try to create a culture where we say,
NOTE Confidence: 0.9418989

01:09:53.920 --> 01:09:55.944 oh, you don't even have to be dead
NOTE Confidence: 0.9418989

01:09:55.944 --> 01:09:58.008 to take your organs, but don't worry,
NOTE Confidence: 0.9418989

01:09:58.008 --> 01:09:59.544 we're going to make sure that
NOTE Confidence: 0.9418989

01:09:59.544 --> 01:10:00.919 you're close enough to death,
NOTE Confidence: 0.9418989

01:10:00.920 --> 01:10:01.318 right.
NOTE Confidence: 0.9418989

01:10:01.318 --> 01:10:04.104 That might sort of breach a line
NOTE Confidence: 0.9418989

01:10:04.104 --> 01:10:06.555 that actually allows some of the

NOTE Confidence: 0.9418989
01:10:06.555 --> 01:10:08.520 other motivations to sort of
NOTE Confidence: 0.90322334
01:10:10.640 --> 01:10:12.340 overwhelm the prioritization of
NOTE Confidence: 0.90322334
01:10:12.340 --> 01:10:14.465 clinical care and well-being of
NOTE Confidence: 0.90322334
01:10:14.465 --> 01:10:16.676 those patients at the end of life,
NOTE Confidence: 0.90322334
01:10:16.680 --> 01:10:18.941 which is you know that I think
NOTE Confidence: 0.90322334
01:10:18.941 --> 01:10:20.879 the beginning of of Bob's talk
NOTE Confidence: 0.90322334
01:10:20.880 --> 01:10:22.120 is it necessarily the case?
NOTE Confidence: 0.90322334
01:10:22.120 --> 01:10:22.802 Not necessarily.
NOTE Confidence: 0.90322334
01:10:22.802 --> 01:10:25.530 I think there would have to be a
NOTE Confidence: 0.90322334
01:10:25.602 --> 01:10:28.038 lot of work done to educate people,
NOTE Confidence: 0.90322334
01:10:28.040 --> 01:10:29.825 to make sure that individuals
NOTE Confidence: 0.90322334
01:10:29.825 --> 01:10:32.000 are empowered to have the right
NOTE Confidence: 0.90322334
01:10:32.000 --> 01:10:33.680 course at the end of life,
NOTE Confidence: 0.90322334
01:10:33.680 --> 01:10:35.455 which I also think includes
NOTE Confidence: 0.90322334
01:10:35.455 --> 01:10:36.875 realizing their transplant wishes.
NOTE Confidence: 0.90322334

01:10:36.880 --> 01:10:40.072 There are some countries now that are
NOTE Confidence: 0.90322334

01:10:40.072 --> 01:10:42.736 either exploring or adopting organ
NOTE Confidence: 0.90322334

01:10:42.736 --> 01:10:45.040 donation after euthanasia, right?
NOTE Confidence: 0.90322334

01:10:45.040 --> 01:10:45.420 Because here,
NOTE Confidence: 0.90322334

01:10:45.420 --> 01:10:46.750 if I want dignity at the end
NOTE Confidence: 0.90322334

01:10:46.750 --> 01:10:47.959 of life and I want to die,
NOTE Confidence: 0.90322334

01:10:47.960 --> 01:10:49.240 but I also want it to be done
NOTE Confidence: 0.90322334

01:10:49.240 --> 01:10:50.712 in such a way that it could
NOTE Confidence: 0.90322334

01:10:50.712 --> 01:10:51.596 save other people's lives,
NOTE Confidence: 0.90322334

01:10:51.600 --> 01:10:52.560 well then let's do that.
NOTE Confidence: 0.90322334

01:10:52.560 --> 01:10:55.199 Could you imagine that in this country?
NOTE Confidence: 0.90322334

01:10:55.200 --> 01:10:56.112 Not, not yet.
NOTE Confidence: 0.90322334

01:10:56.112 --> 01:10:58.240 And I also want to point out,
NOTE Confidence: 0.90322334

01:10:58.240 --> 01:11:00.720 I think somebody else's work in this room.
NOTE Confidence: 0.9082717

01:11:03.080 --> 01:11:05.803 So there have been some studies to
NOTE Confidence: 0.9082717

01:11:05.803 --> 01:11:08.674 suggest that if you are honest with

NOTE Confidence: 0.9082717

01:11:08.674 --> 01:11:12.535 people about what happens that they

NOTE Confidence: 0.9082717

01:11:12.535 --> 01:11:14.847 don't necessarily feel like they

NOTE Confidence: 0.9082717

01:11:14.847 --> 01:11:17.462 have to be dead in order for their

NOTE Confidence: 0.9082717

01:11:17.462 --> 01:11:20.480 organs to save other people's lives.

NOTE Confidence: 0.9082717

01:11:20.480 --> 01:11:24.864 As long as you know that death

NOTE Confidence: 0.9082717

01:11:24.864 --> 01:11:27.708 is imminent and that this could

NOTE Confidence: 0.9082717

01:11:27.708 --> 01:11:30.390 lead to good outcomes and that

NOTE Confidence: 0.9082717

01:11:30.487 --> 01:11:32.486 people are being again honest,

NOTE Confidence: 0.9082717

01:11:32.486 --> 01:11:34.184 transparent and giving them the best

NOTE Confidence: 0.9082717

01:11:34.184 --> 01:11:35.639 clinical care at the end of life.

NOTE Confidence: 0.9082717

01:11:35.640 --> 01:11:38.240 And I I, I kind of rolled through that a bit.

NOTE Confidence: 0.9082717

01:11:38.240 --> 01:11:39.339 If you want to say a little

NOTE Confidence: 0.9082717

01:11:39.339 --> 01:11:40.839 bit more about it, you can OK,

NOTE Confidence: 0.5016402

01:11:40.840 --> 01:11:43.320 so we'll get to this in one second.

NOTE Confidence: 0.5016402

01:11:43.320 --> 01:11:46.632 I just, I just want to comment that the

NOTE Confidence: 0.5016402

01:11:46.632 --> 01:11:49.596 issue of trust also plays into when we say,

NOTE Confidence: 0.5016402

01:11:49.600 --> 01:11:50.782 well, you know we're well maybe

NOTE Confidence: 0.5016402

01:11:50.782 --> 01:11:51.920 you're not quite dead but you

NOTE Confidence: 0.5016402

01:11:51.920 --> 01:11:53.168 know but by the way we're going to

NOTE Confidence: 0.5016402

01:11:53.207 --> 01:11:54.359 clamp the vessels to your head.

NOTE Confidence: 0.5016402

01:11:54.360 --> 01:11:56.360 So so I mean the the trust issue

NOTE Confidence: 0.5016402

01:11:56.360 --> 01:11:58.320 could play it the other way as well

NOTE Confidence: 0.5016402

01:11:58.320 --> 01:12:00.300 which is essentially you know as I

NOTE Confidence: 0.5016402

01:12:00.300 --> 01:12:02.181 described this to one person it it

NOTE Confidence: 0.5016402

01:12:02.181 --> 01:12:04.045 is the idea of severing a head is

NOTE Confidence: 0.5016402

01:12:04.045 --> 01:12:06.079 is just so so horrific to people.

NOTE Confidence: 0.5016402

01:12:06.080 --> 01:12:07.340 But physiologically we're thinking

NOTE Confidence: 0.5016402

01:12:07.340 --> 01:12:09.747 well if you're going to you know cut

NOTE Confidence: 0.5016402

01:12:09.747 --> 01:12:11.579 off all the blood supply to the head

NOTE Confidence: 0.5016402

01:12:11.632 --> 01:12:13.048 you know there's issues with trust

NOTE Confidence: 0.5016402

01:12:13.048 --> 01:12:14.680 there as well is what I would say.

NOTE Confidence: 0.5016402

01:12:14.680 --> 01:12:15.954 So. So it could go either way.

NOTE Confidence: 0.5016402

01:12:15.960 --> 01:12:18.223 What I'm going to ask and and I

NOTE Confidence: 0.5016402

01:12:18.223 --> 01:12:19.448 don't I mean Brenda cut you up you

NOTE Confidence: 0.5016402

01:12:19.448 --> 01:12:20.240 wanted to say something.

NOTE Confidence: 0.5016402

01:12:20.240 --> 01:12:22.355 But what I'm going to ask is we have

NOTE Confidence: 0.5016402

01:12:22.360 --> 01:12:24.033 a number of individuals here who are

NOTE Confidence: 0.5016402

01:12:24.033 --> 01:12:26.159 leaders in the transplant community locally,

NOTE Confidence: 0.5016402

01:12:26.160 --> 01:12:26.976 nationally and otherwise.

NOTE Confidence: 0.5016402

01:12:26.976 --> 01:12:29.174 So we don't ordinarily do this but just

NOTE Confidence: 0.5016402

01:12:29.174 --> 01:12:30.917 so folks know who they're hearing from.

NOTE Confidence: 0.5016402

01:12:30.920 --> 01:12:33.128 If you'd like please when you

NOTE Confidence: 0.5016402

01:12:33.128 --> 01:12:34.232 get the microphone,

NOTE Confidence: 0.5016402

01:12:34.240 --> 01:12:35.880 I'll call on you as best I can.

NOTE Confidence: 0.5016402

01:12:35.880 --> 01:12:38.248 Just please tell us your name and and

NOTE Confidence: 0.5016402

01:12:38.248 --> 01:12:40.031 what organization you represent or

NOTE Confidence: 0.5016402

01:12:40.031 --> 01:12:41.916 what university you represent etcetera.
NOTE Confidence: 0.5016402

01:12:41.920 --> 01:12:43.719 And by the way, to my friends,
NOTE Confidence: 0.5016402

01:12:43.720 --> 01:12:45.796 the students who are here that
NOTE Confidence: 0.5016402

01:12:45.800 --> 01:12:46.649 whether you're the,
NOTE Confidence: 0.5016402

01:12:46.649 --> 01:12:48.347 the chief of transplant medicine or
NOTE Confidence: 0.5016402

01:12:48.347 --> 01:12:50.235 a first year medical student or a
NOTE Confidence: 0.5016402

01:12:50.235 --> 01:12:52.517 nursing student or a member of the community,
NOTE Confidence: 0.5016402

01:12:52.520 --> 01:12:53.960 we want to hear from everybody
NOTE Confidence: 0.5016402

01:12:53.960 --> 01:12:54.680 in this conversation.
NOTE Confidence: 0.5016402

01:12:54.680 --> 01:12:55.776 Everybody's opinions and thoughts
NOTE Confidence: 0.5016402

01:12:55.776 --> 01:12:56.598 and questions count.
NOTE Confidence: 0.5016402

01:12:56.600 --> 01:12:58.280 So I'm asking people to identify,
NOTE Confidence: 0.5016402

01:12:58.280 --> 01:12:59.837 so you kind of know who you're hearing from.
NOTE Confidence: 0.5016402

01:12:59.840 --> 01:13:00.431 So with that,
NOTE Confidence: 0.5016402

01:13:00.431 --> 01:13:01.416 I think Doctor Formica has
NOTE Confidence: 0.5016402

01:13:01.416 --> 01:13:02.759 the mic and we'll start there.

NOTE Confidence: 0.5016402

01:13:02.760 --> 01:13:03.240 So Rich

NOTE Confidence: 0.58682066

01:13:03.240 --> 01:13:05.067 from Mike, I'm one of the transplant

NOTE Confidence: 0.58682066

01:13:05.067 --> 01:13:06.702 physicians here at Yale and the

NOTE Confidence: 0.58682066

01:13:06.702 --> 01:13:08.037 incoming president for the OPTN.

NOTE Confidence: 0.58682066

01:13:08.040 --> 01:13:10.038 So I will the great conversation,

NOTE Confidence: 0.58682066

01:13:10.040 --> 01:13:11.144 I thought the way it was

NOTE Confidence: 0.58682066

01:13:11.144 --> 01:13:11.880 presented was really great.

NOTE Confidence: 0.58682066

01:13:11.880 --> 01:13:14.292 But I want to ask the reciprocal of what

NOTE Confidence: 0.58682066

01:13:14.292 --> 01:13:17.572 you just asked about doing gymnastics with

NOTE Confidence: 0.58682066

01:13:17.572 --> 01:13:20.472 language to say that somebody's dead.

NOTE Confidence: 0.58682066

01:13:20.472 --> 01:13:22.368 Well, it sounds like you're doing

NOTE Confidence: 0.58682066

01:13:22.368 --> 01:13:24.288 gymnastics to me to say that somebody's

NOTE Confidence: 0.58682066

01:13:24.288 --> 01:13:26.152 live because those of us who have

NOTE Confidence: 0.58682066

01:13:26.152 --> 01:13:27.597 attended the deaths of patients,

NOTE Confidence: 0.58682066

01:13:27.600 --> 01:13:29.718 like the individuals who we are

NOTE Confidence: 0.58682066

01:13:29.720 --> 01:13:32.960 Speaking of have had a tragic accident.
NOTE Confidence: 0.58682066

01:13:32.960 --> 01:13:34.945 They are neurologically so damaged
NOTE Confidence: 0.58682066

01:13:34.945 --> 01:13:37.520 that when we withdraw life support,
NOTE Confidence: 0.58682066

01:13:37.520 --> 01:13:39.704 they expire within a relatively short
NOTE Confidence: 0.58682066

01:13:39.704 --> 01:13:42.445 period of time and then their heart is
NOTE Confidence: 0.58682066

01:13:42.445 --> 01:13:44.680 stopped for an additional 5 minutes.
NOTE Confidence: 0.58682066

01:13:44.680 --> 01:13:47.172 So keep the conversation going,
NOTE Confidence: 0.58682066

01:13:47.172 --> 01:13:48.687 but do the mental gymnastics
NOTE Confidence: 0.58682066

01:13:48.687 --> 01:13:50.120 from the other perspective,
NOTE Confidence: 0.58682066

01:13:50.120 --> 01:13:52.780 like you're really trying to make this
NOTE Confidence: 0.58682066

01:13:52.780 --> 01:13:55.120 person still alive to come up with language,
NOTE Confidence: 0.58682066

01:13:55.120 --> 01:13:55.869 which I think we have to be
NOTE Confidence: 0.58682066

01:13:55.869 --> 01:13:56.520 a little bit careful of,
NOTE Confidence: 0.58682066

01:13:56.520 --> 01:13:58.452 like using the word killing in this
NOTE Confidence: 0.58682066

01:13:58.452 --> 01:13:59.960 context because trust is important.
NOTE Confidence: 0.58682066

01:13:59.960 --> 01:14:02.276 But give me that, You know,

NOTE Confidence: 0.58682066

01:14:02.280 --> 01:14:03.720 give me the opposite argument.

NOTE Confidence: 0.58682066

01:14:03.720 --> 01:14:05.850 Why are they alive versus why

NOTE Confidence: 0.58682066

01:14:05.850 --> 01:14:06.915 aren't they dead?

NOTE Confidence: 0.58682066

01:14:06.920 --> 01:14:07.212 That too.

NOTE Confidence: 0.58682066

01:14:07.212 --> 01:14:07.358 Nice

NOTE Confidence: 0.40299097

01:14:12.480 --> 01:14:16.680 go. Why aren't Of course they're alive.

NOTE Confidence: 0.8539521

01:14:16.680 --> 01:14:18.100 I mean, you know,

NOTE Confidence: 0.8539521

01:14:18.100 --> 01:14:19.875 you've got somebody who's dying,

NOTE Confidence: 0.8539521

01:14:19.880 --> 01:14:21.772 but of course they're alive

NOTE Confidence: 0.8539521

01:14:21.772 --> 01:14:23.536 now you know, you, you,

NOTE Confidence: 0.8539521

01:14:23.536 --> 01:14:25.792 you might be able to cause them to die,

NOTE Confidence: 0.8539521

01:14:25.792 --> 01:14:28.206 allow them to die in a way that it then

NOTE Confidence: 0.8539521

01:14:28.206 --> 01:14:29.880 becomes acceptable to take the organs.

NOTE Confidence: 0.8539521

01:14:29.880 --> 01:14:31.640 But I mean, if you want to just

NOTE Confidence: 0.8539521

01:14:31.640 --> 01:14:32.959 say they're as good as dead,

NOTE Confidence: 0.8539521

01:14:32.960 --> 01:14:34.624 then let's just give them a big dose

NOTE Confidence: 0.8539521

01:14:34.624 --> 01:14:35.958 of fentanyl and take the organs.

NOTE Confidence: 0.8539521

01:14:35.960 --> 01:14:37.664 And I'm not saying that that

NOTE Confidence: 0.8539521

01:14:37.664 --> 01:14:38.800 would necessarily be wrong,

NOTE Confidence: 0.8539521

01:14:38.800 --> 01:14:40.781 but I I I think that the

NOTE Confidence: 0.8539521

01:14:40.781 --> 01:14:42.010 presumption that they're not

NOTE Confidence: 0.8539521

01:14:42.010 --> 01:14:43.600 alive doesn't make any sense.

NOTE Confidence: 0.8539521

01:14:43.600 --> 01:14:43.800 Well,

NOTE Confidence: 0.7634172

01:14:43.840 --> 01:14:46.078 let's imagine that when we're there,

NOTE Confidence: 0.7634172

01:14:46.080 --> 01:14:50.720 we don't do the NRRP procedure.

NOTE Confidence: 0.7634172

01:14:50.720 --> 01:14:52.760 Their 5 minutes has elapsed,

NOTE Confidence: 0.7634172

01:14:52.760 --> 01:14:54.760 Their medical team has declared

NOTE Confidence: 0.7634172

01:14:54.760 --> 01:14:56.760 them dead by circulatory death,

NOTE Confidence: 0.7634172

01:14:56.760 --> 01:14:59.960 and we just walk out of the room.

NOTE Confidence: 0.7634172

01:14:59.960 --> 01:15:02.160 Well, now they're dead, right?

NOTE Confidence: 0.7634172

01:15:04.200 --> 01:15:05.080 Yeah. So

NOTE Confidence: 0.57259375

01:15:08.240 --> 01:15:09.880 and this is, this is kind of my point, right.

NOTE Confidence: 0.57259375

01:15:09.880 --> 01:15:12.839 And and I feel that the law is

NOTE Confidence: 0.57259375

01:15:12.840 --> 01:15:14.932 a blunt instrument that has to

NOTE Confidence: 0.57259375

01:15:14.932 --> 01:15:16.876 delineate a moment when people are

NOTE Confidence: 0.57259375

01:15:16.876 --> 01:15:18.919 dead versus when they're alive.

NOTE Confidence: 0.57259375

01:15:18.920 --> 01:15:20.320 But I think everybody in this room,

NOTE Confidence: 0.57259375

01:15:20.320 --> 01:15:21.755 this is probably one of the few

NOTE Confidence: 0.57259375

01:15:21.755 --> 01:15:22.931 rooms where probably everybody knows

NOTE Confidence: 0.57259375

01:15:22.931 --> 01:15:24.720 it's messier than that, right.

NOTE Confidence: 0.57259375

01:15:24.720 --> 01:15:28.408 And absolute clarity on dead versus

NOTE Confidence: 0.57259375

01:15:28.408 --> 01:15:30.352 living is kind of impossible to

NOTE Confidence: 0.57259375

01:15:30.352 --> 01:15:32.497 come by especially and this is

NOTE Confidence: 0.57259375

01:15:32.497 --> 01:15:34.633 like the perfect example of that.

NOTE Confidence: 0.57259375

01:15:34.640 --> 01:15:38.960 And I feel that there are already the the,

NOTE Confidence: 0.57259375

01:15:38.960 --> 01:15:41.992 the verbal gymnastics to to be able to

NOTE Confidence: 0.57259375

01:15:41.992 --> 01:15:44.968 declare people dead in light of the
NOTE Confidence: 0.57259375

01:15:44.968 --> 01:15:47.113 broken or insufficient legal definition
NOTE Confidence: 0.57259375

01:15:47.187 --> 01:15:50.120 of death going to the permanent standard.
NOTE Confidence: 0.57259375

01:15:50.120 --> 01:15:51.704 So for I think that is the work
NOTE Confidence: 0.57259375

01:15:51.704 --> 01:15:53.116 that's sort of being done to say,
NOTE Confidence: 0.57259375

01:15:53.120 --> 01:15:55.520 OK, they're they're still alive.
NOTE Confidence: 0.57259375

01:15:55.520 --> 01:15:57.440 And so that's why I try to get out of,
NOTE Confidence: 0.57259375

01:15:57.440 --> 01:15:58.800 out of the, the rabbit hole and say,
NOTE Confidence: 0.57259375

01:15:58.800 --> 01:16:01.218 OK, what are the actual consequences
NOTE Confidence: 0.57259375

01:16:01.218 --> 01:16:04.882 here and how do we meet the requirements
NOTE Confidence: 0.57259375

01:16:04.882 --> 01:16:07.966 of justice? Yes, please. Thanks.
NOTE Confidence: 0.57259375

01:16:07.966 --> 01:16:08.458 Sanjay Kulkarni,
NOTE Confidence: 0.57259375

01:16:08.458 --> 01:16:09.760 I'm a transplant surgeon here.
NOTE Confidence: 0.35680017

01:16:10.440 --> 01:16:13.032 I would just say this to that last question.
NOTE Confidence: 0.35680017

01:16:13.040 --> 01:16:16.008 I think the consensus at least on the
NOTE Confidence: 0.35680017

01:16:16.008 --> 01:16:18.055 Ethics Committee is after DCD donation,

NOTE Confidence: 0.35680017

01:16:18.055 --> 01:16:19.880 at the time of procurement,

NOTE Confidence: 0.35680017

01:16:19.880 --> 01:16:21.944 an individual is dying.

NOTE Confidence: 0.35680017

01:16:21.944 --> 01:16:25.040 And in the process of dying,

NOTE Confidence: 0.35680017

01:16:25.040 --> 01:16:27.798 they are willing to donate their organs.

NOTE Confidence: 0.35680017

01:16:27.800 --> 01:16:28.970 That's not the question I'm trying

NOTE Confidence: 0.35680017

01:16:28.970 --> 01:16:32.240 to ask because there's a lot of

NOTE Confidence: 0.35680017

01:16:32.240 --> 01:16:33.900 gymnastics going on with language.

NOTE Confidence: 0.35680017

01:16:33.900 --> 01:16:36.089 And I as much as I think the

NOTE Confidence: 0.35680017

01:16:36.089 --> 01:16:37.719 dead donor rule is important,

NOTE Confidence: 0.35680017

01:16:37.720 --> 01:16:39.813 I think a lot of the conversation

NOTE Confidence: 0.35680017

01:16:39.813 --> 01:16:41.784 has been really constrained by the

NOTE Confidence: 0.35680017

01:16:41.784 --> 01:16:44.360 UDA and the and the terminology

NOTE Confidence: 0.35680017

01:16:44.360 --> 01:16:46.152 like what irreversibility means.

NOTE Confidence: 0.35680017

01:16:46.160 --> 01:16:50.360 And I think we maybe most people don't know,

NOTE Confidence: 0.35680017

01:16:50.360 --> 01:16:52.005 but the Uniform Law Commission

NOTE Confidence: 0.35680017

01:16:52.005 --> 01:16:53.983 recently said that they aren't going
NOTE Confidence: 0.35680017

01:16:53.983 --> 01:16:55.915 to make major revisions on the UDA.
NOTE Confidence: 0.35680017

01:16:55.920 --> 01:16:57.918 My question is,
NOTE Confidence: 0.35680017

01:16:57.920 --> 01:17:01.000 if you wanted to make a revision
NOTE Confidence: 0.35680017

01:17:01.000 --> 01:17:03.776 for the UDA to and make NRP
NOTE Confidence: 0.35680017

01:17:03.776 --> 01:17:05.596 acceptable and change the language,
NOTE Confidence: 0.35680017

01:17:05.600 --> 01:17:07.120 what does that look like?
NOTE Confidence: 0.7980077

01:17:13.560 --> 01:17:15.920 It's a great question. I spent a lot
NOTE Confidence: 0.7980077

01:17:15.920 --> 01:17:19.264 of time thinking about it and I I I
NOTE Confidence: 0.7980077

01:17:19.264 --> 01:17:21.560 don't have a great answer, right.
NOTE Confidence: 0.7980077

01:17:25.080 --> 01:17:31.826 This is part of why I think we should
NOTE Confidence: 0.7980077

01:17:31.826 --> 01:17:35.569 maintain the determination of death.
NOTE Confidence: 0.7980077

01:17:35.569 --> 01:17:38.816 I think we I I think there's some
NOTE Confidence: 0.7980077

01:17:38.816 --> 01:17:41.376 work that's done by by changing
NOTE Confidence: 0.7980077

01:17:41.376 --> 01:17:44.640 out irreversibility for permanence.
NOTE Confidence: 0.7980077

01:17:44.640 --> 01:17:47.888 But when you open up this can of worms,

NOTE Confidence: 0.7980077

01:17:47.888 --> 01:17:49.598 it can get really messy,

NOTE Confidence: 0.7980077

01:17:49.600 --> 01:17:51.544 as was seen right when they tried to

NOTE Confidence: 0.7980077

01:17:51.544 --> 01:17:53.479 update the Determination of Death Act.

NOTE Confidence: 0.7980077

01:17:53.480 --> 01:17:55.405 There were parties who came to the

NOTE Confidence: 0.7980077

01:17:55.405 --> 01:17:57.972 table who wanted to do away with death

NOTE Confidence: 0.7980077

01:17:57.972 --> 01:17:59.316 by neurologic criteria altogether,

NOTE Confidence: 0.7980077

01:17:59.320 --> 01:18:00.904 even some under what they claimed

NOTE Confidence: 0.7980077

01:18:00.904 --> 01:18:01.960 were disability rights arguments,

NOTE Confidence: 0.7980077

01:18:01.960 --> 01:18:03.910 saying that someone we consider

NOTE Confidence: 0.7980077

01:18:03.910 --> 01:18:05.860 who's dead by neurologic criteria

NOTE Confidence: 0.7980077

01:18:05.920 --> 01:18:07.480 is just severely impaired.

NOTE Confidence: 0.7980077

01:18:07.480 --> 01:18:08.026 Right.

NOTE Confidence: 0.7980077

01:18:08.026 --> 01:18:12.394 So I think the the capacity to update

NOTE Confidence: 0.7980077

01:18:12.394 --> 01:18:17.040 the law in a useful way is is limited.

NOTE Confidence: 0.76564515

01:18:20.160 --> 01:18:21.364 Can I just respond?

NOTE Confidence: 0.76564515

01:18:21.364 --> 01:18:23.170 I disagree with the way you're
NOTE Confidence: 0.76564515

01:18:23.233 --> 01:18:25.220 using this idea of switching to
NOTE Confidence: 0.76564515

01:18:25.220 --> 01:18:28.320 a permanent standard of death.
NOTE Confidence: 0.76564515

01:18:28.320 --> 01:18:30.760 You know when the code team arrives at
NOTE Confidence: 0.76564515

01:18:30.760 --> 01:18:33.195 the bedside of a patient in the hospital,
NOTE Confidence: 0.76564515

01:18:33.200 --> 01:18:36.077 they don't go. It's been 6 minutes.
NOTE Confidence: 0.76564515

01:18:36.080 --> 01:18:37.816 They fulfill the permanent
NOTE Confidence: 0.76564515

01:18:37.816 --> 01:18:39.118 definition of death.
NOTE Confidence: 0.76564515

01:18:39.120 --> 01:18:40.695 So we're not going to
NOTE Confidence: 0.76564515

01:18:40.695 --> 01:18:41.955 try to resuscitate them.
NOTE Confidence: 0.76564515

01:18:41.960 --> 01:18:43.848 The permanent definition of
NOTE Confidence: 0.76564515

01:18:43.848 --> 01:18:45.736 death is entirely contingent
NOTE Confidence: 0.76564515

01:18:45.736 --> 01:18:48.775 upon a promise not to attempt
NOTE Confidence: 0.76564515

01:18:48.775 --> 01:18:50.795 to reestablish the circulation.
NOTE Confidence: 0.76564515

01:18:50.800 --> 01:18:52.920 If if without that promise,
NOTE Confidence: 0.76564515

01:18:52.920 --> 01:18:54.834 of course you should be trying

NOTE Confidence: 0.76564515

01:18:54.834 --> 01:18:56.446 to resuscitate somebody at six

NOTE Confidence: 0.76564515

01:18:56.446 --> 01:18:58.090 7-8 minutes and you will likely

NOTE Confidence: 0.76564515

01:18:58.090 --> 01:19:00.040 in many cases be very successful.

NOTE Confidence: 0.76564515

01:19:00.040 --> 01:19:02.632 So I I don't agree with sort of the

NOTE Confidence: 0.76564515

01:19:02.632 --> 01:19:05.157 idea that by by the the permanence,

NOTE Confidence: 0.76564515

01:19:05.160 --> 01:19:06.345 the permanent standard would say

NOTE Confidence: 0.76564515

01:19:06.345 --> 01:19:08.001 that at 5 minutes we can say

NOTE Confidence: 0.76564515

01:19:08.001 --> 01:19:08.837 this person is dead.

NOTE Confidence: 0.76564515

01:19:08.840 --> 01:19:10.208 It's entirely contingent upon

NOTE Confidence: 0.76564515

01:19:10.208 --> 01:19:12.260 a promise not to attempt to

NOTE Confidence: 0.76564515

01:19:12.320 --> 01:19:13.760 establish recirculation.

NOTE Confidence: 0.6277278

01:19:15.360 --> 01:19:16.335 But that doesn't feel different

NOTE Confidence: 0.6277278

01:19:16.335 --> 01:19:17.680 from what I was trying to argue.

NOTE Confidence: 0.6277278

01:19:17.680 --> 01:19:19.696 So maybe I think my maybe I

NOTE Confidence: 0.6277278

01:19:19.696 --> 01:19:20.679 wasn't clear. I don't because

NOTE Confidence: 0.6277278

01:19:20.680 --> 01:19:23.840 the NRP violates that promise. The the
NOTE Confidence: 0.31066307

01:19:24.640 --> 01:19:27.398 promise not to attempt to recirculate the
NOTE Confidence: 0.31066307

01:19:27.440 --> 01:19:29.150 patient NRP with the full
NOTE Confidence: 0.31066307

01:19:29.150 --> 01:19:30.860 expectation that you are going
NOTE Confidence: 0.31066307

01:19:30.930 --> 01:19:32.560 to violate that promise. The the
NOTE Confidence: 0.31066307

01:19:34.360 --> 01:19:36.640 so I I hear you, but the promise for me,
NOTE Confidence: 0.31066307

01:19:36.640 --> 01:19:38.172 this is the difference.
NOTE Confidence: 0.31066307

01:19:38.172 --> 01:19:40.956 I think the promise for me is
NOTE Confidence: 0.31066307

01:19:40.956 --> 01:19:42.996 a promise not to resuscitate.
NOTE Confidence: 0.31066307

01:19:43.000 --> 01:19:46.320 That's the promise, the recirculation,
NOTE Confidence: 0.31066307

01:19:46.320 --> 01:19:48.760 this is the issue, right. It's well
NOTE Confidence: 0.3105167

01:19:51.360 --> 01:19:53.390 intent, but also so is the intention
NOTE Confidence: 0.3105167

01:19:53.390 --> 01:19:55.443 and there was a slide that that
NOTE Confidence: 0.3105167

01:19:55.443 --> 01:19:57.117 you had which which there was,
NOTE Confidence: 0.3105167

01:19:57.120 --> 01:19:58.624 I forget what it was, but there was sort
NOTE Confidence: 0.3105167

01:19:58.624 --> 01:20:00.239 of a distinction in in the top part,

NOTE Confidence: 0.3105167

01:20:00.240 --> 01:20:05.175 you say there's a a promise, let's see

NOTE Confidence: 0.3105167

01:20:05.175 --> 01:20:08.000 what is it not to resuscitate the patient,

NOTE Confidence: 0.3105167

01:20:08.000 --> 01:20:10.680 but then you recirculate, right.

NOTE Confidence: 0.3105167

01:20:10.680 --> 01:20:13.560 And my claim is that the

NOTE Confidence: 0.3105167

01:20:13.560 --> 01:20:15.480 promise not to resuscitate.

NOTE Confidence: 0.3105167

01:20:15.480 --> 01:20:17.139 Has been met and continues to be

NOTE Confidence: 0.3105167

01:20:17.139 --> 01:20:18.680 met because when you recirculate,

NOTE Confidence: 0.3105167

01:20:18.680 --> 01:20:20.500 you're not resuscitating by virtue

NOTE Confidence: 0.3105167

01:20:20.500 --> 01:20:22.812 of the other actions, right. And so.

NOTE Confidence: 0.3105167

01:20:22.812 --> 01:20:25.880 So that's that's the the distinction, right.

NOTE Confidence: 0.3105167

01:20:25.880 --> 01:20:28.000 I I think we can go anyway continue.

NOTE Confidence: 0.3105167

01:20:28.000 --> 01:20:28.240 So

NOTE Confidence: 0.69934237

01:20:28.240 --> 01:20:29.236 Sarah, one thing before you see,

NOTE Confidence: 0.69934237

01:20:29.240 --> 01:20:31.000 so I just to let folks know there's

NOTE Confidence: 0.69934237

01:20:31.000 --> 01:20:32.478 not going to be time for much.

NOTE Confidence: 0.69934237

01:20:32.480 --> 01:20:33.758 The questions come through on the
NOTE Confidence: 0.69934237

01:20:33.758 --> 01:20:35.460 Q&A and zoom, but one point of
NOTE Confidence: 0.69934237

01:20:35.460 --> 01:20:36.520 clarification might be interesting.
NOTE Confidence: 0.69934237

01:20:36.520 --> 01:20:39.650 Someone asked and by the way lots of
NOTE Confidence: 0.69934237

01:20:39.650 --> 01:20:41.720 praise for this conference for your
NOTE Confidence: 0.69934237

01:20:41.720 --> 01:20:44.197 talks from as far away as Berlin here.
NOTE Confidence: 0.69934237

01:20:44.200 --> 01:20:45.520 I'm hoping that's not the Berlin,
NOTE Confidence: 0.69934237

01:20:45.520 --> 01:20:47.235 Connecticut, but in fact Berlin and Germany.
NOTE Confidence: 0.69934237

01:20:47.240 --> 01:20:49.400 I think what it is.
NOTE Confidence: 0.69934237

01:20:49.400 --> 01:20:51.430 Doctor Thompson, a question for you, please.
NOTE Confidence: 0.69934237

01:20:51.430 --> 01:20:54.160 In your personal experience in your new role,
NOTE Confidence: 0.69934237

01:20:54.160 --> 01:20:57.556 what percentage of cases have involved NRP?
NOTE Confidence: 0.69934237

01:20:57.560 --> 01:20:58.681 And if you if you could, Eric,
NOTE Confidence: 0.69934237

01:20:58.681 --> 01:20:59.886 ballpark what percentage of the
NOTE Confidence: 0.69934237

01:20:59.886 --> 01:21:01.390 ones because it says here you
NOTE Confidence: 0.69934237

01:21:01.390 --> 01:21:02.534 mentioned 120 cases ballpark.

NOTE Confidence: 0.69934237

01:21:02.534 --> 01:21:03.726 What percentage of the

NOTE Confidence: 0.69934237

01:21:03.726 --> 01:21:05.119 cases you've done with NRP,

NOTE Confidence: 0.69934237

01:21:05.120 --> 01:21:07.388 but also if you know ballpark and maybe you

NOTE Confidence: 0.69934237

01:21:07.388 --> 01:21:09.797 guys know what percentage of the transplants,

NOTE Confidence: 0.69934237

01:21:09.800 --> 01:21:11.560 heart transplants in the

NOTE Confidence: 0.69934237

01:21:11.560 --> 01:21:13.320 US are currently NRP.

NOTE Confidence: 0.69934237

01:21:13.320 --> 01:21:13.440 Yeah,

NOTE Confidence: 0.8967935

01:21:13.440 --> 01:21:14.580 there are approximately

NOTE Confidence: 0.8967935

01:21:14.580 --> 01:21:15.760 3000 heart transplants

NOTE Confidence: 0.8967935

01:21:15.760 --> 01:21:18.120 done in the US and there's projections that

NOTE Confidence: 0.8967935

01:21:18.440 --> 01:21:22.520 if NRP is, is is fully developed

NOTE Confidence: 0.8967935

01:21:22.520 --> 01:21:24.160 that it could generate another

NOTE Confidence: 0.8967935

01:21:24.160 --> 01:21:26.596 5 or 600 cases. So it's not

NOTE Confidence: 0.8967935

01:21:26.600 --> 01:21:29.480 it's not a huge number but it's a

NOTE Confidence: 0.8967935

01:21:29.480 --> 01:21:31.184 significant number And as far as

NOTE Confidence: 0.8967935

01:21:31.184 --> 01:21:32.820 my experience I've done, I've had
NOTE Confidence: 0.8967935

01:21:32.820 --> 01:21:35.520 I've been involved in one and and
NOTE Confidence: 0.8967935

01:21:35.520 --> 01:21:37.080 actually it's you know when I
NOTE Confidence: 0.8967935

01:21:37.080 --> 01:21:38.919 called you and I said I I got,
NOTE Confidence: 0.8967935

01:21:39.360 --> 01:21:41.946 I have I have some bad feelings about this.
NOTE Confidence: 0.8967935

01:21:41.946 --> 01:21:44.332 We we have postponed going ahead
NOTE Confidence: 0.8967935

01:21:44.332 --> 01:21:46.496 with it although one of my associates
NOTE Confidence: 0.8967935

01:21:46.496 --> 01:21:47.760 did one yesterday actually.
NOTE Confidence: 0.32795218

01:21:48.560 --> 01:21:50.640 So so. So my understanding is that some
NOTE Confidence: 0.32795218

01:21:50.640 --> 01:21:52.584 that some centers at Vanderbilt for
NOTE Confidence: 0.32795218

01:21:52.584 --> 01:21:54.886 example are are full speed and other
NOTE Confidence: 0.32795218

01:21:54.886 --> 01:21:57.077 centers have said we're not doing this
NOTE Confidence: 0.32795218

01:21:57.080 --> 01:21:59.236 and the conversation because and I know
NOTE Confidence: 0.32795218

01:21:59.236 --> 01:22:01.216 that that that Bob and Brendan are
NOTE Confidence: 0.32795218

01:22:01.216 --> 01:22:02.800 both the leaders in this conversation.
NOTE Confidence: 0.32795218

01:22:02.800 --> 01:22:04.624 So we have time for Doctor Hull

NOTE Confidence: 0.32795218

01:22:04.624 --> 01:22:05.896 and then perhaps one more after

NOTE Confidence: 0.32795218

01:22:05.896 --> 01:22:07.119 that if there's a comment.

NOTE Confidence: 0.32795218

01:22:07.840 --> 01:22:08.560 OK, just checking.

NOTE Confidence: 0.32795218

01:22:09.720 --> 01:22:11.385 Thank you all for this

NOTE Confidence: 0.32795218

01:22:11.385 --> 01:22:12.486 really wonderful conference.

NOTE Confidence: 0.32795218

01:22:12.486 --> 01:22:15.167 This has been been so illuminating and

NOTE Confidence: 0.32795218

01:22:15.167 --> 01:22:17.558 really insightful and and really nuanced,

NOTE Confidence: 0.32795218

01:22:17.560 --> 01:22:19.240 which I I really appreciate.

NOTE Confidence: 0.32795218

01:22:19.240 --> 01:22:21.080 You know, I wonder if sort of getting

NOTE Confidence: 0.32795218

01:22:21.080 --> 01:22:22.916 back to this question of you know,

NOTE Confidence: 0.32795218

01:22:22.920 --> 01:22:24.992 the gymnastics that we're doing either to

NOTE Confidence: 0.32795218

01:22:24.992 --> 01:22:27.395 say that this person is dead or you know,

NOTE Confidence: 0.32795218

01:22:27.400 --> 01:22:28.146 alternatively, well,

NOTE Confidence: 0.32795218

01:22:28.146 --> 01:22:30.757 can you really argue that they're alive?

NOTE Confidence: 0.32795218

01:22:30.760 --> 01:22:33.090 You know, I, I, I almost, I'm,

NOTE Confidence: 0.32795218

01:22:33.090 --> 01:22:34.358 I'm struck by the fact that I,
NOTE Confidence: 0.32795218

01:22:34.360 --> 01:22:35.944 I I don't think they're,
NOTE Confidence: 0.32795218

01:22:35.944 --> 01:22:38.028 but really if we sort of step back and
NOTE Confidence: 0.32795218

01:22:38.028 --> 01:22:39.333 interrogate our moral intuition in a
NOTE Confidence: 0.32795218

01:22:39.333 --> 01:22:41.019 in a way they're almost neither, right?
NOTE Confidence: 0.32795218

01:22:41.019 --> 01:22:42.156 Like they're not.
NOTE Confidence: 0.32795218

01:22:42.156 --> 01:22:44.430 You know Especially if someone doesn't
NOTE Confidence: 0.32795218

01:22:44.494 --> 01:22:46.370 have perfusion to the brain it's
NOTE Confidence: 0.32795218

01:22:46.370 --> 01:22:47.904 kind of hard to argue they're alive.
NOTE Confidence: 0.32795218

01:22:47.904 --> 01:22:49.594 But at the same time if if you
NOTE Confidence: 0.32795218

01:22:49.594 --> 01:22:50.759 can restart their heart beating,
NOTE Confidence: 0.32795218

01:22:50.760 --> 01:22:52.632 it's kind of hard to argue that they're dead.
NOTE Confidence: 0.32795218

01:22:52.640 --> 01:22:54.136 And I wonder if you know in in
NOTE Confidence: 0.32795218

01:22:54.136 --> 01:22:55.569 sort of talking about what kind
NOTE Confidence: 0.32795218

01:22:55.569 --> 01:22:57.462 of language that we can use that
NOTE Confidence: 0.32795218

01:22:57.462 --> 01:22:58.782 more accurately captures what's

NOTE Confidence: 0.32795218

01:22:58.782 --> 01:23:00.800 going on both biologically and I

NOTE Confidence: 0.32795218

01:23:00.800 --> 01:23:02.240 think sort of metaphysically.

NOTE Confidence: 0.32795218

01:23:02.240 --> 01:23:03.616 You know, what about some of the,

NOTE Confidence: 0.32795218

01:23:03.616 --> 01:23:04.160 you know,

NOTE Confidence: 0.32795218

01:23:04.160 --> 01:23:06.400 I I think about the language of

NOTE Confidence: 0.32795218

01:23:06.400 --> 01:23:08.144 of liminality like is there a

NOTE Confidence: 0.32795218

01:23:08.144 --> 01:23:10.160 sort of a third state or is this

NOTE Confidence: 0.32795218

01:23:10.160 --> 01:23:11.600 sort of liminal state that that

NOTE Confidence: 0.32795218

01:23:11.600 --> 01:23:13.790 may be helpful for us to use in

NOTE Confidence: 0.32795218

01:23:13.790 --> 01:23:14.920 terms of conceptualizing this?

NOTE Confidence: 0.32795218

01:23:14.920 --> 01:23:15.745 Because I I,

NOTE Confidence: 0.32795218

01:23:15.745 --> 01:23:17.740 I think they're kind of both alive

NOTE Confidence: 0.32795218

01:23:17.740 --> 01:23:19.365 and dead and also neither alive and

NOTE Confidence: 0.32795218

01:23:19.365 --> 01:23:20.925 dead and and maybe do we need to

NOTE Confidence: 0.32795218

01:23:20.925 --> 01:23:22.428 sort of take a step back from this

NOTE Confidence: 0.32795218

01:23:22.428 --> 01:23:23.820 dichotomy because that dichotomy is
NOTE Confidence: 0.32795218

01:23:23.820 --> 01:23:25.280 not serving us in this discussion.
NOTE Confidence: 0.32795218

01:23:25.280 --> 01:23:25.400 Did
NOTE Confidence: 0.9419601

01:23:29.400 --> 01:23:30.120 you want to say something?
NOTE Confidence: 0.29624143

01:23:35.000 --> 01:23:36.216 Let us know who you are and you're
NOTE Confidence: 0.29624143

01:23:36.216 --> 01:23:37.394 kind enough to come and join the
NOTE Confidence: 0.29624143

01:23:37.394 --> 01:23:38.234 conversation I'd like to hear.
NOTE Confidence: 0.29624143

01:23:38.240 --> 01:23:40.235 I have to echo thanks to everyone.
NOTE Confidence: 0.29624143

01:23:40.240 --> 01:23:41.335 This was fantastic.
NOTE Confidence: 0.29624143

01:23:41.335 --> 01:23:43.700 I learned a ton. Andy Fleischer,
NOTE Confidence: 0.29624143

01:23:43.700 --> 01:23:46.400 Stony Brook University Stony Brook Medicine,
NOTE Confidence: 0.29624143

01:23:46.400 --> 01:23:50.000 and also Startup University Professor
NOTE Confidence: 0.29624143

01:23:50.000 --> 01:23:53.800 of Bioethics, Public Health and English.
NOTE Confidence: 0.29624143

01:23:53.800 --> 01:23:55.000 And I'm also chair of the,
NOTE Confidence: 0.29624143

01:23:55.000 --> 01:23:56.120 you know, Ethics Committee.
NOTE Confidence: 0.29624143

01:23:56.120 --> 01:23:58.359 I'm sitting next to my wonderful Vice chair,

NOTE Confidence: 0.29624143

01:23:58.360 --> 01:24:03.210 Sanjay, and Bob is the intellectual

NOTE Confidence: 0.29624143

01:24:03.210 --> 01:24:07.040 haft on the committee OK.

NOTE Confidence: 0.29624143

01:24:07.040 --> 01:24:09.470 I can't do a better job than Brenda

NOTE Confidence: 0.29624143

01:24:09.470 --> 01:24:11.352 did explaining my reservations,

NOTE Confidence: 0.29624143

01:24:11.352 --> 01:24:13.596 not getting rid of the dead donor roll,

NOTE Confidence: 0.29624143

01:24:13.600 --> 01:24:15.707 both with respect to trust and with

NOTE Confidence: 0.29624143

01:24:15.707 --> 01:24:17.639 respect to our current culture.

NOTE Confidence: 0.29624143

01:24:17.640 --> 01:24:19.272 And Bob, you've made that point

NOTE Confidence: 0.29624143

01:24:19.272 --> 01:24:21.400 as well in in person meetings.

NOTE Confidence: 0.29624143

01:24:21.400 --> 01:24:24.560 So let's just assume for the sake of

NOTE Confidence: 0.29624143

01:24:24.560 --> 01:24:26.200 argument with the compelling weight

NOTE Confidence: 0.29624143

01:24:26.200 --> 01:24:28.600 of that de facto state of affairs.

NOTE Confidence: 0.29624143

01:24:28.600 --> 01:24:29.800 We're not getting rid of the

NOTE Confidence: 0.29624143

01:24:29.800 --> 01:24:30.840 dead donor rule anytime soon,

NOTE Confidence: 0.29624143

01:24:30.840 --> 01:24:32.520 and I don't think we should

NOTE Confidence: 0.29624143

01:24:32.520 --> 01:24:33.513 for ethical reasons.
NOTE Confidence: 0.29624143

01:24:33.513 --> 01:24:35.168 I have slippery slope concerns
NOTE Confidence: 0.29624143

01:24:35.168 --> 01:24:36.040 about getting in.
NOTE Confidence: 0.29624143

01:24:36.040 --> 01:24:38.880 Brendan alluded to those.
NOTE Confidence: 0.29624143

01:24:38.880 --> 01:24:39.328 However,
NOTE Confidence: 0.29624143

01:24:39.328 --> 01:24:41.568 I disagree with Brendan that
NOTE Confidence: 0.29624143

01:24:41.568 --> 01:24:43.360 that solves any problem
NOTE Confidence: 0.35457134

01:24:45.600 --> 01:24:47.144 because I'm completely compelled
NOTE Confidence: 0.35457134

01:24:47.144 --> 01:24:49.440 by your number two reason, Bob,
NOTE Confidence: 0.35457134

01:24:49.440 --> 01:24:52.400 I can't get past, as you well know,
NOTE Confidence: 0.35457134

01:24:52.400 --> 01:24:54.495 the occlusion of these critical
NOTE Confidence: 0.35457134

01:24:54.495 --> 01:24:56.275 arteries to the brain.
NOTE Confidence: 0.35457134

01:24:56.280 --> 01:24:57.792 I think that violates even the weaker
NOTE Confidence: 0.35457134

01:24:57.792 --> 01:24:59.199 version of the dead dollar rule,
NOTE Confidence: 0.35457134

01:24:59.200 --> 01:25:01.853 which is that you can't get organs
NOTE Confidence: 0.35457134

01:25:01.853 --> 01:25:04.608 by virtue of causing death sold.

NOTE Confidence: 0.35457134

01:25:04.608 --> 01:25:08.512 And there in lie my reservations with NRP.

NOTE Confidence: 0.35457134

01:25:08.520 --> 01:25:10.320 But I have real questions for

NOTE Confidence: 0.35457134

01:25:10.320 --> 01:25:12.040 you and maybe all of you,

NOTE Confidence: 0.35457134

01:25:12.040 --> 01:25:14.000 with regard to your number one argument.

NOTE Confidence: 0.35457134

01:25:14.000 --> 01:25:15.645 And this is awkward for me because

NOTE Confidence: 0.35457134

01:25:15.645 --> 01:25:17.440 UI and Karen Ladine, the former

NOTE Confidence: 0.35457134

01:25:17.440 --> 01:25:19.480 chair of the UNOS Ethics Committee,

NOTE Confidence: 0.35457134

01:25:19.480 --> 01:25:21.280 published a piece in JAMA,

NOTE Confidence: 0.35457134

01:25:21.280 --> 01:25:22.513 a viewpoint piece,

NOTE Confidence: 0.35457134

01:25:22.513 --> 01:25:24.576 where we argue that intention,

NOTE Confidence: 0.35457134

01:25:24.576 --> 01:25:26.240 even the best intentions,

NOTE Confidence: 0.35457134

01:25:26.240 --> 01:25:28.344 does not override actions.

NOTE Confidence: 0.35457134

01:25:28.344 --> 01:25:29.700 I completely agree.

NOTE Confidence: 0.35457134

01:25:29.700 --> 01:25:31.251 From a legal perspective,

NOTE Confidence: 0.35457134

01:25:31.251 --> 01:25:32.919 it doesn't and can't.

NOTE Confidence: 0.35457134

01:25:32.920 --> 01:25:33.799 And that, frankly,
NOTE Confidence: 0.35457134

01:25:33.800 --> 01:25:36.110 is the argument that Alex and Alex
NOTE Confidence: 0.35457134

01:25:36.110 --> 01:25:38.358 made in the piece to which you alluded.
NOTE Confidence: 0.35457134

01:25:38.360 --> 01:25:40.380 That doesn't solve the ethics issue, though.
NOTE Confidence: 0.35457134

01:25:40.380 --> 01:25:42.240 Here's my question.
NOTE Confidence: 0.35457134

01:25:42.240 --> 01:25:45.860 Why should, from an ethical perspective,
NOTE Confidence: 0.35457134

01:25:45.860 --> 01:25:48.435 that be the overriding thing?
NOTE Confidence: 0.35457134

01:25:48.440 --> 01:25:50.462 We all agreed at the beginning
NOTE Confidence: 0.35457134

01:25:50.462 --> 01:25:51.473 of our deliberations,
NOTE Confidence: 0.35457134

01:25:51.480 --> 01:25:53.650 both with regard to the work group and
NOTE Confidence: 0.35457134

01:25:53.650 --> 01:25:55.600 then subsequently on the Ethics Committee,
NOTE Confidence: 0.35457134

01:25:55.600 --> 01:25:57.196 that utility would not carry the day.
NOTE Confidence: 0.35457134

01:25:57.200 --> 01:25:59.728 So I categorically reject a
NOTE Confidence: 0.35457134

01:25:59.728 --> 01:26:01.664 consequentialist conclusion to this
NOTE Confidence: 0.35457134

01:26:01.664 --> 01:26:05.178 Utility is just a species of the
NOTE Confidence: 0.35457134

01:26:05.178 --> 01:26:07.174 larger genus of consequentialism

NOTE Confidence: 0.35457134

01:26:07.174 --> 01:26:08.671 that won't work.

NOTE Confidence: 0.35457134

01:26:08.680 --> 01:26:11.284 We are here to make sure that

NOTE Confidence: 0.35457134

01:26:11.284 --> 01:26:12.400 utility doesn't overrun.

NOTE Confidence: 0.35457134

01:26:12.400 --> 01:26:15.076 Why doesn't intention count more how

NOTE Confidence: 0.35457134

01:26:15.080 --> 01:26:17.524 we we say we balance these principles,

NOTE Confidence: 0.35457134

01:26:17.524 --> 01:26:19.212 these classic principles whether

NOTE Confidence: 0.35457134

01:26:19.212 --> 01:26:20.478 you know Beechman,

NOTE Confidence: 0.35457134

01:26:20.480 --> 01:26:23.360 Childress or or any other version.

NOTE Confidence: 0.35457134

01:26:23.360 --> 01:26:26.860 Why are we giving such a massive

NOTE Confidence: 0.35457134

01:26:26.860 --> 01:26:30.425 coefficient to the variable of of action?

NOTE Confidence: 0.35457134

01:26:30.425 --> 01:26:32.200 I understand the answer legally,

NOTE Confidence: 0.35457134

01:26:32.200 --> 01:26:35.836 but why in terms of ethics?

NOTE Confidence: 0.35457134

01:26:35.840 --> 01:26:37.398 So this is ultimately,

NOTE Confidence: 0.35457134

01:26:37.400 --> 01:26:39.297 and I'm going to allude to Sanjay

NOTE Confidence: 0.35457134

01:26:39.297 --> 01:26:40.912 now because Sanjay is the first

NOTE Confidence: 0.35457134

01:26:40.912 --> 01:26:42.476 person who said this out loud to me,
NOTE Confidence: 0.35457134

01:26:42.480 --> 01:26:43.760 this is ultimately a values
NOTE Confidence: 0.35457134

01:26:43.760 --> 01:26:44.879 question for society.
NOTE Confidence: 0.45887506

01:26:46.960 --> 01:26:48.395 Are we in a position to answer?
NOTE Confidence: 0.45887506

01:26:48.400 --> 01:26:50.395 And that's where we basically end up
NOTE Confidence: 0.45887506

01:26:50.395 --> 01:26:52.200 on the Ethics Committee. Well said,
NOTE Confidence: 0.45887506

01:26:57.160 --> 01:26:58.320 I take a second. Yeah, yeah, yeah,
NOTE Confidence: 0.45887506

01:26:58.320 --> 01:26:58.998 take a breath.
NOTE Confidence: 0.45887506

01:26:58.998 --> 01:27:00.354 Because what's going to happen now,
NOTE Confidence: 0.45887506

01:27:00.360 --> 01:27:01.634 as promised is, and I and I,
NOTE Confidence: 0.45887506

01:27:01.640 --> 01:27:03.327 I'm sure there are other folks that
NOTE Confidence: 0.45887506

01:27:03.327 --> 01:27:05.028 think that what's going to happen now
NOTE Confidence: 0.45887506

01:27:05.028 --> 01:27:06.880 is that anything that either or all of
NOTE Confidence: 0.45887506

01:27:06.880 --> 01:27:08.680 the three of you would like to say,
NOTE Confidence: 0.45887506

01:27:08.680 --> 01:27:09.320 I'd like you to say.
NOTE Confidence: 0.45887506

01:27:09.320 --> 01:27:10.594 And then that will close the evening.

NOTE Confidence: 0.89236563

01:27:11.960 --> 01:27:13.360 Yeah, I just have to be careful here.

NOTE Confidence: 0.89236563

01:27:13.360 --> 01:27:14.277 And I won't take the last word.

NOTE Confidence: 0.89236563

01:27:14.280 --> 01:27:15.280 I'll give it over there.

NOTE Confidence: 0.89236563

01:27:15.280 --> 01:27:17.765 But I will respond and say again,

NOTE Confidence: 0.89236563

01:27:17.765 --> 01:27:19.200 I said in one of my slides,

NOTE Confidence: 0.89236563

01:27:19.200 --> 01:27:21.118 and I think this is a really

NOTE Confidence: 0.89236563

01:27:21.118 --> 01:27:23.001 important point that you have made

NOTE Confidence: 0.89236563

01:27:23.001 --> 01:27:24.676 that intention isn't enough alone.

NOTE Confidence: 0.89236563

01:27:24.680 --> 01:27:26.360 It also depends on action.

NOTE Confidence: 0.89236563

01:27:26.360 --> 01:27:28.400 So just because you don't intend

NOTE Confidence: 0.89236563

01:27:28.400 --> 01:27:30.659 to kill the patient doesn't mean

NOTE Confidence: 0.89236563

01:27:30.659 --> 01:27:32.719 you're not actually doing that,

NOTE Confidence: 0.89236563

01:27:32.720 --> 01:27:35.149 which I think goes back to why

NOTE Confidence: 0.89236563

01:27:35.149 --> 01:27:37.480 we maintain the dead donor rule.

NOTE Confidence: 0.89236563

01:27:37.480 --> 01:27:39.040 And that dead donor rule

NOTE Confidence: 0.85294175

01:27:41.080 --> 01:27:43.925 corresponds to an ethically founded
NOTE Confidence: 0.85294175

01:27:43.925 --> 01:27:48.240 notion of the line between life and death.
NOTE Confidence: 0.85294175

01:27:48.240 --> 01:27:49.160 And what is that notion?
NOTE Confidence: 0.85294175

01:27:49.160 --> 01:27:51.356 I did the best I could to represent it,
NOTE Confidence: 0.85294175

01:27:51.360 --> 01:27:53.630 which is what actually matters
NOTE Confidence: 0.85294175

01:27:53.630 --> 01:27:56.360 about when we declare someone dead,
NOTE Confidence: 0.85294175

01:27:56.360 --> 01:27:59.000 the heart stopped, can't restart on its own,
NOTE Confidence: 0.85294175

01:27:59.000 --> 01:28:00.488 and we're not going to try
NOTE Confidence: 0.85294175

01:28:00.488 --> 01:28:01.480 to resuscitate the patient.
NOTE Confidence: 0.85294175

01:28:01.480 --> 01:28:04.900 So I see that that that is the intention and
NOTE Confidence: 0.85294175

01:28:04.978 --> 01:28:08.317 that if NRP protocol is followed correctly,
NOTE Confidence: 0.85294175

01:28:08.320 --> 01:28:11.477 that patient is not in fact resuscitated.
NOTE Confidence: 0.85294175

01:28:11.480 --> 01:28:14.040 So my biggest ethics issues and I'll end
NOTE Confidence: 0.85294175

01:28:14.040 --> 01:28:17.040 here my biggest ethics concerns aren't this,
NOTE Confidence: 0.85294175

01:28:17.040 --> 01:28:18.940 you know, I think philosophically
NOTE Confidence: 0.85294175

01:28:18.940 --> 01:28:20.080 interesting conversation that

NOTE Confidence: 0.85294175

01:28:20.137 --> 01:28:21.637 takes us down the rabbit hole.

NOTE Confidence: 0.85294175

01:28:21.640 --> 01:28:24.525 But really is this protocol

NOTE Confidence: 0.85294175

01:28:24.525 --> 01:28:25.679 empirically valid?

NOTE Confidence: 0.85294175

01:28:25.680 --> 01:28:28.374 Are we actually ensuring that there

NOTE Confidence: 0.85294175

01:28:28.374 --> 01:28:31.278 is no meaningful harm to the donor?

NOTE Confidence: 0.85294175

01:28:31.280 --> 01:28:32.570 One And two,

NOTE Confidence: 0.85294175

01:28:32.570 --> 01:28:35.580 can we be honest enough with potential

NOTE Confidence: 0.85294175

01:28:35.664 --> 01:28:38.472 donors and their family members that

NOTE Confidence: 0.85294175

01:28:38.472 --> 01:28:42.016 they can make informed decisions about

NOTE Confidence: 0.85294175

01:28:42.016 --> 01:28:46.160 whether to to authorize this or not?

NOTE Confidence: 0.79564667

01:28:49.280 --> 01:28:50.240 Would you like to say something,

NOTE Confidence: 0.79564667

01:28:50.240 --> 01:28:50.920 Bob? You don't have to.

NOTE Confidence: 0.79564667

01:28:50.920 --> 01:28:52.040 We're happy to hear if there's some.

NOTE Confidence: 0.76333

01:28:54.200 --> 01:28:55.040 I'm going to address your your

NOTE Confidence: 0.76333

01:28:55.200 --> 01:28:56.960 point, Where are we going?

NOTE Confidence: 0.76333

01:28:56.960 --> 01:28:59.200 I'm old enough to remember when DCD

NOTE Confidence: 0.76333

01:28:59.200 --> 01:29:00.786 was first getting started back in

NOTE Confidence: 0.76333

01:29:00.786 --> 01:29:02.560 the 1990s and they were the same

NOTE Confidence: 0.76333

01:29:02.560 --> 01:29:04.200 debates that were happening then.

NOTE Confidence: 0.76333

01:29:04.200 --> 01:29:06.384 The donor's not really dead because

NOTE Confidence: 0.76333

01:29:06.384 --> 01:29:09.518 the the loss of of Pulse is not

NOTE Confidence: 0.76333

01:29:09.518 --> 01:29:10.850 irreversible and several people

NOTE Confidence: 0.76333

01:29:10.850 --> 01:29:14.945 were actually charged with homicide

NOTE Confidence: 0.76333

01:29:14.945 --> 01:29:17.320 for participating in DCD donations.

NOTE Confidence: 0.76333

01:29:17.320 --> 01:29:20.458 But the utility of saving lives

NOTE Confidence: 0.76333

01:29:20.458 --> 01:29:23.279 through that ultimately just won the

NOTE Confidence: 0.76333

01:29:23.279 --> 01:29:25.106 day and eventually the arguments

NOTE Confidence: 0.76333

01:29:25.106 --> 01:29:27.672 died down And now DCD happens

NOTE Confidence: 0.76333

01:29:27.672 --> 01:29:30.520 with virtually no objections.

NOTE Confidence: 0.76333

01:29:30.520 --> 01:29:32.056 I predict that the same thing

NOTE Confidence: 0.76333

01:29:32.056 --> 01:29:33.400 is going to happen here,

NOTE Confidence: 0.76333

01:29:33.400 --> 01:29:36.306 that the utility and the

NOTE Confidence: 0.76333

01:29:36.306 --> 01:29:37.280 incredible success of

NOTE Confidence: 0.70694613

01:29:37.280 --> 01:29:40.000 NRP is going to become a standard. And

NOTE Confidence: 0.70694613

01:29:40.000 --> 01:29:42.238 there's enough debate about, you know,

NOTE Confidence: 0.70694613

01:29:42.240 --> 01:29:44.454 the legality and the ethics of it that I

NOTE Confidence: 0.70694613

01:29:44.454 --> 01:29:46.474 think ultimately overtime it's just going

NOTE Confidence: 0.70694613

01:29:46.474 --> 01:29:48.180 to fade away and it will become the de

NOTE Confidence: 0.70694613

01:29:48.180 --> 01:29:49.480 facto standard for organ procurement.

NOTE Confidence: 0.70694613

01:29:50.520 --> 01:29:53.480 Thank you. So Doctor Thompson,

NOTE Confidence: 0.70694613

01:29:53.480 --> 01:29:55.062 the guy who's actually a lot of

NOTE Confidence: 0.70694613

01:29:55.062 --> 01:29:56.545 lives are getting saved by these

NOTE Confidence: 0.70694613

01:29:56.545 --> 01:29:57.795 heart transplants and you're one

NOTE Confidence: 0.70694613

01:29:57.795 --> 01:29:59.357 of the guys who's doing that.

NOTE Confidence: 0.70694613

01:29:59.360 --> 01:30:01.712 And I appreciate that you raised this

NOTE Confidence: 0.70694613

01:30:01.712 --> 01:30:04.014 important question for us to have a

NOTE Confidence: 0.70694613

01:30:04.014 --> 01:30:05.554 conversation as a bioethics community
NOTE Confidence: 0.70694613

01:30:05.554 --> 01:30:07.996 here and as a as a medical community here.
NOTE Confidence: 0.70694613

01:30:08.000 --> 01:30:09.600 Having heard all of this,
NOTE Confidence: 0.70694613

01:30:09.600 --> 01:30:10.716 I wonder any thoughts you might
NOTE Confidence: 0.70694613

01:30:10.716 --> 01:30:11.840 want to share with the crew?
NOTE Confidence: 0.70694613

01:30:11.840 --> 01:30:14.120 We'd be happy to hear.
NOTE Confidence: 0.69422686

01:30:14.120 --> 01:30:16.514 Well first I want to thank you for doing
NOTE Confidence: 0.69422686

01:30:16.520 --> 01:30:18.120 this because I think it was a great
NOTE Confidence: 0.69422686

01:30:18.120 --> 01:30:20.840 idea to have this this was Mark's idea
NOTE Confidence: 0.69422686

01:30:20.840 --> 01:30:22.964 to have this gathering I just called.
NOTE Confidence: 0.69422686

01:30:22.964 --> 01:30:24.596 I just called Mark up on the phone
NOTE Confidence: 0.69422686

01:30:24.600 --> 01:30:26.536 and said Mark this is bothers me what
NOTE Confidence: 0.69422686

01:30:26.536 --> 01:30:28.529 do you think And then he's the one
NOTE Confidence: 0.69422686

01:30:28.529 --> 01:30:30.840 that set this up and I'm and I'm I'm
NOTE Confidence: 0.69422686

01:30:30.840 --> 01:30:32.520 sure I speak for everybody that's
NOTE Confidence: 0.69422686

01:30:32.577 --> 01:30:34.396 that's we appreciate that you did this

NOTE Confidence: 0.66974014
01:30:36.480 --> 01:30:37.960 I'm not sure about DCD
NOTE Confidence: 0.66974014
01:30:37.960 --> 01:30:38.878 whether that's gonna
NOTE Confidence: 0.66974014
01:30:40.040 --> 01:30:42.304 whether it's it's gonna fit the
NOTE Confidence: 0.66974014
01:30:42.304 --> 01:30:43.560 controversy is gonna fade away
NOTE Confidence: 0.66974014
01:30:43.560 --> 01:30:45.080 because I can tell you
NOTE Confidence: 0.66974014
01:30:45.080 --> 01:30:46.656 from going on these retrievals if I
NOTE Confidence: 0.66974014
01:30:46.656 --> 01:30:49.160 go on a brain dead donor there is no
NOTE Confidence: 0.66974014
01:30:49.160 --> 01:30:52.558 controversy at all from anybody. And if we
NOTE Confidence: 0.7921712
01:30:52.560 --> 01:30:54.240 go on ADCD case,
NOTE Confidence: 0.7921712
01:30:55.520 --> 01:30:58.560 there is always an issue of something
NOTE Confidence: 0.7921712
01:30:58.560 --> 01:31:01.000 like somebody either either
NOTE Confidence: 0.7921712
01:31:01.000 --> 01:31:03.120 there's like some variability
NOTE Confidence: 0.7921712
01:31:03.120 --> 01:31:05.208 and exactly how you're going to
NOTE Confidence: 0.7921712
01:31:05.208 --> 01:31:07.440 proceed or there's some question about
NOTE Confidence: 0.7921712
01:31:08.640 --> 01:31:11.360 you know one thing or one
NOTE Confidence: 0.7921712

01:31:11.360 --> 01:31:13.440 aspect of it or another. And I I
NOTE Confidence: 0.7921712

01:31:13.440 --> 01:31:18.198 just, I think it's it's just too
NOTE Confidence: 0.7921712

01:31:18.200 --> 01:31:19.916 and and clearly the patients are not
NOTE Confidence: 0.8472248

01:31:19.920 --> 01:31:21.160 dead. I mean they're not,
NOTE Confidence: 0.8472248

01:31:23.560 --> 01:31:26.080 they're they're they're
NOTE Confidence: 0.8472248

01:31:26.080 --> 01:31:27.550 alive when you start. They are, they're
NOTE Confidence: 0.8472248

01:31:27.550 --> 01:31:29.920 alive when they come in the room. And
NOTE Confidence: 0.8472248

01:31:32.240 --> 01:31:33.158 I don't know, I'm not sure
NOTE Confidence: 0.8472248

01:31:33.160 --> 01:31:35.407 it's going to, I'm not sure the
NOTE Confidence: 0.8472248

01:31:35.407 --> 01:31:37.520 controversy is going to go away. Well,
NOTE Confidence: 0.8472248

01:31:37.880 --> 01:31:39.217 thank you very much all three of
NOTE Confidence: 0.8472248

01:31:39.217 --> 01:31:40.840 you for a fantastic presentation
NOTE Confidence: 0.37724227

01:31:45.840 --> 01:31:46.080 and the
NOTE Confidence: 0.37724227

01:31:48.600 --> 01:31:50.172 really it was a remarkable
NOTE Confidence: 0.37724227

01:31:50.172 --> 01:31:52.230 night and the and the beauty
NOTE Confidence: 0.37724227

01:31:52.310 --> 01:31:54.956 of it is you each get some Yale swag.

NOTE Confidence: 0.37724227

01:31:54.960 --> 01:31:56.453 So we'll pass out.

NOTE Confidence: 0.37724227

01:31:56.453 --> 01:31:57.518 Thank you guys very much.

NOTE Confidence: 0.37724227

01:31:57.520 --> 01:31:58.320 Thank you all for coming.

NOTE Confidence: 0.37724227

01:31:58.320 --> 01:31:59.279 We'll see you again in two weeks.

NOTE Confidence: 0.37724227

01:31:59.280 --> 01:32:00.600 We're back in Cohen

NOTE Confidence: 0.37724227

01:32:00.600 --> 01:32:01.920 Auditorium in two weeks.

NOTE Confidence: 0.37724227

01:32:01.920 --> 01:32:04.000 Good night. Thank you.