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
- $00{:}00{:}02{.}240 \dashrightarrow 00{:}00{:}03{.}560$ Let's go ahead and get started.
- NOTE Confidence: 0.4558106
- $00:00:06.080 \dashrightarrow 00:00:09.032$ My name is Mark Mercurio and you're
- NOTE Confidence: 0.4558106
- $00{:}00{:}09{.}032 \dashrightarrow 00{:}00{:}10.568$ 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
- $00:00:18.947 \longrightarrow 00:00:20.921$ 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
- $00{:}00{:}23.318 \dashrightarrow 00{:}00{:}25.317$ that that you'll find it the same.
- NOTE Confidence: 0.4558106
- $00:00:25.320 \longrightarrow 00:00:27.288$ 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

 $00:00:28.280 \longrightarrow 00:00:30.200$ an old friend of mine,

NOTE Confidence: 0.4558106

 $00{:}00{:}30{.}200 \dashrightarrow 00{:}00{:}31{.}880$ reached out to me to talk about

NOTE Confidence: 0.4558106

 $00:00:31.880 \longrightarrow 00:00:32.600$ this particular topic,

NOTE Confidence: 0.4558106

 $00{:}00{:}32.600 \dashrightarrow 00{:}00{:}36.320$ normal thermic regional perfusion

NOTE Confidence: 0.4558106

 $00:00:36.320 \dashrightarrow 00:00:38.320$ 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

 $00:00:41.080 \longrightarrow 00:00:43.078$ 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

 $00:00:48.960 \longrightarrow 00:00:50.608$ but also to get to the people who

NOTE Confidence: 0.4558106

 $00{:}00{:}50{.}608 \dashrightarrow 00{:}00{:}52{.}620$ want a national level are leading the

NOTE Confidence: 0.4558106

 $00:00:52.620 \rightarrow 00:00:54.543$ conversation 'cause this is a pretty

NOTE Confidence: 0.4558106

 $00{:}00{:}54{.}543 \dashrightarrow 00{:}00{:}56{.}475$ important conversation and to have Bob

NOTE Confidence: 0.4558106

 $00:00:56.475 \rightarrow 00:00:58.973$ Trug and Brendan Parent here as well is

- NOTE Confidence: 0.4558106
- $00:00:58.973 \rightarrow 00:01:00.677$ a is a tremendous treat for the program.
- NOTE Confidence: 0.4558106
- $00:01:00.680 \rightarrow 00:01:02.200$ So I think it's going to be a great night.
- NOTE Confidence: 0.4558106
- $00:01:02.200 \longrightarrow 00:01:04.251$ Let me just tell you how the
- NOTE Confidence: 0.4558106
- $00:01:04.251 \longrightarrow 00:01:05.879$ night is going to unfold.
- NOTE Confidence: 0.4558106
- $00:01:05.880 \longrightarrow 00:01:06.780$ 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
- $00:01:07.680 \longrightarrow 00:01:09.005$ 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
- $00{:}01{:}09{.}800 \dashrightarrow 00{:}01{:}12{.}005$ He's going to speak for a little
- NOTE Confidence: 0.4558106
- $00:01:12.005 \rightarrow 00:01:14.800$ bit about the technology and about
- NOTE Confidence: 0.4558106
- $00:01:14.800 \rightarrow 00:01:17.600$ the Physiology and about the issue.
- NOTE Confidence: 0.4558106
- $00{:}01{:}17.600 \dashrightarrow 00{:}01{:}20.575$ 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
- $00{:}01{:}22.065 \dashrightarrow 00{:}01{:}24.195$ And then after Bob's done speaking,
- NOTE Confidence: 0.4558106
- $00{:}01{:}24.200 \dashrightarrow 00{:}01{:}27.440$ I'm going to introduce Brendan Parent.
- NOTE Confidence: 0.4558106

- $00:01:27.440 \longrightarrow 00:01:29.035$ And each one of them, as you'll see,
- NOTE Confidence: 0.4558106
- $00:01:29.035 \longrightarrow 00:01:29.960$ is a very special guest.

 $00:01:29.960 \longrightarrow 00:01:31.436$ So it's quite an exciting night.

NOTE Confidence: 0.4558106

 $00:01:31.440 \longrightarrow 00:01:33.996$ So that that will last for

NOTE Confidence: 0.4558106

 $00:01:34.000 \longrightarrow 00:01:35.518$ on the order of 45 minutes.

NOTE Confidence: 0.4558106

 $00{:}01{:}35{.}520 \dashrightarrow 00{:}01{:}37{.}193$ It's not an exact science, lads.

NOTE Confidence: 0.4558106

 $00:01:37.193 \longrightarrow 00:01:39.158$ It'll be what it'll be.

NOTE Confidence: 0.4558106

 $00:01:39.160 \rightarrow 00:01:40.968$ And then and then they're going to come

NOTE Confidence: 0.4558106

 $00{:}01{:}40{.}968 \dashrightarrow 00{:}01{:}42{.}717$ up here and answer your questions.

NOTE Confidence: 0.4558106

 $00:01:42.720 \rightarrow 00:01:44.280$ They're going to have a conversation.

NOTE Confidence: 0.4558106

 $00{:}01{:}44.280 \dashrightarrow 00{:}01{:}45.039$ We will stop.

NOTE Confidence: 0.4558106

 $00:01:45.039 \dashrightarrow 00:01:46.304$ And that clock's looking pretty

NOTE Confidence: 0.4558106

 $00:01:46.304 \rightarrow 00:01:47.820$ good for a change. It's right.

NOTE Confidence: 0.4558106

 $00:01:47.820 \longrightarrow 00:01:50.311$ 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

 $00:01:51.004 \rightarrow 00:01:52.700$ I suspect there may be many people

- NOTE Confidence: 0.4558106
- $00{:}01{:}52{.}700 \dashrightarrow 00{:}01{:}54{.}478$ who have something they want to say.

 $00:01:54.480 \longrightarrow 00:01:57.056$ 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

 $00:01:58.545 \longrightarrow 00:01:59.840$ and we have all sorts of folks

NOTE Confidence: 0.4558106

 $00{:}01{:}59{.}840 \dashrightarrow 00{:}02{:}00{.}640$ in the audience.

NOTE Confidence: 0.4558106

 $00:02:00.640 \longrightarrow 00:02:02.026$ So I think going to contribute

NOTE Confidence: 0.4558106

 $00:02:02.026 \longrightarrow 00:02:02.719$ to the conversation.

NOTE Confidence: 0.4558106

 $00:02:02.720 \rightarrow 00:02:05.080$ And we do hope we get to everybody.

NOTE Confidence: 0.4558106

 $00:02:05.080 \dashrightarrow 00:02:06.208$ There's going to be a microphone

NOTE Confidence: 0.4558106

 $00:02:06.208 \longrightarrow 00:02:06.960$ when the time comes.

NOTE Confidence: 0.4558106

 $00{:}02{:}06{.}960 \dashrightarrow 00{:}02{:}08{.}992$ I'm going to ask you to wait until

NOTE Confidence: 0.4558106

 $00:02:08.992 \longrightarrow 00:02:10.860$ you have a microphone to speak

NOTE Confidence: 0.4558106

 $00:02:10.860 \longrightarrow 00:02:12.572$ like the talking stick so that

NOTE Confidence: 0.4558106

 $00{:}02{:}12.572 \dashrightarrow 00{:}02{:}14.014$ we can make sure the folks on

NOTE Confidence: 0.4558106

 $00:02:14.014 \rightarrow 00:02:15.598$ Zoom can hear what we're saying.

- $00:02:15.600 \longrightarrow 00:02:17.280$ So we will have the talks,
- NOTE Confidence: 0.4558106
- $00{:}02{:}17.280 \dashrightarrow 00{:}02{:}18.948$ then we'll have the panel discussion
- NOTE Confidence: 0.4558106
- $00:02:18.948 \rightarrow 00:02:20.599$ with the audience question and answer.
- NOTE Confidence: 0.4558106
- $00:02:20.600 \longrightarrow 00:02:22.000$ And then at 6:30,
- NOTE Confidence: 0.4558106
- $00:02:22.000 \longrightarrow 00:02:23.400$ we will say goodnight.
- NOTE Confidence: 0.4558106
- $00:02:23.400 \longrightarrow 00:02:24.450$ So that said,
- NOTE Confidence: 0.4558106
- $00{:}02{:}24.450 \dashrightarrow 00{:}02{:}26.550$ let me go ahead and introduce
- NOTE Confidence: 0.4558106
- $00:02:26.550 \longrightarrow 00:02:28.917$ our first speaker for tonight.
- NOTE Confidence: 0.4558106
- $00:02:28.920 \longrightarrow 00:02:29.788$ This thing keeps stinging.
- NOTE Confidence: 0.4558106
- $00{:}02{:}29.788 \dashrightarrow 00{:}02{:}31.524$ I'm going to go ahead and guess that
- NOTE Confidence: 0.4558106
- $00:02:31.524 \rightarrow 00:02:33.092$ this is Karen trying to remind me to
- NOTE Confidence: 0.46441522
- $00:02:33.136 \longrightarrow 00:02:34.140$ 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
- $00:02:38.760 \rightarrow 00:02:43.596$ so the first speaker is Doctor Eric Thompson.
- NOTE Confidence: 0.46441522
- $00:02:43.600 \dashrightarrow 00:02:45.300$ Eric practiced adult cardiac and
- NOTE Confidence: 0.46441522
- $00:02:45.300 \rightarrow 00:02:47.000$ thoracic surgery for 31 years,

- NOTE Confidence: 0.46441522
- 00:02:47.000 --> 00:02:49.088 most recently at the Mid America

 $00{:}02{:}49.088 \dashrightarrow 00{:}02{:}50.924$ 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

 $00:02:52.440 \longrightarrow 00:02:54.198$ So what exactly does he know

NOTE Confidence: 0.46441522

 $00:02:54.198 \longrightarrow 00:02:55.077$ about heart transplant?

NOTE Confidence: 0.46441522

 $00:02:55.080 \longrightarrow 00:02:57.252$ Well, he was present for Saint

NOTE Confidence: 0.46441522

 $00{:}02{:}57.252 \dashrightarrow 00{:}02{:}58.700$ Luke's second heart transplant

NOTE Confidence: 0.46441522

 $00:02:58.761 \longrightarrow 00:03:01.688$ in 1985 and was a participant in

NOTE Confidence: 0.46441522

 $00:03:01.688 \longrightarrow 00:03:04.403$ transplant #950 In the fall of 2021,

NOTE Confidence: 0.46441522

 $00:03:04.403 \longrightarrow 00:03:05.818$ 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

 $00{:}03{:}07{.}640 \dashrightarrow 00{:}03{:}09{.}025$ Doctor Thompson took a part

NOTE Confidence: 0.46441522

 $00:03:09.025 \rightarrow 00:03:10.760$ time job with the ex vivo.

NOTE Confidence: 0.46441522

 $00{:}03{:}10.760 \dashrightarrow 00{:}03{:}12.776$ Is that how we pronounce that ex vivo

NOTE Confidence: 0.46441522

 $00:03:12.776 \rightarrow 00:03:14.623$ with ex vivo procurement services

 $00:03:14.623 \rightarrow 00:03:17.197$ 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

 $00:03:18.064 \dashrightarrow 00:03:20.760$ he has travelled from his base at the Oxford,

NOTE Confidence: 0.46441522

 $00:03:20.760 \longrightarrow 00:03:24.064$ CT airport on more than 120 organ retrievals.

NOTE Confidence: 0.46441522

 $00{:}03{:}24.064 \dashrightarrow 00{:}03{:}26.892$ 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

 $00:03:29.040 \longrightarrow 00:03:30.316$ both from Washington University.

NOTE Confidence: 0.46441522

 $00:03:30.316 \longrightarrow 00:03:31.911$ 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

 $00:03:33.320 \longrightarrow 00:03:35.600$ 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

 $00:03:45.132 \rightarrow 00:03:47.394$ a way to get him here and I have found it.

NOTE Confidence: 0.7727477

 $00{:}03{:}47{.}400 \dashrightarrow 00{:}03{:}49{.}836$ And Eric's extensive experience with heart

NOTE Confidence: 0.7727477

 $00:03:49.840 \longrightarrow 00:03:51.334$ transplant makes him just the right

NOTE Confidence: 0.7727477

 $00:03:51.334 \rightarrow 00:03:52.960$ person to begin this conversation.

- NOTE Confidence: 0.7727477
- 00:03:52.960 --> 00:03:53.959 Welcome, Doctor Thompson.

 $00{:}03{:}56{.}080 \dashrightarrow 00{:}03{:}57{.}238$ So what, Mark

NOTE Confidence: 0.7727477

 $00:03:57.240 \longrightarrow 00:03:58.997$ didn't tell you about the pinnacle of

NOTE Confidence: 0.7727477

 $00:03:59.520 \longrightarrow 00:04:01.200$ my academic career, which

NOTE Confidence: 0.7727477

 $00:04:01.200 \rightarrow 00:04:04.600$ was that I was his high school classmate.

NOTE Confidence: 0.7727477

 $00:04:04.600 \dashrightarrow 00:04:06.400$ 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

 $00:04:13.640 \longrightarrow 00:04:15.080$ the topic is normal thermic

NOTE Confidence: 0.6899602

 $00{:}04{:}15{.}080 \dashrightarrow 00{:}04{:}16{.}644$ regional perfusion that doesn't

NOTE Confidence: 0.6899602

 $00:04:16.644 \longrightarrow 00:04:18.599$ exactly roll off the tongue.

NOTE Confidence: 0.6899602

 $00:04:18.600 \dashrightarrow 00:04:20.595$ 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

 $00:04:31.669 \rightarrow 00:04:33.184$ reservations about this both from NOTE Confidence: 0.6899602 $00:04:33.184 \rightarrow 00:04:35.740$ 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 $00:04:37.644 \rightarrow 00:04:40.242$ interested to hear what my Co panelists NOTE Confidence: 0.6899602 $00:04:40.242 \rightarrow 00:04:43.130$ have to say about this and and I'm NOTE Confidence: 0.6899602 $00:04:43.130 \rightarrow 00:04:46.201$ 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 $00:04:48.684 \rightarrow 00:04:50.839$ 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 $00:04:52.920 \rightarrow 00:04:54.880$ what Well couple things one is NOTE Confidence: 0.64918494 $00:04:56.360 \longrightarrow 00:04:57.480$ I'm going to show some NOTE Confidence: 0.64918494 $00:04:57.880 \rightarrow 00:05:00.808$ slides some pictures of in the operating room NOTE Confidence: 0.64918494 $00:05:00.808 \rightarrow 00:05:03.720$ and some videos from the operating room. NOTE Confidence: 0.64918494 $00:05:03.720 \longrightarrow 00:05:05.720$ So if any of you are thrown to NOTE Confidence: 0.64918494 $00:05:05.720 \rightarrow 00:05:07.598$ 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
- $00:05:09.340 \longrightarrow 00:05:11.080$ 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
- $00:05:14.600 \rightarrow 00:05:18.106$ anybody to leave here thinking that
- NOTE Confidence: 0.64918494
- $00:05:18.106 \rightarrow 00:05:20.158$ heart transplantation is unethical.
- NOTE Confidence: 0.64918494
- $00{:}05{:}20{.}160 \dashrightarrow 00{:}05{:}21{.}844$ That's not the issue.
- NOTE Confidence: 0.64918494
- $00:05:21.844 \rightarrow 00:05:23.949$ It's it's this one specific
- NOTE Confidence: 0.64918494
- $00:05:23.949 \rightarrow 00:05:26.158$ technique for organ retrieval that
- NOTE Confidence: 0.64918494
- $00:05:26.160 \longrightarrow 00:05:29.560$ is an issue I want to start with,
- NOTE Confidence: 0.38558823
- $00:05:31.640 \longrightarrow 00:05:35.120$ with my conclusions
- NOTE Confidence: 0.6965361
- $00:05:38.040 \longrightarrow 00:05:39.920$ and if you understand this,
- NOTE Confidence: 0.6965361
- $00:05:39.920 \longrightarrow 00:05:41.080$ you can skip my talk.
- NOTE Confidence: 0.6965361
- $00{:}05{:}41{.}080 \dashrightarrow 00{:}05{:}42{.}360$ You can go take a break for 15
- NOTE Confidence: 0.6965361
- $00:05:42.360 \dashrightarrow 00:05:43.448$ minutes and then come back and
- NOTE Confidence: 0.6965361
- $00:05:43.448 \longrightarrow 00:05:44.720$ hear what the others have to say,
- NOTE Confidence: 0.6965361
- $00{:}05{:}44.720 \dashrightarrow 00{:}05{:}47.000$ 'cause this is what I'm going to end up at
- NOTE Confidence: 0.6965361

 $00:05:49.200 \longrightarrow 00:05:50.580$ the ethical issue.

NOTE Confidence: 0.6965361

 $00:05:50.580 \dashrightarrow 00:05:52.916$ 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

 $00:05:56.262 \rightarrow 00:05:59.359$ said to have irreversibly stopped.

NOTE Confidence: 0.6965361

 $00{:}05{:}59{.}360 \dashrightarrow 00{:}06{:}02{.}181$ 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

 $00{:}06{:}04.586 \dashrightarrow 00{:}06{:}06{:}340$ vessels so that you substitute

NOTE Confidence: 0.6965361

 $00:06:06.340 \rightarrow 00:06:08.090$ 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

 $00:06:11.640 \rightarrow 00:06:14.336$ 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

 $00{:}06{:}17.880 \dashrightarrow 00{:}06{:}19.585$ 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

 $00{:}06{:}22.792 \dashrightarrow 00{:}06{:}25.256$ And I know we haven't changed at

NOTE Confidence: 0.6965361

 $00:06:25.256 \rightarrow 00:06:29.072$ all but this is this is me and

- NOTE Confidence: 0.6965361
- $00:06:29.072 \longrightarrow 00:06:30.480$ this is Doctor Mercurio.

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

NOTE Confidence: 0.48602045

 $00{:}06{:}39{.}640 \dashrightarrow 00{:}06{:}42{.}049$ and Mark mentioned I was at the Mid America

NOTE Confidence: 0.48602045

 $00:06:42.049 \rightarrow 00:06:44.080$ Heart Institute and I'm going back there.

NOTE Confidence: 0.48602045

 $00:06:44.080 \rightarrow 00:06:46.432$ I'm flying back there Saturday they're

NOTE Confidence: 0.48602045

 $00{:}06{:}46{.}432 \dashrightarrow 00{:}06{:}48{.}336$ 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

 $00:06:51.800 \longrightarrow 00:06:54.683$ So the job I have now is is kind

NOTE Confidence: 0.48602045

 $00{:}06{:}54.683 \dashrightarrow 00{:}06{:}57.159$ of a unique job and I I made this,

NOTE Confidence: 0.48602045

 $00{:}06{:}57{.}160 \dashrightarrow 00{:}07{:}00{.}634$ 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

 $00{:}07{:}03.000 \dashrightarrow 00{:}07{:}04.964$ 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

 $00:07:12.119 \rightarrow 00:07:14.135$ working for does retrieval services.

NOTE Confidence: 0.48602045

 $00{:}07{:}14.135 \dashrightarrow 00{:}07{:}16.360$ We retrieve hearts and lungs.

NOTE Confidence: 0.48602045

 $00{:}07{:}16.360 \dashrightarrow 00{:}07{:}19.170$ So currently there are the I put

NOTE Confidence: 0.48602045

 $00:07:19.170 \longrightarrow 00:07:21.355$ 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

 $00:07:25.584 \longrightarrow 00:07:27.266$ working for are located.

NOTE Confidence: 0.48602045

 $00{:}07{:}27.266 \dashrightarrow 00{:}07{:}28.320$ And so

NOTE Confidence: 0.6679444

 $00{:}07{:}31{.}200 \dashrightarrow 00{:}07{:}33{.}824$ so I'm here in Connecticut and

NOTE Confidence: 0.6679444

 $00:07:33.824 \longrightarrow 00:07:35.619$ you can see the other the other

NOTE Confidence: 0.6679444

 $00{:}07{:}35{.}619 \dashrightarrow 00{:}07{:}37{.}150$ four are scattered around.

NOTE Confidence: 0.6679444

 $00{:}07{:}37{.}150 \dashrightarrow 00{:}07{:}40{.}760$ So what'll happen is like say that say

NOTE Confidence: 0.6679444

 $00:07:40.760 \dashrightarrow 00:07:44.245$ Christ hospital in Cincinnati accepts

NOTE Confidence: 0.6679444

 $00{:}07{:}44.245 \dashrightarrow 00{:}07{:}47.165$ a heart and the and the donor operation

NOTE Confidence: 0.6679444

 $00{:}07{:}47.165 \dashrightarrow 00{:}07{:}49.799$ is scheduled for tomorrow morning

NOTE Confidence: 0.6679444

 $00:07:49.800 \dashrightarrow 00:07:51.760$ and the and the donors in Chicago.

- NOTE Confidence: 0.6679444
- $00:07:51.760 \dashrightarrow 00:07:54.555$ So what what would happen is a plane

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

NOTE Confidence: 0.6679444

 $00:07:57.360 \longrightarrow 00:07:59.324$ we fly to Chicago,

NOTE Confidence: 0.6679444

 $00:07:59.324 \rightarrow 00:08:02.288$ 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

 $00{:}08{:}05{.}760 \dashrightarrow 00{:}08{:}08{.}704$ and a Courier would take it on to the

NOTE Confidence: 0.6679444

 $00:08:08.704 \rightarrow 00:08:10.920$ hospital and then we'd fly back home.

NOTE Confidence: 0.6679444

 $00:08:10.920 \longrightarrow 00:08:12.072$ 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

 $00:08:13.800 \longrightarrow 00:08:15.840$ I've done this 120 Times Now

NOTE Confidence: 0.5341728

 $00:08:18.440 \longrightarrow 00:08:20.440$ then this, this shows

NOTE Confidence: 0.5341728

 $00:08:24.720 \longrightarrow 00:08:25.470$ it's not working.

NOTE Confidence: 0.5341728

 $00:08:25.470 \longrightarrow 00:08:28.542$ This heat map shows where

NOTE Confidence: 0.5341728

 $00{:}08{:}28{.}542 \dashrightarrow 00{:}08{:}32{.}397$ the donors are have been,

NOTE Confidence: 0.5341728

 $00:08:32.400 \longrightarrow 00:08:33.515$ so they're scattered all over

- 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
- $00:08:37.680 \longrightarrow 00:08:39.480$ I've gone as far as Dallas,
- NOTE Confidence: 0.5341728
- $00:08:39.480 \longrightarrow 00:08:40.720$ and I've gone to Minot,
- NOTE Confidence: 0.5341728
- $00:08:40.720 \longrightarrow 00:08:42.800$ ND to get Oregon's.
- NOTE Confidence: 0.37746108
- $00:08:45.720 \rightarrow 00:08:47.400$ This is the Waterbury Oxford Airport.
- NOTE Confidence: 0.37746108
- $00:08:47.400 \longrightarrow 00:08:49.038$ It's just 15 miles from here.
- NOTE Confidence: 0.37746108
- $00{:}08{:}49{.}040 \dashrightarrow 00{:}08{:}52{.}029$ The pilots love it because has that
- NOTE Confidence: 0.37746108
- $00{:}08{:}52{.}029 \dashrightarrow 00{:}08{:}54{.}656$ long runway with ILS landing capability.
- NOTE Confidence: 0.37746108
- $00{:}08{:}54.656 \dashrightarrow 00{:}08{:}58.212$ 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
- $00:09:01.040 \rightarrow 00:09:03.240$ in there where all our supplies are.
- NOTE Confidence: 0.37746108
- $00:09:03.240 \longrightarrow 00:09:07.596$ 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
- $00:09:08.930 \longrightarrow 00:09:10.560$ take on a retrieval and this Jed,
- NOTE Confidence: 0.37746108
- $00:09:10.560 \longrightarrow 00:09:13.600$ is typical of the ones that we fly.

- NOTE Confidence: 0.37746108
- $00:09:13.600 \longrightarrow 00:09:15.240$ This was from the retrieval

 $00:09:15.240 \longrightarrow 00:09:16.552$ 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

 $00:09:19.400 \longrightarrow 00:09:21.020$ you know, cast of thousands

NOTE Confidence: 0.37746108

 $00:09:21.020 \longrightarrow 00:09:22.316$ in the operating room.

NOTE Confidence: 0.37746108

 $00:09:22.320 \longrightarrow 00:09:24.300$ If you if you stripped it down to the

NOTE Confidence: 0.37746108

 $00:09:24.300 \longrightarrow 00:09:26.464$ people that are really just the just the

NOTE Confidence: 0.37746108

 $00:09:26.464 \rightarrow 00:09:28.280$ essential people you could do this with,

NOTE Confidence: 0.37746108

 $00:09:28.280 \longrightarrow 00:09:29.760$ you could retrieve a heart,

NOTE Confidence: 0.37746108

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

NOTE Confidence: 0.37746108

 $00{:}09{:}30{.}488 \dashrightarrow 00{:}09{:}32{.}672$ kidneys and pancreas with just two

NOTE Confidence: 0.37746108

 $00{:}09{:}32.672 \dashrightarrow 00{:}09{:}35.080$ 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

 $00{:}09{:}41.237 \dashrightarrow 00{:}09{:}44.874$ and up at the top of the screen you

NOTE Confidence: 0.9255376

 $00:09:44.874 \rightarrow 00:09:46.984$ can see simultaneously while we're

 $00{:}09{:}46{.}984 \dashrightarrow 00{:}09{:}49{.}110$ working in the chest other surgeons

NOTE Confidence: 0.9255376

 $00:09:49.110 \longrightarrow 00:09:50.760$ are working down in the abdomen.

NOTE Confidence: 0.71331805

 $00{:}09{:}56{.}200 \dashrightarrow 00{:}09{:}58{.}335$ And then on every case we take

NOTE Confidence: 0.71331805

 $00:09:58.335 \longrightarrow 00:10:00.523$ a video of the heart to send

NOTE Confidence: 0.71331805

 $00:10:00.523 \rightarrow 00:10:02.119$ to the an implanting surgeon.

NOTE Confidence: 0.71331805

 $00:10:02.119 \longrightarrow 00:10:04.273$ So they get a sense of they

NOTE Confidence: 0.71331805

 $00{:}10{:}04.273 \dashrightarrow 00{:}10{:}05.344$ get a sense of the size of

NOTE Confidence: 0.71331805

 $00:10:05.344 \rightarrow 00:10:06.398$ the heart they're going to be

NOTE Confidence: 0.71331805

 $00{:}10{:}06{.}400 \dashrightarrow 00{:}10{:}08{.}140$ implanting and that that and

NOTE Confidence: 0.71331805

 $00:10:08.140 \longrightarrow 00:10:09.880$ that the quality is good.

NOTE Confidence: 0.71331805

00:10:12.280 --> 00:10:13.360 So normal heart

NOTE Confidence: 0.71331805

 $00{:}10{:}13.480 \dashrightarrow 00{:}10{:}15.076$ you can see up here the

NOTE Confidence: 0.71331805

 $00:10:15.076 \rightarrow 00:10:15.874$ livers being mobilized.

NOTE Confidence: 0.71331805

 $00:10:18.000 \longrightarrow 00:10:19.200$ So this schematic

NOTE Confidence: 0.71331805

 $00{:}10{:}21{.}400 \dashrightarrow 00{:}10{:}23{.}638$ I've tried to simplify what's done

NOTE Confidence: 0.71331805

 $00:10:23.638 \rightarrow 00:10:26.020$ during the operation and I've and I've

 $00:10:26.020 \rightarrow 00:10:28.280$ done it partly just by showing the

NOTE Confidence: 0.71331805

 $00{:}10{:}28{.}280 \dashrightarrow 00{:}10{:}30{.}648$ heart and the liver and you can add

NOTE Confidence: 0.71331805

 $00{:}10{:}30{.}648 \dashrightarrow 00{:}10{:}33{.}096$ other organs in to but but the heart NOTE Confidence: 0.71331805

 $00:10:33.096 \rightarrow 00:10:35.240$ and the liver tell most of the story.

NOTE Confidence: 0.71331805

 $00{:}10{:}35{.}240 \dashrightarrow 00{:}10{:}38{.}756$ So the the blood each of the organs

NOTE Confidence: 0.71331805

 $00{:}10{:}38.756 \dashrightarrow 00{:}10{:}41.710$ is mobilized and the blood vessels

NOTE Confidence: 0.71331805

 $00{:}10{:}41.710 \dashrightarrow 00{:}10{:}44.080$ are isolated And then a like

NOTE Confidence: 0.71331805

 $00:10:44.080 \longrightarrow 00:10:45.409$ in the abdomen A cannula,

NOTE Confidence: 0.71331805

 $00{:}10{:}45{.}409 \dashrightarrow 00{:}10{:}48{.}058$ 1 cannula is put into the portal vein

NOTE Confidence: 0.71331805

 $00{:}10{:}48.058 \dashrightarrow 00{:}10{:}50.277$ and another cannula is put into the

NOTE Confidence: 0.71331805

 $00{:}10{:}50{.}280 \dashrightarrow 00{:}10{:}53{.}838$ abdominal a orta and in the in the chest

NOTE Confidence: 0.71331805

 $00{:}10{:}53.838 \dashrightarrow 00{:}10{:}56.359$ can ulus put in the ascending aorta.

NOTE Confidence: 0.71331805

 $00{:}10{:}56{.}360 \dashrightarrow 00{:}10{:}58{.}112$ And then when when every body's ready NOTE Confidence: 0.71331805

 $00{:}10{:}58{.}112 \dashrightarrow 00{:}11{:}01{.}108$ 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

 $00{:}11{:}04{.}249 \dashrightarrow 00{:}11{:}07{.}275$ venous return and you put clamps on the

NOTE Confidence: 0.71331805

 $00{:}11{:}07{.}275 \dashrightarrow 00{:}11{:}10{.}000$ as cending aorta and the abdominal aorta.

NOTE Confidence: 0.71331805

 $00{:}11{:}10{.}000 \dashrightarrow 00{:}11{:}12{.}024$ And then the preservation solution

NOTE Confidence: 0.71331805

 $00{:}11{:}12.024 \dashrightarrow 00{:}11{:}14.472$ to the liver and abdominal organs

NOTE Confidence: 0.71331805

 $00:11:14.472 \longrightarrow 00:11:16.932$ goes in through these two blood

NOTE Confidence: 0.71331805

 $00:11:16.932 \longrightarrow 00:11:18.520$ vessels and the cardioplegia,

NOTE Confidence: 0.71331805

 $00:11:18.520 \longrightarrow 00:11:19.980$ the solution that stops

NOTE Confidence: 0.71331805

 $00:11:19.980 \longrightarrow 00:11:21.440$ and protects the heart,

NOTE Confidence: 0.71331805

 $00{:}11{:}21{.}440 \dashrightarrow 00{:}11{:}24{.}880$ it goes in into the ascending a orta.

NOTE Confidence: 0.71331805

 $00{:}11{:}24.880 \dashrightarrow 00{:}11{:}26.665$ 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

 $00:11:29.640 \longrightarrow 00:11:30.956$ the the organs out.

NOTE Confidence: 0.71331805

 $00{:}11{:}30{.}956 \dashrightarrow 00{:}11{:}32{.}930$ So here's here's a heart that's

NOTE Confidence: 0.71331805

 $00:11:32.994 \rightarrow 00:11:34.848$ been removed and it's ready to

NOTE Confidence: 0.71331805

 $00:11:34.848 \rightarrow 00:11:36.800$ go in the sterile packaging.

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

NOTE Confidence: 0.71331805

 $00{:}11{:}39{.}200 \dashrightarrow 00{:}11{:}42{.}081$ around that this one had just taken us

NOTE Confidence: 0.71331805

 $00:11:42.081 \rightarrow 00:11:46.120$ 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

 $00{:}11{:}54.840 \dashrightarrow 00{:}11{:}56.856$ sterile bags containing saline,

NOTE Confidence: 0.71331805

 $00{:}11{:}56.856 \dashrightarrow 00{:}11{:}59.376$ and then surrounding the bags

NOTE Confidence: 0.71331805

 $00{:}11{:}59{.}376 \dashrightarrow 00{:}12{:}01{.}360$ is ice to keep it cold.

NOTE Confidence: 0.70875365

 $00{:}12{:}03.600 \dashrightarrow 00{:}12{:}07.271$ Now here here's a part right after

NOTE Confidence: 0.70875365

 $00{:}12{:}07{.}271 \dashrightarrow 00{:}12{:}09{.}893$ 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

 $00:12:12.960 \longrightarrow 00:12:15.319$ 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

 $00:12:17.989 \longrightarrow 00:12:19.480$ as sitting inside a big space.

NOTE Confidence: 0.70875365

 $00{:}12{:}19{.}480 \dashrightarrow 00{:}12{:}22{.}070$ 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

 $00:12:25.080 \longrightarrow 00:12:28.080$ this is heart as normal size.

NOTE Confidence: 0.70875365

 $00{:}12{:}28.080 \dashrightarrow 00{:}12{:}32.067$ And what's a mazing is I had just taken the

NOTE Confidence: 0.70875365

 $00{:}12{:}32.067 \dashrightarrow 00{:}12{:}34.758$ clamp off and it's already in sinus rhythm.

NOTE Confidence: 0.70875365

 $00:12:34.760 \longrightarrow 00:12:37.040$ It's just it's just incredible how that,

NOTE Confidence: 0.70875365

 $00:12:37.040 \longrightarrow 00:12:38.480$ how how that works.

NOTE Confidence: 0.70875365

 $00{:}12{:}38{.}480 \dashrightarrow 00{:}12{:}40{.}083$ And this was like less than a

NOTE Confidence: 0.70875365

 $00:12:40.083 \rightarrow 00:12:41.560$ 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

 $00{:}12{:}45{.}080 \dashrightarrow 00{:}12{:}47{.}978$ I've talked about so far pertains to

NOTE Confidence: 0.69150466

 $00{:}12{:}47.978 \dashrightarrow 00{:}12{:}50.120$ heart procurement after brain death.

NOTE Confidence: 0.69150466

 $00:12:50.120 \longrightarrow 00:12:50.895$ But that's not what we're

NOTE Confidence: 0.69150466

 $00{:}12{:}50.895 \dashrightarrow 00{:}12{:}51.515$ going to talk about.

NOTE Confidence: 0.69150466

 $00:12:51.520 \rightarrow 00:12:53.770$ 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
- $00{:}12{:}57{.}160 \dashrightarrow 00{:}12{:}59{.}274$ And to understand that you have to,
- NOTE Confidence: 0.69150466
- $00{:}12{:}59{.}280 \dashrightarrow 00{:}13{:}01{.}330$ you have to understand there's
- NOTE Confidence: 0.69150466
- $00:13:01.330 \rightarrow 00:13:04.339$ 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
- $00:13:06.546 \longrightarrow 00:13:08.920$ there's circulatory death.
- NOTE Confidence: 0.69150466
- $00:13:08.920 \longrightarrow 00:13:10.000$ And if you
- NOTE Confidence: 0.6075845
- $00:13:13.080 \longrightarrow 00:13:15.162$ brain death is irreversible cessation of
- NOTE Confidence: 0.6075845
- $00{:}13{:}15{.}162 \dashrightarrow 00{:}13{:}17{.}742$ all function of the entire brain including
- NOTE Confidence: 0.6075845
- $00{:}13{:}17.742 \dashrightarrow 00{:}13{:}21.690$ the brain stem and circulatory death
- NOTE Confidence: 0.6075845
- $00:13:21.690 \rightarrow 00:13:24.120$ is defined as irreversible cessation of
- NOTE Confidence: 0.6075845
- $00:13:24.120 \longrightarrow 00:13:26.159$ circulatory and respiratory function.
- NOTE Confidence: 0.6075845
- $00:13:26.160 \longrightarrow 00:13:29.460$ And you know just remember
- NOTE Confidence: 0.6075845
- $00{:}13{:}29{.}460 \dashrightarrow 00{:}13{:}31{.}440$ 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

 $00:13:34.040 \rightarrow 00:13:38.594$ 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

 $00:13:42.056 \rightarrow 00:13:44.356$ system and the other is using NRP.

NOTE Confidence: 0.5449615

 $00:13:46.760 \longrightarrow 00:13:48.222$ So this is the,

NOTE Confidence: 0.5449615

 $00:13:48.222 \dashrightarrow 00:13:50.373$ 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

 $00:13:53.264 \rightarrow 00:13:56.156$ 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

 $00{:}13{:}58{.}160 \dashrightarrow 00{:}14{:}01{.}680$ reservoir and a gas exchanger.

NOTE Confidence: 0.5449615

 $00:14:01.680 \longrightarrow 00:14:04.491$ But the difference is the heart,

NOTE Confidence: 0.5449615

 $00{:}14{:}04{.}491 \dashrightarrow 00{:}14{:}08{.}150$ the heart is is resuscitated

NOTE Confidence: 0.5449615

 $00:14:08.150 \longrightarrow 00:14:11.240$ inside this machine,

NOTE Confidence: 0.5449615

 $00:14:11.240 \longrightarrow 00:14:12.776$ so outside the body.

NOTE Confidence: 0.5449615

 $00{:}14{:}12.776 \dashrightarrow 00{:}14{:}14.716$ Whereas with NRP the resuscitation

NOTE Confidence: 0.5449615

 $00:14:14.716 \longrightarrow 00:14:16.760$ occurs inside the donor's body.

NOTE Confidence: 0.43664122

 $00:14:19.040 \rightarrow 00:14:21.476$ So there's a sequence of events that

- NOTE Confidence: 0.43664122
- $00:14:21.476 \longrightarrow 00:14:23.476$ 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
- $00:14:25.560 \rightarrow 00:14:29.436$ the pay the donors, the donor.
- NOTE Confidence: 0.43664122
- $00{:}14{:}29{.}440 \dashrightarrow 00{:}14{:}30{.}180$ Let me just talk about
- NOTE Confidence: 0.43664122
- $00:14:30.180 \longrightarrow 00:14:30.955$ the donor a little bit.
- NOTE Confidence: 0.43664122
- $00{:}14{:}30{.}960 \dashrightarrow 00{:}14{:}34{.}145$ 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
- $00:14:38.560 \rightarrow 00:14:41.038$ a brain problem but not always.
- NOTE Confidence: 0.43664122
- $00{:}14{:}41{.}040 \dashrightarrow 00{:}14{:}44{.}096$ And they they're they're expected
- NOTE Confidence: 0.43664122
- $00:14:44.096 \rightarrow 00:14:46.112$ to die shortly after supports with
- NOTE Confidence: 0.43664122
- $00{:}14{:}46{.}112 \dashrightarrow 00{:}14{:}48{.}498$ 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
- $00{:}14{:}50{.}600 \dashrightarrow 00{:}14{:}52{.}560$ shortly after support is withdrawn.
- NOTE Confidence: 0.785517
- $00{:}14{:}53{.}400 \dashrightarrow 00{:}14{:}55{.}320$ So they're they're consented
- NOTE Confidence: 0.785517
- $00{:}14{:}55{.}320 \dashrightarrow 00{:}14{:}57{.}720$ for as an organ donor.
- NOTE Confidence: 0.785517

 $00:14:57.720 \rightarrow 00:14:59.160$ They're brought to the operating room,

NOTE Confidence: 0.785517

 $00{:}14{:}59{.}160 \dashrightarrow 00{:}15{:}01{.}519$ they're given heparin so that the blood

NOTE Confidence: 0.785517

 $00{:}15{:}01{.}519 \dashrightarrow 00{:}15{:}03{.}424$ doesn't clot when the circulation

NOTE Confidence: 0.785517

 $00:15:03.424 \rightarrow 00:15:05.152$ stops and then supports withdrawn.

NOTE Confidence: 0.785517

 $00:15:05.152 \rightarrow 00:15:08.080$ So they take them off the ventilator,

NOTE Confidence: 0.785517

 $00{:}15{:}08.080 \dashrightarrow 00{:}15{:}10.640$ 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

 $00:15:14.608 \rightarrow 00:15:17.344$ 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

 $00:15:20.480 \rightarrow 00:15:21.998$ and they have falling blood pressure.

NOTE Confidence: 0.785517

 $00:15:22.000 \rightarrow 00:15:23.700$ Their oxygen levels fall.

NOTE Confidence: 0.785517

 $00{:}15{:}23.700 \dashrightarrow 00{:}15{:}27.150$ Then when the heart stops and a

NOTE Confidence: 0.785517

 $00{:}15{:}27{.}150 \dashrightarrow 00{:}15{:}29{.}760$ systole occurs at that point the

NOTE Confidence: 0.785517

 $00:15:29.760 \rightarrow 00:15:32.776$ the clock starts ticking and they

NOTE Confidence: 0.785517

 $00{:}15{:}32{.}776 \dashrightarrow 00{:}15{:}35{.}878$ you wait for it varies from place to

NOTE Confidence: 0.785517

 $00{:}15{:}35{.}878 \dashrightarrow 00{:}15{:}37{.}840$ place and this is this is an issue.

- NOTE Confidence: 0.785517
- $00:15:37.840 \longrightarrow 00:15:40.120$ The variation is to me is an issue,

 $00{:}15{:}40{.}120 \dashrightarrow 00{:}15{:}43{.}560$ 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

 $00:15:46.640 \longrightarrow 00:15:48.920$ And then so that's called the

NOTE Confidence: 0.785517

 $00:15:48.920 \longrightarrow 00:15:49.680$ standoff period.

NOTE Confidence: 0.785517

 $00{:}15{:}49.680 \dashrightarrow 00{:}15{:}52.074$ At that point death is declared And

NOTE Confidence: 0.785517

 $00:15:52.074 \rightarrow 00:15:54.022$ then the surgical teams, they say,

NOTE Confidence: 0.785517

 $00:15:54.022 \rightarrow 00:15:56.198$ OK, you guys come on in and they have

NOTE Confidence: 0.785517

 $00{:}15{:}56{.}198 \dashrightarrow 00{:}15{:}58{.}074$ us come in from from another room.

NOTE Confidence: 0.785517

 $00{:}15{:}58{.}080 \dashrightarrow 00{:}15{:}59{.}706$ We haven't been involved at all

NOTE Confidence: 0.785517

 $00{:}15{:}59{.}706 \dashrightarrow 00{:}16{:}02{.}190$ and we come in from another room

NOTE Confidence: 0.785517

 $00{:}16{:}02{.}190 \dashrightarrow 00{:}16{:}04{.}240$ and then we start the operation.

NOTE Confidence: 0.785517

 $00:16:04.240 \longrightarrow 00:16:07.200$ So for the transmatic system,

NOTE Confidence: 0.785517

 $00{:}16{:}07{.}200 \dashrightarrow 00{:}16{:}10{.}159$ what you would do is you would rapidly

NOTE Confidence: 0.785517

 $00:16:10.160 \longrightarrow 00:16:13.676$ open the chest and the abdomen,

 $00:16:13.680 \rightarrow 00:16:16.124$ infuse the preservation solutions,

NOTE Confidence: 0.785517

 $00:16:16.124 \rightarrow 00:16:17.957$ excise the organs,

NOTE Confidence: 0.785517

 $00:16:17.960 \longrightarrow 00:16:19.703$ 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

 $00{:}16{:}21.080 \dashrightarrow 00{:}16{:}25.560$ this, this machine.

NOTE Confidence: 0.785517

 $00:16:25.560 \rightarrow 00:16:29.260$ So it's the same as what I showed you before,

NOTE Confidence: 0.785517

 $00{:}16{:}29{.}260 \dashrightarrow 00{:}16{:}32{.}305$ except that on a brain dead donor you

NOTE Confidence: 0.785517

 $00:16:32.305 \rightarrow 00:16:35.319$ would do all this dissection preliminarily.

NOTE Confidence: 0.785517

 $00{:}16{:}35{.}320 \dashrightarrow 00{:}16{:}36{.}832$ And on this, you don't do that at all.

NOTE Confidence: 0.785517

 $00{:}16{:}36{.}840 \dashrightarrow 00{:}16{:}39{.}400$ You just go right in and you put

NOTE Confidence: 0.785517

 $00{:}16{:}39{.}400 \dashrightarrow 00{:}16{:}41{.}352$ the cannulas in immediately and

NOTE Confidence: 0.785517

 $00{:}16{:}41.352 \dashrightarrow 00{:}16{:}43.800$ start the infusion of the solutions.

NOTE Confidence: 0.785517

 $00:16:43.800 \longrightarrow 00:16:45.576$ And then you do the dissection

NOTE Confidence: 0.785517

 $00{:}16{:}45.576 \dashrightarrow 00{:}16{:}47.200$ after you've excised the organs.

NOTE Confidence: 0.6846853

 $00:16:49.800 \longrightarrow 00:16:52.488$ So here's a here's a heart on the

NOTE Confidence: 0.6846853

 $00:16:52.488 \rightarrow 00:16:53.862$ transmetic system. So oxygenated

- NOTE Confidence: 0.6846853
- $00:16:53.862 \rightarrow 00:16:56.319$ blood comes into the aorta up here.

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

NOTE Confidence: 0.6846853

 $00:17:03.720 \longrightarrow 00:17:04.998$ one thing I want to emphasize

NOTE Confidence: 0.75033445

 $00{:}17{:}05{.}000 \dashrightarrow 00{:}17{:}11{.}920$ 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

 $00{:}17{:}16.533 \dashrightarrow 00{:}17{:}19.701$ is chemia going on and that's that's

NOTE Confidence: 0.75033445

 $00{:}17{:}19{.}701 \dashrightarrow 00{:}17{:}22{.}708$ damaging the organs and and the heart

NOTE Confidence: 0.75033445

 $00{:}17{:}22.708 \dashrightarrow 00{:}17{:}25.090$ and of the organs the heart's the

NOTE Confidence: 0.75033445

 $00{:}17{:}25.090 \dashrightarrow 00{:}17{:}27.136$ one that's the most sensitive to

NOTE Confidence: 0.75033445

 $00{:}17{:}27{.}136 \dashrightarrow 00{:}17{:}29{.}587$ that so that so this this but

NOTE Confidence: 0.75033445

 $00{:}17{:}29.587 \dashrightarrow 00{:}17{:}32.452$ it but it that said it works and the

NOTE Confidence: 0.75033445

 $00{:}17{:}32{.}452 \dashrightarrow 00{:}17{:}35{.}160$ hearts do well as a matter of fact.

NOTE Confidence: 0.75033445

 $00{:}17{:}35{.}160 \dashrightarrow 00{:}17{:}37{.}309$ So we'll come to this So here's

NOTE Confidence: 0.75033445

 $00{:}17{:}37{.}309 \dashrightarrow 00{:}17{:}39{.}826$ here's a picture of the of a heart

NOTE Confidence: 0.75033445

 $00{:}17{:}39{.}826 \dashrightarrow 00{:}17{:}42{.}272$ on the transmetic system and you can

 $00:17:42.272 \longrightarrow 00:17:45.135$ see it's it it was taken out of

NOTE Confidence: 0.75033445

 $00{:}17{:}45{.}135 \dashrightarrow 00{:}17{:}47{.}188$ the chest just you know 10 minutes

NOTE Confidence: 0.75033445

 $00:17:47.188 \longrightarrow 00:17:49.080$ 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

 $00{:}17{:}54{.}360 \dashrightarrow 00{:}17{:}56{.}383$ 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

 $00{:}18{:}01{.}214 \dashrightarrow 00{:}18{:}03{.}776$ recipients to either receive a brain

NOTE Confidence: 0.5670332

 $00{:}18{:}03{.}776 \dashrightarrow 00{:}18{:}06{.}588$ dead do nor 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

 $00{:}18{:}08{.}986 \dashrightarrow 00{:}18{:}11{.}986$ and the outcomes are equivalent.

NOTE Confidence: 0.5670332

 $00{:}18{:}11{.}986 \dashrightarrow 00{:}18{:}13{.}636$ 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

 $00:18:16.920 \longrightarrow 00:18:19.590$ to to currently to there's there's

NOTE Confidence: 0.5670332

 $00{:}18{:}19{.}590 \dashrightarrow 00{:}18{:}22{.}180$ 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
- $00:18:24.516 \rightarrow 00:18:26.360$ this transmetic system and NRP.

 $00:18:26.360 \longrightarrow 00:18:28.395$ And the key difference between

NOTE Confidence: 0.5670332

 $00{:}18{:}28{.}395 \dashrightarrow 00{:}18{:}30{.}804$ the two things is transmetics is

NOTE Confidence: 0.5670332

 $00:18:30.804 \longrightarrow 00:18:33.050$ is outside the body and while

NOTE Confidence: 0.5670332

 $00{:}18{:}33.050 \dashrightarrow 00{:}18{:}36.200$ NRP is inside the donor's body.

NOTE Confidence: 0.5670332

 $00:18:36.200 \longrightarrow 00:18:37.984$ And that distinction has,

NOTE Confidence: 0.5670332

 $00:18:37.984 \longrightarrow 00:18:40.080$ you know, some ethical

NOTE Confidence: 0.9026764

 $00:18:42.480 \longrightarrow 00:18:44.160$ issues with it.

NOTE Confidence: 0.9026764

 $00:18:44.160 \rightarrow 00:18:48.038$ 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

 $00:18:50.488 \longrightarrow 00:18:53.283$ Christian Barnard in 1967 in South

NOTE Confidence: 0.9026764

 $00{:}18{:}53.283 \dashrightarrow 00{:}18{:}57.240$ Africa was done with a technique that is

NOTE Confidence: 0.9026764

 $00:18:57.240 \rightarrow 00:19:01.037$ almost identical to what we now call NRP.

NOTE Confidence: 0.9026764

00:19:01.040 $\operatorname{-->}$ 00:19:03.266 They the donor was a young woman

NOTE Confidence: 0.9026764

 $00:19:03.266 \longrightarrow 00:19:05.000$ who was crossing the street,

 $00:19:05.000 \rightarrow 00:19:06.596$ was hit by a drunk driver.

NOTE Confidence: 0.9026764

 $00{:}19{:}06{.}600 \dashrightarrow 00{:}19{:}09{.}261$ She had a a non survivable brain injury.

NOTE Confidence: 0.9026764

 $00:19:09.261 \rightarrow 00:19:12.558$ So they she was going to be an organ donor.

NOTE Confidence: 0.9026764

 $00:19:12.560 \longrightarrow 00:19:15.430$ At the time, the concept of brain

NOTE Confidence: 0.9026764

 $00{:}19{:}15{.}430 \dashrightarrow 00{:}19{:}18{.}240$ death had not been established.

NOTE Confidence: 0.9026764

 $00:19:18.240 \longrightarrow 00:19:19.766$ So what they did was they took

NOTE Confidence: 0.9026764

 $00:19:19.766 \longrightarrow 00:19:21.280$ her to the operating room.

NOTE Confidence: 0.9026764

 $00:19:21.280 \longrightarrow 00:19:23.600$ They cannulated her for

NOTE Confidence: 0.9026764

 $00{:}19{:}23.600 \dashrightarrow 00{:}19{:}25.920$ the heart lung machine.

NOTE Confidence: 0.9026764

 $00:19:25.920 \rightarrow 00:19:28.996$ They withdrew support when her heart stopped.

NOTE Confidence: 0.9026764

 $00{:}19{:}29{.}000 \dashrightarrow 00{:}19{:}30{.}626$ They immediately turned on the heart

NOTE Confidence: 0.9026764

 $00:19:30.626 \rightarrow 00:19:32.000$ lung machine resuscitated her heart,

NOTE Confidence: 0.9026764

 $00:19:32.000 \longrightarrow 00:19:34.375$ And then they and then

NOTE Confidence: 0.9026764

 $00{:}19{:}34{.}375 \dashrightarrow 00{:}19{:}36{.}275$ they implanted the heart.

NOTE Confidence: 0.9026764

 $00:19:36.280 \dashrightarrow 00:19:39.936$ And this, this book is fascinating.

NOTE Confidence: 0.9026764

 $00:19:39.936 \rightarrow 00:19:43.216$ It describes the intrigue surrounding

- NOTE Confidence: 0.9026764
- $00:19:43.216 \rightarrow 00:19:45.840$ the first heart transplants.

 $00{:}19{:}45{.}840 \dashrightarrow 00{:}19{:}49{.}048$ And it it's not, it's not technical at all.

NOTE Confidence: 0.9026764

 $00:19:49.048 \rightarrow 00:19:51.160$ It reads it even though it's not fiction.

NOTE Confidence: 0.9026764

 $00:19:51.160 \longrightarrow 00:19:54.489$ It reads like a novel and it

NOTE Confidence: 0.9026764

 $00{:}19{:}54{.}489 \dashrightarrow 00{:}19{:}55{.}941$ describes the ethical dilemmas

NOTE Confidence: 0.9026764

 $00:19:55.941 \rightarrow 00:19:58.198$ that they were facing back then.

NOTE Confidence: 0.9026764

 $00:19:58.200 \rightarrow 00:20:00.918$ And the story also is interesting

NOTE Confidence: 0.9026764

 $00{:}20{:}00{.}918 \dashrightarrow 00{:}20{:}03.825$ because it features big doses of

NOTE Confidence: 0.9026764

 $00{:}20{:}03.825 \dashrightarrow 00{:}20{:}06.400$ scandalous behavior mostly by Christian

NOTE Confidence: 0.9026764

 $00{:}20{:}06{.}400 \dashrightarrow 00{:}20{:}08{.}880$ Barnard about things like piracy and

NOTE Confidence: 0.5444239

 $00{:}20{:}11.760 \dashrightarrow 00{:}20{:}15.316$ greed. And also he had a steamy affair

NOTE Confidence: 0.5444239

 $00{:}20{:}15{.}316 \dashrightarrow 00{:}20{:}19{.}160$ with Gina Lola Bridgeta, which is.

NOTE Confidence: 0.5444239

 $00{:}20{:}19{.}160 \dashrightarrow 00{:}20{:}23{.}080$ So another thing that's in there is that.

NOTE Confidence: 0.5444239

 $00{:}20{:}23.080 \dashrightarrow 00{:}20{:}25.150$ And he Barnard himself never

NOTE Confidence: 0.5444239

 $00{:}20{:}25{.}150 \dashrightarrow 00{:}20{:}27{.}400$ acknowledged this while he was alive.

 $00:20:27.400 \rightarrow 00:20:30.704$ But in there, they, the patient, the donor,

NOTE Confidence: 0.5444239

 $00{:}20{:}30{.}704 \dashrightarrow 00{:}20{:}33{.}656$ was surreptitiously given a bolus of

NOTE Confidence: 0.5444239

 $00{:}20{:}33.656 \dashrightarrow 00{:}20{:}36.640$ potassium to speed the cardiac arrest.

NOTE Confidence: 0.7548868

 $00{:}20{:}39{.}000 \dashrightarrow 00{:}20{:}42{.}260$ So this, this schematic shows NRP,

NOTE Confidence: 0.7548868

 $00{:}20{:}42.260 \dashrightarrow 00{:}20{:}45.495$ the NRP, with, with, and it's different

NOTE Confidence: 0.7548868

 $00{:}20{:}45{.}495 \dashrightarrow 00{:}20{:}47{.}280$ than what I've shown you before.

NOTE Confidence: 0.7548868

 $00:20:47.280 \rightarrow 00:20:50.680$ So what you do is you you open the chest,

NOTE Confidence: 0.7548868

 $00:20:50.680 \longrightarrow 00:20:53.410$ you put a cannula into the right

NOTE Confidence: 0.7548868

 $00{:}20{:}53.410 \dashrightarrow 00{:}20{:}55.480$ a trium 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

 $00:20:59.200 \longrightarrow 00:21:00.773$ You open the chest and you put this

NOTE Confidence: 0.7548868

 $00{:}21{:}00{.}773 \dashrightarrow 00{:}21{:}02{.}984$ clamp across the arch vessels so

NOTE Confidence: 0.7548868

 $00{:}21{:}02{.}984 \dashrightarrow 00{:}21{:}05{.}300$ that there's no there's going to

NOTE Confidence: 0.7548868

 $00:21:05.377 \longrightarrow 00:21:07.680$ be no blood going to the brain.

NOTE Confidence: 0.7548868

 $00:21:07.680 \longrightarrow 00:21:09.507$ And then you put the cannula in

- NOTE Confidence: 0.7548868
- $00:21:09.507 \rightarrow 00:21:11.258$ the right atrium and you and you

 $00:21:11.258 \rightarrow 00:21:13.120$ drain the blood out of the patient.

NOTE Confidence: 0.7548868

 $00:21:13.120 \longrightarrow 00:21:14.982$ And then you put a cannula in

NOTE Confidence: 0.7548868

 $00:21:14.982 \rightarrow 00:21:16.957$ the aorta and then that it goes,

NOTE Confidence: 0.7548868

 $00{:}21{:}16.960 \dashrightarrow 00{:}21{:}19.320$ it's connected to an ECMO machine.

NOTE Confidence: 0.7548868

 $00:21:19.320 \rightarrow 00:21:21.678$ And this is all done just through the chest,

NOTE Confidence: 0.7548868

 $00:21:21.680 \longrightarrow 00:21:22.880$ and it can be done rapidly.

NOTE Confidence: 0.7548868

 $00:21:22.880 \longrightarrow 00:21:24.662$ The the center with the most

NOTE Confidence: 0.7548868

 $00:21:24.662 \longrightarrow 00:21:25.553$ experience is Vanderbilt,

NOTE Confidence: 0.7548868

 $00:21:25.560 \rightarrow 00:21:28.560$ and they can can pretty consistently

NOTE Confidence: 0.7548868

 $00{:}21{:}28{.}560 \dashrightarrow 00{:}21{:}30{.}880$ 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

 $00{:}21{:}35{.}280 \dashrightarrow 00{:}21{:}38{.}610$ So the sequence of events is exactly

NOTE Confidence: 0.51523453

 $00{:}21{:}38.610 \dashrightarrow 00{:}21{:}42.897$ 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,

 $00:21:46.342 \rightarrow 00:21:48.398$ and then things diverge.

NOTE Confidence: 0.51523453

 $00{:}21{:}48{.}400 \dashrightarrow 00{:}21{:}51{.}640$ So on NRP it's only a chest incision.

NOTE Confidence: 0.51523453

 $00:21:51.640 \longrightarrow 00:21:53.000$ 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

 $00{:}21{:}55{.}368 \dashrightarrow 00{:}21{:}57{.}480$ by pass and this reperfuses all

NOTE Confidence: 0.51523453

 $00{:}21{:}57{.}480 \dashrightarrow 00{:}21{:}59{.}760$ the organs except for the brain.

NOTE Confidence: 0.51523453

 $00{:}21{:}59{.}760 \dashrightarrow 00{:}22{:}02{.}125$ And then after the heart's

NOTE Confidence: 0.51523453

 $00{:}22{:}02{.}125 \dashrightarrow 00{:}22{:}05{.}000$ resuscitated and and the other

NOTE Confidence: 0.51523453

 $00{:}22{:}05{.}000 \dashrightarrow 00{:}22{:}06{.}920$ organ dissection is completed,

NOTE Confidence: 0.51523453

 $00{:}22{:}06{.}920 \dashrightarrow 00{:}22{:}08{.}755$ then you infuse the preservation

NOTE Confidence: 0.51523453

 $00:22:08.755 \longrightarrow 00:22:10.590$ solutions and you excise the

NOTE Confidence: 0.51523453

 $00:22:10.654 \rightarrow 00:22:12.279$ heart and the other organs.

NOTE Confidence: 0.51523453

 $00{:}22{:}12.280 \dashrightarrow 00{:}22{:}15.232$ So here's a photograph from Vanderbilt

NOTE Confidence: 0.51523453

 $00:22:15.232 \rightarrow 00:22:17.200$ showing the heart cannulated.

NOTE Confidence: 0.51523453

 $00{:}22{:}17{.}200 \dashrightarrow 00{:}22{:}20{.}128$ So right here is the cannula

NOTE Confidence: 0.51523453

 $00:22:20.128 \rightarrow 00:22:22.080$ in the right atrium,
$00{:}22{:}22{.}080 \dashrightarrow 00{:}22{:}24{.}192$ here's the cannula in the aorta and then

NOTE Confidence: 0.51523453

 $00{:}22{:}24{.}192 \dashrightarrow 00{:}22{:}28{.}800$ these two clamps are on the arch vessels.

NOTE Confidence: 0.51523453

 $00:22:28.800 \longrightarrow 00:22:30.564$ 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

 $00{:}22{:}32{.}700 \dashrightarrow 00{:}22{:}35{.}415$ that work in the ICU as a a typical

NOTE Confidence: 0.51523453

 $00{:}22{:}35{.}415 \dashrightarrow 00{:}22{:}37{.}265$ ECMO machine with one important

NOTE Confidence: 0.51523453

 $00{:}22{:}37{.}265 \dashrightarrow 00{:}22{:}39{.}418$ addition is that there's a reservoir

NOTE Confidence: 0.51523453

 $00:22:39.418 \longrightarrow 00:22:41.702$ so that when you when you put

NOTE Confidence: 0.51523453

 $00:22:41.702 \longrightarrow 00:22:43.274$ the cannula in the right atrium,

NOTE Confidence: 0.51523453

 $00:22:43.280 \longrightarrow 00:22:45.152$ you you drain the blood out of the heart.

NOTE Confidence: 0.51523453

 $00{:}22{:}45.160 \dashrightarrow 00{:}22{:}48.746$ 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

 $00{:}22{:}49{.}259 \dashrightarrow 00{:}22{:}50{.}798$ this step is,

NOTE Confidence: 0.51523453

 $00{:}22{:}50{.}800 \dashrightarrow 00{:}22{:}53{.}600$ is one of the key reasons why this

NOTE Confidence: 0.51523453

 $00{:}22{:}53.600 \dashrightarrow 00{:}22{:}56.279$ this system works as well as it does.

 $00:22:56.280 \rightarrow 00:22:58.359$ Here's a simplified version of the circuit.

NOTE Confidence: 0.51523453

 $00{:}22{:}58{.}360 \dashrightarrow 00{:}23{:}00{.}952$ So the venous blood comes out and it

NOTE Confidence: 0.51523453

 $00{:}23{:}00{.}952 \dashrightarrow 00{:}23{:}03{.}791$ goes into this reservoir and then a

NOTE Confidence: 0.51523453

 $00:23:03.791 \rightarrow 00:23:05.519$ 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

 $00{:}23{:}07{.}277 \dashrightarrow 00{:}23{:}09{.}120$ blood comes back into the aorta.

NOTE Confidence: 0.6415641

 $00:23:11.160 \longrightarrow 00:23:15.437$ So in conclusion, the NRP definitely works.

NOTE Confidence: 0.6415641

 $00:23:15.440 \rightarrow 00:23:16.960$ It's the I haven't shown you the data,

NOTE Confidence: 0.6415641

 $00{:}23{:}16{.}960 \dashrightarrow 00{:}23{:}19{.}492$ but the outcomes with this are excellent.

NOTE Confidence: 0.6415641

 $00{:}23{:}19{.}492 \dashrightarrow 00{:}23{:}22{.}100$ 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

 $00{:}23{:}24{.}406 \dashrightarrow 00{:}23{:}26{.}555$ than the superior to the outcomes for

NOTE Confidence: 0.5312258

 $00{:}23{:}26{.}560 \dashrightarrow 00{:}23{:}27{.}520$ a brain dead donor.

NOTE Confidence: 0.5312258

 $00{:}23{:}28{.}640 \dashrightarrow 00{:}23{:}31{.}986$ Also, because of rapid reperfusion and also

NOTE Confidence: 0.5312258

 $00:23:31.986 \rightarrow 00:23:34.920$ decompression of the circulatory system,

NOTE Confidence: 0.5312258

 $00:23:34.920 \rightarrow 00:23:36.748$ it's beneficial for the organs other

- NOTE Confidence: 0.5312258
- $00:23:36.748 \longrightarrow 00:23:38.831$ than the heart, specifically the patient.

00:23:38.831 $\operatorname{-->}$ 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

NOTE Confidence: 0.5312258

 $00:23:45.570 \rightarrow 00:23:48.509$ they do with the other approaches.

NOTE Confidence: 0.5312258

 $00{:}23{:}48.509 \dashrightarrow 00{:}23{:}51.750$ It saves A NRP saves a substantial

NOTE Confidence: 0.5312258

 $00:23:51.836 \longrightarrow 00:23:53.159$ amount of money.

NOTE Confidence: 0.5312258

 $00:23:53.160 \longrightarrow 00:23:56.282$ The the disposable cost for the Transmedics

NOTE Confidence: 0.5312258

 $00:23:56.282 \rightarrow 00:24:00.000$ 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

 $00:24:05.240 \longrightarrow 00:24:07.760$ So we're back to the ethical and

NOTE Confidence: 0.5312258

 $00{:}24{:}07.760 \dashrightarrow 00{:}24{:}09.855$ 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

 $00{:}24{:}11{.}689 \dashrightarrow 00{:}24{:}13{.}679$ their heart irreversibly stopped and

NOTE Confidence: 0.5312258

 $00{:}24{:}13.679 \dashrightarrow 00{:}24{:}15.652$ yet you restart the heart and you're

NOTE Confidence: 0.5312258

 $00{:}24{:}15.652 \dashrightarrow 00{:}24{:}18.520$ going to use it in some body else.

- $00:24:18.520 \longrightarrow 00:24:20.536$ NRP is done in site to inside
- NOTE Confidence: 0.5312258
- $00{:}24{:}20.536 \dashrightarrow 00{:}24{:}21.400$ the donor's body.
- NOTE Confidence: 0.5312258
- $00:24:21.400 \longrightarrow 00:24:23.234$ So you not only have the heart,
- NOTE Confidence: 0.5312258
- $00:24:23.240 \longrightarrow 00:24:25.718$ it's like it's maybe there's a distinction.
- NOTE Confidence: 0.5312258
- $00{:}24{:}25{.}720 \dashrightarrow 00{:}24{:}27{.}639$ The heart in this machine has been
- NOTE Confidence: 0.5312258
- $00{:}24{:}27.640 \dashrightarrow 00{:}24{:}29.494$ restarted versus the heart is in
- NOTE Confidence: 0.5312258
- $00{:}24{:}29{.}494 \dashrightarrow 00{:}24{:}31{.}719$ the donor and has been restarted.
- NOTE Confidence: 0.5312258
- $00:24:31.720 \longrightarrow 00:24:32.878$ 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
- $00{:}24{:}34{.}952 \dashrightarrow 00{:}24{:}36{.}559$ before you started the process.
- NOTE Confidence: 0.5312258
- $00:24:36.560 \longrightarrow 00:24:38.555$ And the third thing is you clamp
- NOTE Confidence: 0.5312258
- $00{:}24{:}38.555 \dashrightarrow 00{:}24{:}40.145$ the arch vessels to substitute
- NOTE Confidence: 0.5312258
- $00:24:40.145 \longrightarrow 00:24:42.440$ 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
- $00:24:43.800 \longrightarrow 00:24:44.940$ you know my reaction to that
- NOTE Confidence: 0.5312258
- $00:24:44.940 \longrightarrow 00:24:46.240$ 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.

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

NOTE Confidence: 0.5312258

 $00:24:53.119 \rightarrow 00:24:54.755$ not going to answer any questions

NOTE Confidence: 0.5312258

 $00:24:54.755 \longrightarrow 00:24:55.995$ about the ethics right,

NOTE Confidence: 0.5312258

 $00:24:56.000 \rightarrow 00:24:58.052$ because these guys are going to cover that.

NOTE Confidence: 0.5312258

 $00:24:58.052 \rightarrow 00:24:59.116$ But if are there,

NOTE Confidence: 0.5312258

 $00:24:59.120 \longrightarrow 00:25:00.758$ if there are any questions about the

NOTE Confidence: 0.2881369

 $00{:}25{:}00{.}800 \dashrightarrow 00{:}25{:}03{.}360$ procedure, I can answer those right now. So

NOTE Confidence: 0.2881369

 $00{:}25{:}06{.}120 \dashrightarrow 00{:}25{:}08{.}800$ OK, sounds good. I

NOTE Confidence: 0.2881369

 $00:25:08.800 \longrightarrow 00:25:10.038$ think that's that's great. Thank you.

NOTE Confidence: 0.38793692

 $00{:}25{:}14.280 \dashrightarrow 00{:}25{:}16.176$ Yeah, thanks. I'm sure that there may well

NOTE Confidence: 0.38793692

 $00{:}25{:}16.176 \dashrightarrow 00{:}25{:}18.159$ have been some questions and I I apologize.

NOTE Confidence: 0.38793692

 $00:25:18.160 \longrightarrow 00:25:19.602$ It will do the questions if any

NOTE Confidence: 0.38793692

 $00:25:19.602 \longrightarrow 00:25:20.914$ questions you have for all the

NOTE Confidence: 0.38793692

 $00{:}25{:}20{.}914 \dashrightarrow 00{:}25{:}21{.}994$ all the panelists will answer.

 $00:25:22.000 \rightarrow 00:25:23.848$ 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

 $00{:}25{:}25{.}080 \dashrightarrow 00{:}25{:}27{.}630$ 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

 $00:25:29.000 \rightarrow 00:25:31.359$ Bridget. But she wasn't at that prom.

NOTE Confidence: 0.38793692

 $00:25:31.360 \longrightarrow 00:25:32.356$ 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

 $00:25:35.217 \dashrightarrow 00:25:37.239$ I don't know, something like that.

NOTE Confidence: 0.38793692

 $00{:}25{:}37{.}240 \dashrightarrow 00{:}25{:}39{.}466$ Well, when Eric first reached out to

NOTE Confidence: 0.38793692

 $00{:}25{:}39.466 \dashrightarrow 00{:}25{:}42.170$ me to talk about this, I thought, well,

NOTE Confidence: 0.38793692

 $00{:}25{:}42.170 \dashrightarrow 00{:}25{:}45.535$ why don't I talk to to my personal

NOTE Confidence: 0.38793692

 $00:25:45.535 \rightarrow 00:25:48.560$ favorite pediatric ethicist about this?

NOTE Confidence: 0.38793692

 $00{:}25{:}48.560 \dashrightarrow 00{:}25{:}51.772$ And so I contacted Bob True and it turns out

NOTE Confidence: 0.38793692

 $00:25:51.772 \rightarrow 00:25:53.800$ Bob was very familiar with the situation,

NOTE Confidence: 0.38793692

 $00:25:53.800 \rightarrow 00:25:54.941$ was actually doing some work on it

NOTE Confidence: 0.38793692

 $00:25:54.941 \dashrightarrow 00:25:56.039$ with others on a national level.

- NOTE Confidence: 0.38793692
- $00:25:56.040 \rightarrow 00:25:57.759$ And I'm going to let him talk about that.

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

NOTE Confidence: 0.38793692

 $00:25:59.320 \longrightarrow 00:26:00.720$ we have heard here before.

NOTE Confidence: 0.38793692

 $00:26:00.720 \rightarrow 00:26:02.560$ 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

 $00{:}26{:}04{.}160 \dashrightarrow 00{:}26{:}06{.}040$ 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

 $00{:}26{:}07{.}920 \dashrightarrow 00{:}26{:}10{.}392$ Anaesthesia and Pediatrics at Harvard Medical

NOTE Confidence: 0.38793692

 $00{:}26{:}10.392 \dashrightarrow 00{:}26{:}12.600$ School and Boston Children's Hospital.

NOTE Confidence: 0.38793692

 $00{:}26{:}12.600 \dashrightarrow 00{:}26{:}14.268$ 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

 $00{:}26{:}15{.}981 \dashrightarrow 00{:}26{:}17{.}637$ and his board certified in Pediatrics,

NOTE Confidence: 0.38793692

 $00{:}26{:}17.640 \dashrightarrow 00{:}26{:}20.400$ anaes thesiology and pediatric critical care.

NOTE Confidence: 0.38793692

 $00{:}26{:}20{.}400 \dashrightarrow 00{:}26{:}22{.}703$ He also holds a master's degree in

NOTE Confidence: 0.38793692

 $00{:}26{:}22.703 \dashrightarrow 00{:}26{:}24.400$ philosophy from Brown University.

 $00{:}26{:}24{.}400 \dashrightarrow 00{:}26{:}26{.}032$ We actually had the same mentor NOTE Confidence: 0.38793692

 $00{:}26{:}26{.}032 \dashrightarrow 00{:}26{:}28{.}008$ 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

 $00{:}26{:}29{.}712 \dashrightarrow 00{:}26{:}31{.}215$ 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

 $00{:}26{:}33{.}328 \dashrightarrow 00{:}26{:}35{.}281$ 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

 $00:26:36.433 \longrightarrow 00:26:38.937$ 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

 $00{:}26{:}40.561 \dashrightarrow 00{:}26{:}42.636$ ethics at Harvard Medical School.

NOTE Confidence: 0.38793692

 $00{:}26{:}42.640 \dashrightarrow 00{:}26{:}45.188$ 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

 $00{:}26{:}45{.}920 \dashrightarrow 00{:}26{:}47{.}522$ 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

 $00:26:48.943 \longrightarrow 00:26:50.559$ then on a national level as well.

NOTE Confidence: 0.38793692

 $00:26:50.560 \longrightarrow 00:26:51.436$ I'm in 2004,

- NOTE Confidence: 0.38793692
- $00:26:51.436 \longrightarrow 00:26:52.896$ he was recruited at Harvard

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

NOTE Confidence: 0.38793692

 $00{:}26{:}54{.}160 \dashrightarrow 00{:}26{:}56{.}995$ who was the his mentor and mind

NOTE Confidence: 0.38793692

 $00:26:56.995 \rightarrow 00:26:58.552$ actually in building the Division

NOTE Confidence: 0.38793692

 $00{:}26{:}58{.}552 \dashrightarrow 00{:}26{:}59{.}992$ 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

 $00:27:16.950 \longrightarrow 00:27:20.190$ 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

 $00{:}27{:}21{.}359 \dashrightarrow 00{:}27{:}22{.}630$ 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

 $00{:}27{:}26.010 \dashrightarrow 00{:}27{:}27.510$ well as an accomplished clinician.

 $00:27:27.510 \longrightarrow 00:27:28.795$ 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

 $00:27:33.750 \longrightarrow 00:27:34.950$ very much for inviting me.

NOTE Confidence: 0.6804405

 $00:27:34.950 \longrightarrow 00:27:36.306$ It's always great to be here.

NOTE Confidence: 0.6804405

 $00:27:36.310 \longrightarrow 00:27:37.570$ Doctor Thompson, thank you for

NOTE Confidence: 0.6804405

 $00{:}27{:}37{.}570 \dashrightarrow 00{:}27{:}38{.}830$ the really nice overview there.

NOTE Confidence: 0.6804405

 $00:27:38.830 \longrightarrow 00:27:41.426$ 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

 $00{:}27{:}43{.}480 \dashrightarrow 00{:}27{:}46{.}555$ I'm going to talk a little bit about some NOTE Confidence: 0.6804405

 $00{:}27{:}46.555 \dashrightarrow 00{:}27{:}49.600$ of the ethical issues that are involved,

NOTE Confidence: 0.6804405

 $00{:}27{:}49.600 \dashrightarrow 00{:}27{:}53.031$ and I want to start with this point

NOTE Confidence: 0.6804405

 $00{:}27{:}53.031 \dashrightarrow 00{:}27{:}55.893$ that the fundamental challenge of organ

NOTE Confidence: 0.6804405

 $00{:}27{:}55{.}893 \dashrightarrow 00{:}27{:}58{.}874$ procurement and transplantation is the

NOTE Confidence: 0.6804405

 $00{:}27{:}58.874 \dashrightarrow 00{:}28{:}01.559$ necessity of obtaining living organs

NOTE Confidence: 0.6804405

 $00:28:01.560 \rightarrow 00:28:04.280$ from patients who are deemed to be dead.

 $00:28:04.280 \longrightarrow 00:28:06.224$ 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

 $00:28:08.434 \rightarrow 00:28:10.080$ to the conversation we have today.

NOTE Confidence: 0.6804405

 $00{:}28{:}10.080 \dashrightarrow 00{:}28{:}11.914$ 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

 $00{:}28{:}16.426 \dashrightarrow 00{:}28{:}19.840$ a body that is cold and Gray and stiff,

NOTE Confidence: 0.6804405

 $00{:}28{:}19{.}840 \dashrightarrow 00{:}28{:}22{.}966$ I mean, that understanding of death can

NOTE Confidence: 0.6804405

 $00{:}28{:}22.966 \dashrightarrow 00{:}28{:}24.596$ never lead to transplantable organs.

NOTE Confidence: 0.6804405

 $00{:}28{:}24.600 \dashrightarrow 00{:}28{:}26.877$ Those organs are just as dead as the body.

NOTE Confidence: 0.6804405

 $00{:}28{:}26{.}880 \dashrightarrow 00{:}28{:}29{.}754$ So we're always struggling with this

NOTE Confidence: 0.6804405

 $00{:}28{:}29{.}754 \dashrightarrow 00{:}28{:}32{.}065$ balance between wanting that body

NOTE Confidence: 0.6804405

 $00:28:32.065 \longrightarrow 00:28:34.601$ to be as alive as possible so that

NOTE Confidence: 0.6804405

 $00{:}28{:}34{.}601 \dashrightarrow 00{:}28{:}37{.}279$ the organs are as good as possible.

NOTE Confidence: 0.6804405

 $00{:}28{:}37{.}280 \dashrightarrow 00{:}28{:}39{.}200$ So let me I'm going to come back.

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

NOTE Confidence: 0.6804405

 $00{:}28{:}40{.}475 \dashrightarrow 00{:}28{:}43{.}315$ I'll I'll reiterate some of what you covered.

NOTE Confidence: 0.6804405

 $00{:}28{:}43{.}320 \dashrightarrow 00{:}28{:}44{.}872$ 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

 $00:28:47.088 \rightarrow 00:28:49.015$ the whole thing about NRP is really

NOTE Confidence: 0.6804405

 $00{:}28{:}49.015 \dashrightarrow 00{:}28{:}51.136$ convoluted and a lot of times the

NOTE Confidence: 0.6804405

 $00:28:51.136 \rightarrow 00:28:53.079$ conversations seem to go down a rabbit hole.

NOTE Confidence: 0.6804405

 $00{:}28{:}53{.}080 \dashrightarrow 00{:}28{:}55{.}611$ 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

 $00:28:57.942 \longrightarrow 00:28:59.200$ and comprehensible.

NOTE Confidence: 0.6804405

 $00{:}28{:}59{.}200 \dashrightarrow 00{:}29{:}02{.}000$ And so NRP is considered a version of

NOTE Confidence: 0.6804405

 $00:29:02.000 \rightarrow 00:29:03.595$ donation after circulatory determination

NOTE Confidence: 0.6804405

 $00:29:03.595 \rightarrow 00:29:06.472$ of death or what we call DCD,

NOTE Confidence: 0.6804405

 $00:29:06.480 \longrightarrow 00:29:09.456$ which has been used since the early 1990s

NOTE Confidence: 0.6804405

 $00:29:09.456 \rightarrow 00:29:12.678$ and is generally pretty well accepted.

- NOTE Confidence: 0.6804405
- $00:29:12.680 \longrightarrow 00:29:14.968$ And let me go through repeating to a

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

NOTE Confidence: 0.6804405

 $00{:}29{:}17.000 \dashrightarrow 00{:}29{:}19.320$ what that sequence looks like.

NOTE Confidence: 0.6804405

 $00:29:19.320 \longrightarrow 00:29:21.580$ So we have a patient who's terminally

NOTE Confidence: 0.6804405

 $00{:}29{:}21{.}580 \dashrightarrow 00{:}29{:}24{.}030$ ill A decision has been made to

NOTE Confidence: 0.6804405

 $00:29:24.030 \longrightarrow 00:29:26.061$ withdraw life support with death

NOTE Confidence: 0.6804405

 $00:29:26.061 \rightarrow 00:29:28.076$ being both inevitable and imminent.

NOTE Confidence: 0.6804405

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

NOTE Confidence: 0.6804405

 $00{:}29{:}28{.}463 \dashrightarrow 00{:}29{:}31{.}144$ these are patients who are on a

NOTE Confidence: 0.6804405

 $00:29:31.144 \rightarrow 00:29:33.970$ 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

 $00{:}29{:}35{.}960 \dashrightarrow 00{:}29{:}39{.}000$ they will die within 30 minutes or so,

NOTE Confidence: 0.6804405

 $00:29:39.000 \rightarrow 00:29:42.360$ certainly within an hour or two.

NOTE Confidence: 0.6804405

 $00{:}29{:}42.360 \dashrightarrow 00{:}29{:}45.120$ The patient or the surrogate has

NOTE Confidence: 0.6804405

 $00{:}29{:}45{.}120 \dashrightarrow 00{:}29{:}47{.}285$ given authorization for this patient

- $00:29:47.285 \longrightarrow 00:29:49.360$ 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
- $00:29:51.072 \rightarrow 00:29:52.356$ typically a ventilator,
- NOTE Confidence: 0.6804405
- $00{:}29{:}52{.}360 \dashrightarrow 00{:}29{:}54{.}852$ but could also be medications that are
- NOTE Confidence: 0.6804405
- $00{:}29{:}54.852 \dashrightarrow 00{:}29{:}56.586$ supporting blood pressure, etcetera.
- NOTE Confidence: 0.6804405
- $00{:}29{:}56{.}586 \dashrightarrow 00{:}29{:}59{.}916$ Sedatives and analgesics are given,
- NOTE Confidence: 0.6804405
- $00{:}29{:}59{.}920 \dashrightarrow 00{:}30{:}02{.}336$ but only as much as is necessary to
- NOTE Confidence: 0.6804405
- $00:30:02.336 \rightarrow 00:30:04.517$ ensure the comfort of the patient,
- NOTE Confidence: 0.6804405
- $00:30:04.520 \longrightarrow 00:30:06.526$ not to speed up the patient's
- NOTE Confidence: 0.6804405
- $00:30:06.526 \longrightarrow 00:30:07.338$ death deliberately.
- NOTE Confidence: 0.6804405
- $00{:}30{:}07{.}338 \dashrightarrow 00{:}30{:}10.252$ 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
- $00:30:12.876 \longrightarrow 00:30:15.196$ allowing the patient to die,
- NOTE Confidence: 0.6804405
- $00:30:15.200 \longrightarrow 00:30:18.920$ not causing the patient to die.
- NOTE Confidence: 0.6804405
- $00:30:18.920 \rightarrow 00:30:21.880$ 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
- $00:30:22.066 \rightarrow 00:30:24.680$ if and when the patient becomes pulseless,

 $00{:}30{:}24.680 \dashrightarrow 00{:}30{:}27.620$ the five minute hands off period begins

NOTE Confidence: 0.6804405

 $00{:}30{:}27.620 \dashrightarrow 00{:}30{:}29.920$ to observe for auto resuscitation.

NOTE Confidence: 0.6804405

 $00:30:29.920 \rightarrow 00:30:32.880$ Where does this 5 minute interval come from?

NOTE Confidence: 0.6804405

 $00:30:32.880 \longrightarrow 00:30:35.696$ What we're looking for here is whether the

NOTE Confidence: 0.6804405

 $00{:}30{:}35{.}696 \dashrightarrow 00{:}30{:}38{.}675$ 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

 $00:30:41.668 \rightarrow 00:30:44.519$ past five minutes of pulselessness,

NOTE Confidence: 0.857296

 $00{:}30{:}44{.}520 \dashrightarrow 00{:}30{:}47{.}035$ 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

 $00{:}30{:}50{.}080 \dashrightarrow 00{:}30{:}53{.}293$ But that does not mean that cardiac

NOTE Confidence: 0.857296

 $00:30:53.293 \rightarrow 00:30:56.000$ 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

 $00:30:57.840 \longrightarrow 00:30:59.700$ many, indeed most patients

NOTE Confidence: 0.857296

 $00{:}30{:}59{.}700 \dashrightarrow 00{:}31{:}01{.}560$ could still be resuscitated.

 $00:31:01.560 \rightarrow 00:31:03.300$ And this happens countless times

NOTE Confidence: 0.857296

 $00:31:03.300 \longrightarrow 00:31:05.355$ 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

 $00:31:07.172 \longrightarrow 00:31:08.236$ the patient's already been

NOTE Confidence: 0.857296

 $00:31:08.236 \longrightarrow 00:31:09.870$ 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

 $00{:}31{:}11{.}115 \dashrightarrow 00{:}31{:}12{.}360$ at resuscitating people,

NOTE Confidence: 0.857296

 $00:31:12.360 \longrightarrow 00:31:13.383$ as are paramedics.

NOTE Confidence: 0.857296

 $00{:}31{:}13{.}383 \dashrightarrow 00{:}31{:}15{.}770$ And so by no means is the

NOTE Confidence: 0.857296

 $00:31:15.853 \longrightarrow 00:31:18.025$ loss of circulatory function

NOTE Confidence: 0.857296

 $00:31:18.025 \longrightarrow 00:31:20.197$ 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

 $00{:}31{:}26{.}438 \dashrightarrow 00{:}31{:}29{.}640$ a DNR order in place that would

NOTE Confidence: 0.857296

 $00:31:29.640 \rightarrow 00:31:32.080$ ethically and legally prohibit any

- NOTE Confidence: 0.857296
- $00:31:32.080 \rightarrow 00:31:34.584$ attempt to establish recirculation.

 $00:31:34.584 \rightarrow 00:31:35.960$ 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

 $00:31:39.056 \rightarrow 00:31:40.080$ 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

 $00:31:41.424 \longrightarrow 00:31:42.664$ the patient dead and then turn

NOTE Confidence: 0.857296

 $00{:}31{:}42.664 \dashrightarrow 00{:}31{:}43.906$ around and have them have them

NOTE Confidence: 0.857296

 $00:31:43.906 \rightarrow 00:31:45.159$ 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

 $00:31:47.560 \longrightarrow 00:31:48.505$ In other words,

NOTE Confidence: 0.857296

 $00:31:48.505 \longrightarrow 00:31:50.395$ after 5 minutes the lingo that

NOTE Confidence: 0.857296

 $00{:}31{:}50{.}395 \dashrightarrow 00{:}31{:}52{.}260$ we use is that pulselessness

NOTE Confidence: 0.857296

 $00:31:52.260 \longrightarrow 00:31:54.115$ is deemed to be permanent,

NOTE Confidence: 0.857296

 $00:31:54.120 \longrightarrow 00:31:57.120$ meaning that at that point we

 $00:31:57.120 \longrightarrow 00:31:58.961$ 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

 $00{:}32{:}01{.}005 \dashrightarrow 00{:}32{:}03{.}375$ that the loss of cardiac function

NOTE Confidence: 0.857296

 $00{:}32{:}03{.}375 \dashrightarrow 00{:}32{:}05{.}038$ will become irreversible within

NOTE Confidence: 0.857296

 $00{:}32{:}05{.}038 \dashrightarrow 00{:}32{:}07{.}038$ the next period of time.

NOTE Confidence: 0.56741834

 $00{:}32{:}09{.}760 \dashrightarrow 00{:}32{:}11.872$ At that point death is declared

NOTE Confidence: 0.56741834

 $00:32:11.872 \rightarrow 00:32:13.743$ and then organ procurement begins

NOTE Confidence: 0.56741834

 $00:32:13.743 \rightarrow 00:32:15.718$ 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

 $00:32:18.339 \rightarrow 00:32:20.595$ contains the main ethical issues here.

NOTE Confidence: 0.56741834

 $00{:}32{:}20.600 \dashrightarrow 00{:}32{:}23.672$ So how does standard DCD differ

NOTE Confidence: 0.56741834

 $00:32:23.672 \dashrightarrow 00:32:26.366$ from thorical abdominal NRP what

NOTE Confidence: 0.56741834

 $00:32:26.366 \rightarrow 00:32:29.116$ 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

 $00{:}32{:}30{.}648 \dashrightarrow 00{:}32{:}32{.}940$ the organs must be recovered as

NOTE Confidence: 0.56741834

 $00:32:33.022 \rightarrow 00:32:35.507$ quickly as possible after the

- NOTE Confidence: 0.56741834
- 00:32:35.507 --> 00:32:37.488 determination of death, right?

 $00:32:37.488 \longrightarrow 00:32:39.440$ Once the heart stops,

NOTE Confidence: 0.56741834

 $00:32:39.440 \longrightarrow 00:32:41.477$ those organs are no longer getting oxygen,

NOTE Confidence: 0.56741834

 $00:32:41.480 \rightarrow 00:32:42.878$ they're no longer getting any blood.

NOTE Confidence: 0.56741834

 $00{:}32{:}42.880 \dashrightarrow 00{:}32{:}45.932$ You got to get them out as

NOTE Confidence: 0.56741834

 $00:32:45.932 \longrightarrow 00:32:47.240$ quickly as possible.

NOTE Confidence: 0.56741834

 $00:32:47.240 \rightarrow 00:32:48.915$ They in some circumstances might

NOTE Confidence: 0.56741834

 $00:32:48.915 \longrightarrow 00:32:49.920$ be immediately transplanted.

NOTE Confidence: 0.56741834

 $00{:}32{:}49{.}920 \dashrightarrow 00{:}32{:}52{.}200$ But as Doctor Thompson said in

NOTE Confidence: 0.56741834

 $00:32:52.200 \longrightarrow 00:32:53.778$ the the sort of standard these

NOTE Confidence: 0.56741834

 $00:32:53.778 \longrightarrow 00:32:55.921$ days is that the organs are placed

NOTE Confidence: 0.56741834

 $00{:}32{:}55{.}921 \dashrightarrow 00{:}32{:}57{.}636$ on ex vivo circulation devices.

NOTE Confidence: 0.56741834

 $00{:}32{:}57{.}640 \dashrightarrow 00{:}33{:}00{.}586$ 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

 $00:33:03.145 \rightarrow 00:33:06.240$ their function before they are transplanted.

 $00:33:06.240 \rightarrow 00:33:09.714$ 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

 $00:33:11.235 \longrightarrow 00:33:13.255$ restoring circulation to all

NOTE Confidence: 0.56741834

 $00{:}33{:}13.255 \dashrightarrow 00{:}33{:}16.387$ of the vital organs in the body

NOTE Confidence: 0.56741834

 $00{:}33{:}16{.}387 \dashrightarrow 00{:}33{:}17{.}919$ except for the brain.

NOTE Confidence: 0.56741834

 $00{:}33{:}17{.}920 \dashrightarrow 00{:}33{:}19{.}700$ And ideally that organ

NOTE Confidence: 0.56741834

 $00:33:19.700 \longrightarrow 00:33:21.480$ 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

 $00:33:25.632 \longrightarrow 00:33:27.156$ be completely with drawn.

NOTE Confidence: 0.56741834

 $00{:}33{:}27.160 \dashrightarrow 00{:}33{:}29.944$ 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

 $00:33:32.312 \longrightarrow 00:33:34.840$ The heart's pumping blood,

NOTE Confidence: 0.56741834

 $00:33:34.840 \longrightarrow 00:33:36.564$ the liver's making bile,

NOTE Confidence: 0.56741834

 $00:33:36.564 \rightarrow 00:33:38.719$ the kidneys are making urine,

NOTE Confidence: 0.56741834

 $00:33:38.720 \longrightarrow 00:33:40.112$ the intestines are pink,

- NOTE Confidence: 0.56741834
- $00:33:40.112 \longrightarrow 00:33:41.156$ and they're functioning.

00:33:41.160 --> 00:33:41.860 I mean,

NOTE Confidence: 0.56741834

 $00:33:41.860 \rightarrow 00:33:42.560$ everything's working

NOTE Confidence: 0.56741834

 $00:33:42.560 \rightarrow 00:33:43.960$ perfectly below the neck,

NOTE Confidence: 0.56741834

 $00:33:43.960 \longrightarrow 00:33:46.185$ 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

 $00:33:49.054 \rightarrow 00:33:51.839$ transplanting them into somebody else.

NOTE Confidence: 0.56741834

 $00{:}33{:}51{.}840 \dashrightarrow 00{:}33{:}53{.}500$ So what are the ethical and

NOTE Confidence: 0.56741834

 $00:33:53.500 \rightarrow 00:33:54.880$ legal challenges to NRP?

NOTE Confidence: 0.56741834

 $00:33:54.880 \longrightarrow 00:33:57.226$ There's two first having to do

NOTE Confidence: 0.56741834

 $00{:}33{:}57{.}226 \dashrightarrow 00{:}33{:}59{.}165$ with restoration of circulation and

NOTE Confidence: 0.56741834

 $00{:}33{:}59{.}165 \dashrightarrow 00{:}34{:}01{.}328$ the second having to do with the

NOTE Confidence: 0.56741834

 $00{:}34{:}01{.}328 \dashrightarrow 00{:}34{:}03{.}398$ occlusion of the cerebral arteries.

NOTE Confidence: 0.56741834

 $00{:}34{:}03{.}400 \dashrightarrow 00{:}34{:}05{.}836$ So let's talk about the first one again.

NOTE Confidence: 0.56741834

 $00{:}34{:}05{.}836 \dashrightarrow 00{:}34{:}08{.}216$ A prerequisite of death determination

 $00{:}34{:}08{.}216 \dashrightarrow 00{:}34{:}12{.}031$ in DCD is that no attempt will be

NOTE Confidence: 0.56741834

 $00{:}34{:}12.031 \dashrightarrow 00{:}34{:}14.316$ made to restore the circulation.

NOTE Confidence: 0.56741834

 $00:34:14.320 \longrightarrow 00:34:15.718$ I mean, that is the assumption.

NOTE Confidence: 0.56741834

 $00{:}34{:}15.720 \dashrightarrow 00{:}34{:}16.184$ If.

NOTE Confidence: 0.56741834

00:34:16.184 --> 00:34:18.040 If that's not true,

NOTE Confidence: 0.56741834

 $00{:}34{:}18{.}040 \dashrightarrow 00{:}34{:}20{.}008$ then you cannot pronounce the person

NOTE Confidence: 0.56741834

 $00:34:20.008 \longrightarrow 00:34:22.957$ dead after that 5 minute hands off interval.

NOTE Confidence: 0.56741834

 $00{:}34{:}22{.}960 \dashrightarrow 00{:}34{:}25{.}292$ NRP violates this prerequisite,

NOTE Confidence: 0.56741834

 $00{:}34{:}25{.}292 \dashrightarrow 00{:}34{:}27{.}722$ since NRP absolutely requires the

NOTE Confidence: 0.56741834

 $00{:}34{:}27.722 \dashrightarrow 00{:}34{:}30.080$ restoration of the circulation.

NOTE Confidence: 0.56741834

 $00:34:30.080 \longrightarrow 00:34:32.164$ 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

 $00{:}34{:}35{.}378 \dashrightarrow 00{:}34{:}37{.}548$ that in NRP the declaration

NOTE Confidence: 0.56741834

 $00{:}34{:}37{.}548 \dashrightarrow 00{:}34{:}39{.}718$ of death is not valid.

NOTE Confidence: 0.56741834

 $00:34:39.720 \longrightarrow 00:34:42.785$ You violated that prohibition against

NOTE Confidence: 0.56741834

 $00:34:42.785 \rightarrow 00:34:46.760$ an attempt to restart the circulation.

- NOTE Confidence: 0.56741834
- 00:34:46.760 --> 00:34:47.106 Now,
- NOTE Confidence: 0.56741834
- $00:34:47.106 \longrightarrow 00:34:49.528$ the way that this has been rebutted
- NOTE Confidence: 0.56741834
- $00:34:49.528 \longrightarrow 00:34:52.720$ in the literature is to say that the
- NOTE Confidence: 0.56741834
- $00{:}34{:}52{.}720 \dashrightarrow 00{:}34{:}54{.}844$ intention and the intention in NRP
- NOTE Confidence: 0.56741834
- $00:34:54.844 \rightarrow 00:34:57.076$ is not to resuscitate the patient.
- NOTE Confidence: 0.56741834
- $00{:}34{:}57{.}080 \dashrightarrow 00{:}34{:}59{.}040$ That's not what they're trying to do.
- NOTE Confidence: 0.56741834
- $00:34:59.040 \rightarrow 00:35:02.600$ The intention is only to perfuse the organs.
- NOTE Confidence: 0.56741834
- $00:35:02.600 \rightarrow 00:35:04.240$ But regardless of the intention,
- NOTE Confidence: 0.56741834
- $00{:}35{:}04{.}240 \dashrightarrow 00{:}35{:}05{.}640$ the result is the same.
- NOTE Confidence: 0.56741834
- $00:35:05.640 \longrightarrow 00:35:07.176$ Circulation is restored.
- NOTE Confidence: 0.56741834
- $00:35:07.176 \dashrightarrow 00:35:10.248$ And this was addressed in some
- NOTE Confidence: 0.56741834
- $00{:}35{:}10{.}248 \dashrightarrow 00{:}35{:}12{.}290$ detail a while back by two
- NOTE Confidence: 0.56741834
- $00:35:12.290 \rightarrow 00:35:14.520$ prominent healthcare lawyers,
- NOTE Confidence: 0.56741834
- 00:35:14.520 --> 00:35:17.680 Alex Glazier and Alex Capron,
- NOTE Confidence: 0.56741834
- $00:35:17.680 \longrightarrow 00:35:19.339$ in an article they wrote in the
- NOTE Confidence: 0.56741834

 $00:35:19.339 \rightarrow 00:35:20.840$ American Journal of Transplantation.

NOTE Confidence: 0.56741834

 $00:35:20.840 \longrightarrow 00:35:23.120$ And they addressed this point

NOTE Confidence: 0.56741834

 $00:35:23.120 \longrightarrow 00:35:25.400$ about the role of intention.

NOTE Confidence: 0.56741834

 $00:35:25.400 \longrightarrow 00:35:26.615$ Do intentions matter?

NOTE Confidence: 0.56741834

 $00{:}35{:}26.615 \dashrightarrow 00{:}35{:}28.640$ And they wrote that although

NOTE Confidence: 0.56741834

 $00:35:28.640 \longrightarrow 00:35:30.477$ intentions may be important

NOTE Confidence: 0.56741834

 $00{:}35{:}30{.}477 \dashrightarrow 00{:}35{:}32{.}397$ when evaluating the ethical

NOTE Confidence: 0.56741834

 $00:35:32.397 \rightarrow 00:35:34.317$ acceptability of physicians actions,

NOTE Confidence: 0.56741834

 $00{:}35{:}34{.}320 \dashrightarrow 00{:}35{:}36{.}576$ the legal standard for determining

NOTE Confidence: 0.56741834

 $00{:}35{:}36{.}576 \dashrightarrow 00{:}35{:}38{.}916$ death is bare of intent.

NOTE Confidence: 0.9437477

 $00{:}35{:}38{.}920 \dashrightarrow 00{:}35{:}41{.}200$ A patient is dead when circulation

NOTE Confidence: 0.9437477

 $00{:}35{:}41.200 \dashrightarrow 00{:}35{:}43.760$ neither can nor will resume,

NOTE Confidence: 0.9437477

 $00:35:43.760 \dashrightarrow 00:35:46.760$ 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

 $00{:}35{:}48{.}590 \dashrightarrow 00{:}35{:}51{.}468$ can nor will resume in order for that

NOTE Confidence: 0.9437477

 $00:35:51.468 \rightarrow 00:35:53.436$ determination of death to be valid.

 $00:35:53.440 \rightarrow 00:35:56.797$ They go on to say that even assumptions that,

NOTE Confidence: 0.9437477

 $00{:}35{:}56{.}800 \dashrightarrow 00{:}35{:}59{.}032$ for example, the patient is in a state

NOTE Confidence: 0.9437477

 $00:35:59.032 \dashrightarrow 00:36:00.957$ where meaningful existence is not possible,

NOTE Confidence: 0.9437477

 $00:36:00.960 \rightarrow 00:36:02.730$ that trying to induce spontaneous

NOTE Confidence: 0.9437477

 $00:36:02.730 \rightarrow 00:36:04.920$ resumption of circulation would be futile,

NOTE Confidence: 0.9437477

 $00{:}36{:}04{.}920 \dashrightarrow 00{:}36{:}06{.}908$ or even that the NRP protocol is

NOTE Confidence: 0.9437477

 $00:36:06.908 \dashrightarrow 00:36:08.639$ consistent with the donor's wishes.

NOTE Confidence: 0.9437477

 $00{:}36{:}08{.}640 \dashrightarrow 00{:}36{:}10{.}680$ These are all irrelevant to whether

NOTE Confidence: 0.9437477

 $00{:}36{:}10.680 \dashrightarrow 00{:}36{:}13.080$ the patient is deceased under U.S.

NOTE Confidence: 0.9437477

 $00:36:13.080 \rightarrow 00:36:16.615$ law, which turns on the person's physical

NOTE Confidence: 0.9437477

 $00:36:16.615 \rightarrow 00:36:20.440$ condition and not on anyone's intention.

NOTE Confidence: 0.9437477

 $00{:}36{:}20{.}440 \dashrightarrow 00{:}36{:}22{.}000$ And so in my mind,

NOTE Confidence: 0.9437477

 $00:36:22.000 \longrightarrow 00:36:25.012$ I think it's pretty clear that

NOTE Confidence: 0.9437477

 $00{:}36{:}25.012 \dashrightarrow 00{:}36{:}27.020$ the restoration of circulation

NOTE Confidence: 0.9437477

 $00{:}36{:}27.106 \dashrightarrow 00{:}36{:}28.896$ in NRP means that the original

 $00{:}36{:}28.896 \dashrightarrow 00{:}36{:}30.840$ 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

 $00{:}36{:}33{.}396 \dashrightarrow 00{:}36{:}35{.}540$ the time that cannulation was

NOTE Confidence: 0.9437477

 $00:36:35.540 \rightarrow 00:36:38.120$ 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

 $00:36:39.680 \longrightarrow 00:36:41.240$ of the cerebral arteries.

NOTE Confidence: 0.9437477

 $00:36:41.240 \longrightarrow 00:36:43.118$ Say a few things about that.

NOTE Confidence: 0.9437477

 $00:36:43.120 \longrightarrow 00:36:44.740$ The first little preamble here on

NOTE Confidence: 0.9437477

 $00{:}36{:}44.740 \dashrightarrow 00{:}36{:}46.399$ what's called the dead donor rule,

NOTE Confidence: 0.9437477

 $00:36:46.400 \rightarrow 00:36:47.795$ I'm sure many of you are familiar with it.

NOTE Confidence: 0.9437477

 $00{:}36{:}47.800 \dashrightarrow 00{:}36{:}50.638$ It's it's not an actual law,

NOTE Confidence: 0.9437477

 $00{:}36{:}50{.}640 \dashrightarrow 00{:}36{:}52{.}964$ but it's this sort of ethical presumption

NOTE Confidence: 0.9437477

 $00{:}36{:}52{.}964 \dashrightarrow 00{:}36{:}55{.}708$ that underlies all of our practices about

NOTE Confidence: 0.9437477

 $00{:}36{:}55{.}708 \dashrightarrow 00{:}36{:}57{.}396$ organ procurement and transplantation.

NOTE Confidence: 0.9437477

 $00{:}36{:}57{.}400 \dashrightarrow 00{:}36{:}59{.}640$ You can put it in a couple of different ways.

NOTE Confidence: 0.9437477

 $00:36:59.640 \longrightarrow 00:37:01.596$ Either vital organs may not be

- NOTE Confidence: 0.9437477
- 00:37:01.596 00:37:03.480 procured from patients who are dead,

 $00{:}37{:}03{.}480 \dashrightarrow 00{:}37{:}05{.}979$ or you can say that physicians may

NOTE Confidence: 0.9437477

 $00:37:05.979 \longrightarrow 00:37:08.271$ not cause death when procuring

NOTE Confidence: 0.9437477

 $00:37:08.271 \longrightarrow 00:37:10.559$ vital organs for transplantation.

NOTE Confidence: 0.9437477

 $00{:}37{:}10.560 \dashrightarrow 00{:}37{:}10.956$ Now,

NOTE Confidence: 0.9437477

 $00{:}37{:}10.956 \dashrightarrow 00{:}37{:}12.936$ standard DCD is compliant with

NOTE Confidence: 0.9437477

 $00:37:12.936 \longrightarrow 00:37:14.520$ the dead donor rule.

NOTE Confidence: 0.9437477

 $00:37:14.520 \longrightarrow 00:37:14.898$ Why?

NOTE Confidence: 0.9437477

 $00{:}37{:}14.898 \dashrightarrow 00{:}37{:}16.788$ 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

 $00:37:19.302 \longrightarrow 00:37:21.594$ the patients are allowed to die.

NOTE Confidence: 0.9437477

 $00{:}37{:}21.600 \dashrightarrow 00{:}37{:}23.720$ They're not caused to die.

NOTE Confidence: 0.8631241

 $00:37:26.320 \dashrightarrow 00:37:28.692$ The problem with occlusion of the cerebral

NOTE Confidence: 0.8631241

 $00{:}37{:}28.692 \dashrightarrow 00{:}37{:}32.167$ arteries in DC in NRP is that occlusion

NOTE Confidence: 0.8631241

 $00{:}37{:}32.167 \dashrightarrow 00{:}37{:}35.555$ is absolutely a necessary step for NRP.

00:37:35.560 - 00:37:38.925 Why? They've done experiments in

NOTE Confidence: 0.8631241

 $00{:}37{:}38{.}925 \dashrightarrow 00{:}37{:}42{.}696$ pigs where they did NRP but without

NOTE Confidence: 0.8631241

 $00:37:42.696 \dashrightarrow 00:37:44.760$ clamping the cerebral arteries.

NOTE Confidence: 0.8631241

 $00:37:44.760 \longrightarrow 00:37:46.560$ And some of those pigs started

NOTE Confidence: 0.8631241

 $00{:}37{:}46{.}560 \dashrightarrow 00{:}37{:}48{.}759$ to move and to breathe again.

NOTE Confidence: 0.8631241

 $00{:}37{:}48.760 \dashrightarrow 00{:}37{:}51.140$ So clearly if you don't clamp these

NOTE Confidence: 0.8631241

 $00{:}37{:}51{.}140 \dashrightarrow 00{:}37{:}53{.}872$ 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

 $00{:}37{:}55{.}680 \dashrightarrow 00{:}37{:}57{.}240$ taking out the heart for transplantation

NOTE Confidence: 0.8631241

 $00{:}37{:}57{.}240 \dashrightarrow 00{:}37{:}59{.}307$ at a time that the person may be

NOTE Confidence: 0.8631241

 $00{:}37{:}59{.}307 \dashrightarrow 00{:}38{:}00{.}880$ actually starting to move or breathe.

NOTE Confidence: 0.8631241

 $00:38:00.880 \dashrightarrow 00:38:03.256$ So it's absolutely necessary

NOTE Confidence: 0.8631241

 $00:38:03.256 \rightarrow 00:38:05.038$ for performing NRP.

NOTE Confidence: 0.8631241

 $00:38:05.040 \rightarrow 00:38:06.690$ It's also sufficient to actually cause

NOTE Confidence: 0.8631241

 $00:38:06.690 \rightarrow 00:38:08.542$ the death of the patient, right?

NOTE Confidence: 0.8631241

 $00:38:08.542 \rightarrow 00:38:10.354$ We haven't declared the patient dead,

 $00:38:10.360 \rightarrow 00:38:12.766$ but occlusion of the cerebral arteries

NOTE Confidence: 0.8631241

 $00{:}38{:}12.766 \dashrightarrow 00{:}38{:}15.280$ causes a non survivable brain injury.

NOTE Confidence: 0.8631241

 $00{:}38{:}15{.}280 \dashrightarrow 00{:}38{:}18{.}480$ 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

 $00{:}38{:}20{.}505 \dashrightarrow 00{:}38{:}22{.}720$ clear that it violates the dead donor rule

NOTE Confidence: 0.87311363

 $00{:}38{:}24{.}960 \dashrightarrow 00{:}38{:}26{.}694$ that physicians must not 'cause the

NOTE Confidence: 0.87311363

 $00:38:26.694 \rightarrow 00:38:28.240$ death that will actually in NRP,

NOTE Confidence: 0.87311363

 $00{:}38{:}28{.}240 \dashrightarrow 00{:}38{:}30{.}406$ 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

 $00{:}38{:}33.009 \dashrightarrow 00{:}38{:}35.193$ organs through this process of NRP.

NOTE Confidence: 0.87311363

 $00{:}38{:}35{.}200 \dashrightarrow 00{:}38{:}37{.}013$ So that's kind of the summary of

NOTE Confidence: 0.87311363

 $00{:}38{:}37{.}013 \dashrightarrow 00{:}38{:}38{.}816$ 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

 $00{:}38{:}40.878 \dashrightarrow 00{:}38{:}42.558$ is that the two challenges is that

NOTE Confidence: 0.87311363

 $00{:}38{:}42.617 \dashrightarrow 00{:}38{:}44.405$ the original determination of death is

 $00:38:44.405 \rightarrow 00:38:46.776$ not valid and that occlusion of the

NOTE Confidence: 0.87311363

 $00{:}38{:}46.776 \dashrightarrow 00{:}38{:}49.128$ cerebral arteries causes the death of

NOTE Confidence: 0.87311363

 $00:38:49.128 \rightarrow 00:38:52.158$ 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

 $00:38:54.374 \longrightarrow 00:38:56.440$ 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

 $00:38:58.825 \rightarrow 00:39:00.475$ 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

 $00{:}39{:}02{.}600 \dashrightarrow 00{:}39{:}04{.}310$ but I'd like to explore this

NOTE Confidence: 0.87311363

 $00:39:04.310 \longrightarrow 00:39:06.318$ just a little bit more and say,

NOTE Confidence: 0.87311363

 $00:39:06.320 \longrightarrow 00:39:08.368$ well, not necessarily the case.

NOTE Confidence: 0.87311363

 $00:39:08.368 \longrightarrow 00:39:11.226$ And let me give you what I think is

NOTE Confidence: 0.87311363

 $00:39:11.226 \rightarrow 00:39:13.994$ maybe the best argument in favor of NRP.

NOTE Confidence: 0.87311363

 $00{:}39{:}14.000 \dashrightarrow 00{:}39{:}15.736$ And it has to do with the ethical

NOTE Confidence: 0.87311363

 $00{:}39{:}15.736 \dashrightarrow 00{:}39{:}17.159$ theory known as consequentialism,

NOTE Confidence: 0.87311363

 $00:39:17.160 \longrightarrow 00:39:18.872$ which evaluates the rightness

- NOTE Confidence: 0.87311363
- 00:39:18.872 -> 00:39:21.440 or wrongness of acts solely in

 $00:39:21.519 \rightarrow 00:39:23.519$ terms of their consequences.

NOTE Confidence: 0.87311363

 $00:39:23.520 \longrightarrow 00:39:25.152$ OK, and consequences matter

NOTE Confidence: 0.87311363

 $00:39:25.152 \longrightarrow 00:39:27.192$ a lot in moral theory.

NOTE Confidence: 0.87311363

 $00{:}39{:}27{.}200 \dashrightarrow 00{:}39{:}29{.}195$ And in fact, most of us are

NOTE Confidence: 0.87311363

 $00:39:29.195 \dashrightarrow 00:39:30.600$ consequentialist most of the time.

NOTE Confidence: 0.87311363

 $00:39:30.600 \longrightarrow 00:39:31.775$ When we think about what

NOTE Confidence: 0.87311363

 $00:39:31.775 \longrightarrow 00:39:33.160$ 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

 $00:39:34.800 \rightarrow 00:39:37.520$ 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

 $00{:}39{:}39{.}144 \dashrightarrow 00{:}39{:}43{.}158$ I think NRP fares pretty well.

NOTE Confidence: 0.87311363

 $00{:}39{:}43.160 \dashrightarrow 00{:}39{:}43.912$ Here's the key points.

NOTE Confidence: 0.87311363

 $00{:}39{:}43{.}912 \dashrightarrow 00{:}39{:}45{.}040$ The death of the patient is

NOTE Confidence: 0.87311363

 $00:39:45.082 \rightarrow 00:39:45.760$ virtually certain.

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

 $00:39:49.040 \rightarrow 00:39:51.357$ you're going to take away the ventilator,

NOTE Confidence: 0.87311363

 $00:39:51.360 \longrightarrow 00:39:52.518$ and I'm going to be dead.

NOTE Confidence: 0.87311363

 $00{:}39{:}52{.}520 \dashrightarrow 00{:}39{:}54{.}795$ So there's not a doubt about that.

NOTE Confidence: 0.87311363

 $00{:}39{:}54{.}800 \dashrightarrow 00{:}39{:}56{.}065$ 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

 $00:40:01.104 \longrightarrow 00:40:02.160$ as they can.

NOTE Confidence: 0.87311363

 $00{:}40{:}02.160 \dashrightarrow 00{:}40{:}03.846$ If the occlusion of the cerebral

NOTE Confidence: 0.87311363

 $00{:}40{:}03{.}846 \dashrightarrow 00{:}40{:}05{.}493$ arteries is effective and there's more

NOTE Confidence: 0.87311363

 $00{:}40{:}05{.}493 \dashrightarrow 00{:}40{:}07{.}357$ work that needs to be done on this,

NOTE Confidence: 0.87311363

 $00:40:07.360 \longrightarrow 00:40:09.382$ but if it is effective after

NOTE Confidence: 0.87311363

 $00{:}40{:}09{.}382 \dashrightarrow 00{:}40{:}11{.}440$ preventing blood flow to the brain,

NOTE Confidence: 0.87311363

 $00:40:11.440 \rightarrow 00:40:13.449$ then we can be pretty confident that

- NOTE Confidence: 0.87311363
- $00:40:13.449 \rightarrow 00:40:15.432$ the patient is insensate and won't

00:40:15.432 --> 00:40:17.202 experience any pain or suffering

NOTE Confidence: 0.87311363

 $00:40:17.202 \rightarrow 00:40:19.439$ during the organ procurement process.

NOTE Confidence: 0.87311363

 $00:40:19.440 \longrightarrow 00:40:20.312$ And finally,

NOTE Confidence: 0.87311363

 $00{:}40{:}20{.}312 \dashrightarrow 00{:}40{:}23{.}364$ NRP optimizes both the number and the

NOTE Confidence: 0.87311363

 $00:40:23.364 \rightarrow 00:40:26.516$ 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

 $00:40:27.150 \longrightarrow 00:40:29.040$ it's amazingly successful in that regard.

NOTE Confidence: 0.87311363

 $00:40:29.040 \longrightarrow 00:40:30.678$ And most donors, if you asked them,

NOTE Confidence: 0.87311363

 $00:40:30.680 \longrightarrow 00:40:31.379$ they'd probably say,

NOTE Confidence: 0.87311363

 $00:40:31.379 \longrightarrow 00:40:31.612$ yeah,

NOTE Confidence: 0.87311363

 $00{:}40{:}31{.}612 \dashrightarrow 00{:}40{:}33{.}505$ I want to save as many lives as

NOTE Confidence: 0.87311363

 $00{:}40{:}33{.}505 \dashrightarrow 00{:}40{:}35{.}066$ 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

 $00{:}40{:}36{.}960 \dashrightarrow 00{:}40{:}40{.}000$ you know, the most benefit.

- $00:40:40.000 \longrightarrow 00:40:40.705$ 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
- $00:40:42.120 \rightarrow 00:40:45.312$ 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
- $00{:}40{:}46.016 \dashrightarrow 00{:}40{:}48.128$ how could something do so much
- NOTE Confidence: 0.87311363
- $00:40:48.128 \longrightarrow 00:40:49.736$ 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
- $00:40:55.226 \rightarrow 00:40:57.837$ 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
- $00:41:00.640 \longrightarrow 00:41:02.912$ but I'd I'd like to say a qualified
- NOTE Confidence: 0.7252172
- $00{:}41{:}02{.}912 \dashrightarrow 00{:}41{:}04{.}742$ yes because I think the strength of
- NOTE Confidence: 0.7252172
- $00:41:04.742 \longrightarrow 00:41:06.702$ this rule and the number of exceptions
- NOTE Confidence: 0.7252172
- $00:41:06.702 \rightarrow 00:41:08.753$ 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.

 $00{:}41{:}12{.}320 \dashrightarrow 00{:}41{:}15{.}008$ So in the 1970s, with drawal of a ventilator

NOTE Confidence: 0.7252172

 $00:41:15.008 \rightarrow 00:41:17.835$ or any other form of life support

NOTE Confidence: 0.7252172

 $00:41:17.835 \rightarrow 00:41:19.920$ was considered killing the patient.

NOTE Confidence: 0.7252172

 $00:41:19.920 \longrightarrow 00:41:21.304$ Back in the 1970s,

NOTE Confidence: 0.7252172

 $00:41:21.304 \rightarrow 00:41:23.034$ physicians never took patients off

NOTE Confidence: 0.7252172

 $00:41:23.034 \rightarrow 00:41:24.400$ ventilators because they believed

NOTE Confidence: 0.7252172

 $00:41:24.400 \longrightarrow 00:41:26.000$ it would kill the patient,

NOTE Confidence: 0.7252172

 $00{:}41{:}26.000 \dashrightarrow 00{:}41{:}28.880$ and it took the Quinlan case and other

NOTE Confidence: 0.7252172

 $00:41:28.880 \longrightarrow 00:41:31.785$ cases to reframe that as not killing

NOTE Confidence: 0.7252172

 $00:41:31.785 \longrightarrow 00:41:34.280$ but allowing the patient to die.

NOTE Confidence: 0.7252172

 $00{:}41{:}34{.}280 \dashrightarrow 00{:}41{:}37{.}040$ In the Up until the 1990s,

NOTE Confidence: 0.7252172

 $00{:}41{:}37.040 \dashrightarrow 00{:}41{:}38.504$ physicians were very reluctant

NOTE Confidence: 0.7252172

 $00{:}41{:}38{.}504 \dashrightarrow 00{:}41{:}40{.}334$ to provide medications to dying

NOTE Confidence: 0.7252172

 $00:41:40.334 \rightarrow 00:41:42.039$ patients to make them comfortable,

- $00:41:42.040 \longrightarrow 00:41:43.960$ for fear that this would be
- NOTE Confidence: 0.7252172
- $00:41:43.960 \longrightarrow 00:41:44.920$ seen as euthanasia.
- NOTE Confidence: 0.7252172
- $00{:}41{:}44{.}920 \dashrightarrow 00{:}41{:}46{.}822$ And there were some Supreme Court
- NOTE Confidence: 0.7252172
- $00:41:46.822 \rightarrow 00:41:48.878$ cases through the 1990s that said no,
- NOTE Confidence: 0.7252172
- $00{:}41{:}48.880 \dashrightarrow 00{:}41{:}51.449$ no, it's OK to use these medications
- NOTE Confidence: 0.7252172
- $00:41:51.449 \longrightarrow 00:41:52.840$ in dosages that may
- NOTE Confidence: 0.8006233
- $00:41:52.840 \rightarrow 00:41:54.520$ actually speed up the death of the patient,
- NOTE Confidence: 0.8006233
- $00:41:55.080 \longrightarrow 00:41:56.928$ so long as your intention is to
- NOTE Confidence: 0.8006233
- $00{:}41{:}56{.}928 \dashrightarrow 00{:}41{:}58{.}440$ make the patient comfortable,
- NOTE Confidence: 0.8006233
- $00{:}41{:}58{.}440 \dashrightarrow 00{:}42{:}01{.}360$ not to cause their death.
- NOTE Confidence: 0.8006233
- $00{:}42{:}01{.}360 \dashrightarrow 00{:}42{:}03{.}061$ 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
- $00:42:04.320 \longrightarrow 00:42:06.960$ beginning in Oregon.
- NOTE Confidence: 0.8006233
- $00:42:06.960 \rightarrow 00:42:08.773$ Physician aid and dying could be looked
- NOTE Confidence: 0.8006233
- $00{:}42{:}08{.}773 \dashrightarrow 00{:}42{:}10{.}800$ at very much as physician euthanasia,
- NOTE Confidence: 0.8006233
- 00:42:10.800 --> 00:42:11.734 physician killing,
- NOTE Confidence: 0.8006233
- $00:42:11.734 \rightarrow 00:42:14.536$ with the caveat that it's important

 $00:42:14.536 \longrightarrow 00:42:16.879$ that the patient themselves

NOTE Confidence: 0.8006233

 $00:42:16.880 \longrightarrow 00:42:18.217$ swallow the lethal medication,

NOTE Confidence: 0.8006233

 $00:42:18.217 \rightarrow 00:42:21.233$ not that it be administered by the physician.

NOTE Confidence: 0.8006233

 $00{:}42{:}21{.}240 \dashrightarrow 00{:}42{:}21{.}848$ And today,

NOTE Confidence: 0.8006233

 $00{:}42{:}21.848 \dashrightarrow 00{:}42{:}24.255$ more than 20% of the US population has

NOTE Confidence: 0.8006233

 $00{:}42{:}24{.}255 \dashrightarrow 00{:}42{:}26{.}160$ access to physician aid and dying.

NOTE Confidence: 0.8006233

 $00:42:26.160 \longrightarrow 00:42:27.354$ And then finally,

NOTE Confidence: 0.8006233

 $00{:}42{:}27.354 \dashrightarrow 00{:}42{:}29.742$ even that last little prohibition has

NOTE Confidence: 0.8006233

 $00:42:29.742 \rightarrow 00:42:32.399$ gone away with our neighbors in Canada

NOTE Confidence: 0.8006233

 $00:42:32.400 \rightarrow 00:42:34.600$ who have fully legalized euthanasia,

NOTE Confidence: 0.8006233

 $00{:}42{:}34{.}600 \dashrightarrow 00{:}42{:}37{.}400$ and not just for the terminally ill.

NOTE Confidence: 0.8006233

 $00:42:37.400 \longrightarrow 00:42:39.241$ My point here is to say that

NOTE Confidence: 0.8006233

 $00{:}42{:}39{.}241 \dashrightarrow 00{:}42{:}41{.}159$ in the past several decades,

NOTE Confidence: 0.8006233

 $00{:}42{:}41{.}160 \dashrightarrow 00{:}42{:}43{.}792$ all of these things have been seen

 $00:42:43.792 \rightarrow 00:42:46.033$ as completely prohibited because they

NOTE Confidence: 0.8006233

 $00:42:46.033 \rightarrow 00:42:48.117$ involve physicians killing patients.

NOTE Confidence: 0.8006233

 $00{:}42{:}48{.}120 \dashrightarrow 00{:}42{:}49{.}440$ And I'm saying that you can

NOTE Confidence: 0.8006233

 $00{:}42{:}49{.}440 \dashrightarrow 00{:}42{:}50{.}320$ see how there's been

NOTE Confidence: 0.94445723

 $00:42:50.320 \longrightarrow 00:42:53.120$ a shift towards weakening

NOTE Confidence: 0.94445723

 $00{:}42{:}53{.}120 \dashrightarrow 00{:}42{:}54{.}960$ that prohibition and in some

NOTE Confidence: 0.94445723

 $00:42:54.960 \longrightarrow 00:42:56.432$ cases totally eliminating it.

NOTE Confidence: 0.94445723

 $00{:}42{:}56{.}440 \dashrightarrow 00{:}42{:}58{.}040$ 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

 $00:43:03.483 \longrightarrow 00:43:05.759$ 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

 $00:43:07.132 \longrightarrow 00:43:08.639$ from the fact that it is killing.

NOTE Confidence: 0.94445723

 $00{:}43{:}08.640 \dashrightarrow 00{:}43{:}10.516$ But, you know, like many other things,

NOTE Confidence: 0.94445723

 $00:43:10.520 \longrightarrow 00:43:12.842$ maybe we could reframe it or

NOTE Confidence: 0.94445723

 $00:43:12.842 \rightarrow 00:43:15.200$ 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,

 $00:43:17.280 \longrightarrow 00:43:18.980$ the fundamental challenge of organ

NOTE Confidence: 0.94445723

00:43:18.980 --> 00:43:20.000 procurement and transplantation,

NOTE Confidence: 0.94445723

 $00:43:20.000 \rightarrow 00:43:21.854$ the necessity of obtaining living organs

NOTE Confidence: 0.94445723

 $00:43:21.854 \rightarrow 00:43:24.038$ from patients who are deemed to be dead.

NOTE Confidence: 0.94445723

 $00:43:24.040 \longrightarrow 00:43:27.742$ And we continue to pair away

NOTE Confidence: 0.94445723

 $00{:}43{:}27.742 \dashrightarrow 00{:}43{:}30.280$ that distinction so that we can

NOTE Confidence: 0.94445723

 $00:43:30.280 \longrightarrow 00:43:32.200$ 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

 $00{:}43{:}36{.}383 \dashrightarrow 00{:}43{:}38{.}482$ from Miracle Max and The Princess Bride

NOTE Confidence: 0.94445723

 $00{:}43{:}38{.}482 \dashrightarrow 00{:}43{:}40{.}687$ where he says there's a big difference

NOTE Confidence: 0.94445723

 $00{:}43{:}40.687 \dashrightarrow 00{:}43{:}42.517$ between mostly dead and all dead.

NOTE Confidence: 0.94445723

 $00{:}43{:}42.520 \dashrightarrow 00{:}43{:}45.040$ 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

00:43:46.872 --> 00:43:48.559 tongue in cheek because in fact,

NOTE Confidence: 0.94445723

 $00{:}43{:}48{.}560 \dashrightarrow 00{:}43{:}50{.}535$ it is important that organ

NOTE Confidence: 0.94445723

 $00:43:50.535 \longrightarrow 00:43:51.720$ donors be somewhat,

NOTE Confidence: 0.94445723

 $00:43:51.720 \rightarrow 00:43:52.900$ at least slightly alive,

NOTE Confidence: 0.94445723

 $00:43:52.900 \longrightarrow 00:43:54.080$ because if they're not,

NOTE Confidence: 0.94445723

 $00{:}43{:}54.080 \dashrightarrow 00{:}43{:}56.552$ those organs are not going to

NOTE Confidence: 0.94445723

 $00{:}43{:}56{.}552 \dashrightarrow 00{:}43{:}58{.}200$ be usable for transplantation.

NOTE Confidence: 0.94445723

 $00:43:58.200 \longrightarrow 00:44:00.078$ So let me finish up here.

NOTE Confidence: 0.94445723

 $00{:}44{:}00{.}080 \dashrightarrow 00{:}44{:}02{.}822$ NRP donors are not dead by

NOTE Confidence: 0.94445723

 $00{:}44{:}02.822 \dashrightarrow 00{:}44{:}04.193$ 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

 $00:44:06.712 \longrightarrow 00:44:08.517$ occlusion of the cerebral arteries

NOTE Confidence: 0.94445723

 $00{:}44{:}08{.}517 \dashrightarrow 00{:}44{:}11{.}114$ in violation of the dead donor rule.

NOTE Confidence: 0.94445723

 $00:44:11.120 \longrightarrow 00:44:13.622$ But NRP is a very compelling

NOTE Confidence: 0.94445723

 $00:44:13.622 \rightarrow 00:44:15.545$ way to maximize respect for the

NOTE Confidence: 0.94445723

 $00{:}44{:}15{.}545 \dashrightarrow 00{:}44{:}17{.}377$ altruism of the donors who want

- NOTE Confidence: 0.94445723
- $00{:}44{:}17.377 \dashrightarrow 00{:}44{:}19.274$ to save the most lives as possible

 $00{:}44{:}19{.}280 \dashrightarrow 00{:}44{:}20{.}720$ and the needs of recipients.

NOTE Confidence: 0.94445723

 $00{:}44{:}20.720 \dashrightarrow 00{:}44{:}23.376$ We are our waiting lists are far beyond

NOTE Confidence: 0.94445723

 $00:44:23.376 \rightarrow 00:44:26.440$ what what we can provide in terms of organs.

NOTE Confidence: 0.94445723

 $00{:}44{:}26{.}440 \dashrightarrow 00{:}44{:}27{.}496$ And NRP is,

NOTE Confidence: 0.94445723

 $00:44:27.496 \longrightarrow 00:44:28.200$ you know,

NOTE Confidence: 0.94445723

 $00:44:28.200 \rightarrow 00:44:28.902$ sort of,

NOTE Confidence: 0.94445723

 $00:44:28.902 \longrightarrow 00:44:30.657$ from an all things considered

NOTE Confidence: 0.94445723

 $00{:}44{:}30{.}657 \dashrightarrow 00{:}44{:}31{.}359$ consequentialist perspective,

NOTE Confidence: 0.94445723

 $00:44:31.360 \longrightarrow 00:44:32.186$ pretty attractive.

NOTE Confidence: 0.94445723

 $00{:}44{:}32.186 \dashrightarrow 00{:}44{:}35.490$ But I think where are my biggest concern

NOTE Confidence: 0.94445723

 $00{:}44{:}35{.}568 \dashrightarrow 00{:}44{:}38{.}312$ is I think that we need to represent

NOTE Confidence: 0.94445723

 $00{:}44{:}38{.}312 \dashrightarrow 00{:}44{:}41{.}320$ NRP honestly and transparently to the public.

NOTE Confidence: 0.94445723

 $00{:}44{:}41{.}320 \dashrightarrow 00{:}44{:}43{.}840$ I need, I think we need to be open

NOTE Confidence: 0.94445723

 $00:44:43.840 \rightarrow 00:44:45.840$ about what it actually involves.

 $00:44:45.840 \dashrightarrow 00:44:48.608$ And I worry a little bit that among

NOTE Confidence: 0.94445723

 $00{:}44{:}48.608 \dashrightarrow 00{:}44{:}50.120$ some transplant professionals,

NOTE Confidence: 0.94445723

 $00:44:50.120 \rightarrow 00:44:51.374$ there's a little bit of gaslighting

NOTE Confidence: 0.94445723

 $00:44:51.374 \longrightarrow 00:44:52.679$ 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

 $00{:}44{:}54{.}502 \dashrightarrow 00{:}44{:}56{.}074$ no, this is just like DCD.

NOTE Confidence: 0.94445723

 $00:44:56.080 \rightarrow 00:44:57.760$ There's nothing different going on here.

NOTE Confidence: 0.94445723

 $00:44:57.760 \longrightarrow 00:44:59.412$ We don't really need to explain to

NOTE Confidence: 0.94445723

 $00{:}44{:}59{.}412 \dashrightarrow 00{:}45{:}00{.}639$ you what's different about this.

NOTE Confidence: 0.94445723

 $00{:}45{:}00{.}640 \dashrightarrow 00{:}45{:}01{.}840$ 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

 $00{:}45{:}02.720 \dashrightarrow 00{:}45{:}04.832$ And I think individuals should be

NOTE Confidence: 0.94445723

 $00{:}45{:}04.832 \dashrightarrow 00{:}45{:}07.080$ fully informed about what NRP involves,

NOTE Confidence: 0.813486

 $00:45:12.450 \longrightarrow 00:45:14.424$ should be free to refuse organ

NOTE Confidence: 0.813486

 $00:45:14.424 \longrightarrow 00:45:16.580$ donation by NRP even if they

NOTE Confidence: 0.813486

 $00:45:16.580 \rightarrow 00:45:18.128$ are authorized organ donors,

- NOTE Confidence: 0.813486
- $00:45:18.130 \longrightarrow 00:45:19.355$ even if they've checked that

 $00:45:19.355 \longrightarrow 00:45:21.610$ box on their driver's license.

NOTE Confidence: 0.813486

 $00:45:21.610 \longrightarrow 00:45:23.320$ So I think we're going to hear a little

NOTE Confidence: 0.813486

 $00:45:23.320 \rightarrow 00:45:24.529$ 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

 $00:45:26.450 \longrightarrow 00:45:27.926$ But so that's sort of my,

NOTE Confidence: 0.813486

 $00:45:27.930 \longrightarrow 00:45:29.562$ 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

 $00{:}45{:}35{.}530 \dashrightarrow 00{:}45{:}38{.}707$ So we hear from a from ACT surgeon greatly

NOTE Confidence: 0.813486

 $00:45:38.707 \rightarrow 00:45:40.958$ experienced who knows whereof he speaks.

NOTE Confidence: 0.813486

 $00{:}45{:}40{.}960 \dashrightarrow 00{:}45{:}44{.}310$ We hear from a bioethic ist who is very

NOTE Confidence: 0.813486

 $00{:}45{:}44{.}310 \dashrightarrow 00{:}45{:}46{.}340$ expert in the field of bioethics and

NOTE Confidence: 0.813486

 $00{:}45{:}46{.}407 \dashrightarrow 00{:}45{:}49{.}023$ in particular with regard to organ

NOTE Confidence: 0.813486

 $00:45:49.023 \rightarrow 00:45:50.767$ transplantation also very experienced

 $00{:}45{:}50{.}828 \dashrightarrow 00{:}45{:}52{.}760$ 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

 $00:45:54.140 \longrightarrow 00:45:55.960$ my good fortune I share with you.

NOTE Confidence: 0.813486

 $00{:}45{:}55{.}960 \dashrightarrow 00{:}45{:}57{.}680$ My good for tune was is knowing Eric and

NOTE Confidence: 0.813486

 $00{:}45{:}57.680 \dashrightarrow 00{:}45{:}59.397$ 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

 $00{:}46{:}00{.}392 \dashrightarrow 00{:}46{:}01{.}736$ if you want to have a conversation

NOTE Confidence: 0.813486

 $00:46:01.736 \longrightarrow 00:46:03.005$ 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

 $00:46:04.480 \longrightarrow 00:46:05.640$ And so I think, well, jeez,

NOTE Confidence: 0.813486

 $00{:}46{:}05{.}640 \dashrightarrow 00{:}46{:}07{.}812$ why can't I get them both And and

NOTE Confidence: 0.813486

 $00:46:07.812 \longrightarrow 00:46:09.674$ 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

 $00:46:11.360 \longrightarrow 00:46:12.408$ We've communicated about this.

NOTE Confidence: 0.813486

 $00:46:12.408 \rightarrow 00:46:14.489$ He was kind enough to agree to come

NOTE Confidence: 0.813486

 $00:46:14.489 \longrightarrow 00:46:15.875$ and join us for the conversation.

- NOTE Confidence: 0.813486
- $00:46:15.880 \longrightarrow 00:46:16.852$ I'm so grateful.
- NOTE Confidence: 0.813486
- $00:46:16.852 \rightarrow 00:46:19.120$ 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
- $00{:}46{:}23.722 \dashrightarrow 00{:}46{:}25.816$ transplant ethics and Policy Research
- NOTE Confidence: 0.813486
- $00{:}46{:}25.816 \dashrightarrow 00{:}46{:}28.196$ and assistant professor of bioethics
- NOTE Confidence: 0.813486
- $00{:}46{:}28.200 \dashrightarrow 00{:}46{:}30.108$ in the Division of medical ethics
- NOTE Confidence: 0.813486
- $00{:}46{:}30{.}108 \dashrightarrow 00{:}46{:}31{.}764$ with joint appointment and surgery
- NOTE Confidence: 0.813486
- $00{:}46{:}31.764 \dashrightarrow 00{:}46{:}33.720$ 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
- $00{:}46{:}38{.}192 \dashrightarrow 00{:}46{:}40{.}036$ regulation of transplant research.
- NOTE Confidence: 0.813486
- $00{:}46{:}40.040 \dashrightarrow 00{:}46{:}41.380$ Parents serves as an independent
- NOTE Confidence: 0.813486
- 00:46:41.380 --> 00:46:41.916 living donor,
- NOTE Confidence: 0.813486
- $00{:}46{:}41.920 \dashrightarrow 00{:}46{:}43.785$ advocate and Advisory Board member
- NOTE Confidence: 0.813486

 $00:46:43.785 \rightarrow 00:46:45.650$ for the National Kidney Foundation

NOTE Confidence: 0.813486

 $00{:}46{:}45{.}706 \dashrightarrow 00{:}46{:}47{.}897$ and a member of the National Donation

NOTE Confidence: 0.813486

 $00{:}46{:}47{.}897 \dashrightarrow 00{:}46{:}49{.}599$ Research Council for the Alliance.

NOTE Confidence: 0.813486

 $00{:}46{:}49{.}600 \dashrightarrow 00{:}46{:}51{.}636$ He provides ethics consultation

NOTE Confidence: 0.813486

 $00:46:51.636 \rightarrow 00:46:54.181$ for transplant and medical research

NOTE Confidence: 0.813486

 $00{:}46{:}54{.}181 \dashrightarrow 00{:}46{:}56{.}440$ 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

 $00{:}47{:}00{.}311 \dashrightarrow 00{:}47{:}02{.}837$ 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

 $00{:}47{:}04{.}376 \dashrightarrow 00{:}47{:}05{.}768$ We are very grateful and very

NOTE Confidence: 0.813486

 $00:47:05.768 \longrightarrow 00:47:07.159$ 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

 $00{:}47{:}13.000 \dashrightarrow 00{:}47{:}13.960$ There you go. It's all yours.

NOTE Confidence: 0.3330512

 $00:47:14.320 \longrightarrow 00:47:15.316$ I had to silence my phone.

NOTE Confidence: 0.3330512

 $00:47:15.320 \longrightarrow 00:47:17.720$ I'm so sorry it's been dinging.

- NOTE Confidence: 0.3330512
- $00:47:17.720 \rightarrow 00:47:20.060$ I want to start by saying thanks to

 $00{:}47{:}20.060 \dashrightarrow 00{:}47{:}21.800$ setting the stage so incredibly well.

NOTE Confidence: 0.3330512

 $00:47:21.800 \longrightarrow 00:47:23.396$ I feel like my job is done.

NOTE Confidence: 0.3330512

 $00:47:23.400 \longrightarrow 00:47:27.104$ I mean that's this is to the point

NOTE Confidence: 0.3330512

 $00:47:27.104 \rightarrow 00:47:29.600$ 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

 $00:47:31.832 \longrightarrow 00:47:34.021$ we do a pro and con discussion

NOTE Confidence: 0.3330512

 $00:47:34.021 \longrightarrow 00:47:35.920$ and you know battle it out.

NOTE Confidence: 0.3330512

 $00{:}47{:}35{.}920 \dashrightarrow 00{:}47{:}38{.}706$ And I politely requested that we reframe

NOTE Confidence: 0.3330512

 $00{:}47{:}38.706 \dashrightarrow 00{:}47{:}41.186$ because the nuance is significant and

NOTE Confidence: 0.3330512

 $00:47:41.186 \rightarrow 00:47:43.314$ and we will obviously you can see this,

NOTE Confidence: 0.3330512

 $00{:}47{:}43.320 \dashrightarrow 00{:}47{:}45.182$ Bob did such a great job of

NOTE Confidence: 0.3330512

 $00:47:45.182 \longrightarrow 00:47:46.760$ 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

 $00:47:49.640 \longrightarrow 00:47:51.560$ do NRP go gang busters.

 $00:47:51.560 \longrightarrow 00:47:54.584$ I do want to think about issues

NOTE Confidence: 0.3330512

 $00:47:54.584 \longrightarrow 00:47:57.278$ of death trust through the lenses

NOTE Confidence: 0.3330512

 $00{:}47{:}57{.}278 \dashrightarrow 00{:}48{:}00{.}074$ of both ethics and the law.

NOTE Confidence: 0.3330512

 $00:48:00.080 \longrightarrow 00:48:01.760$ And here are my disclosures.

NOTE Confidence: 0.3330512

 $00:48:01.760 \longrightarrow 00:48:03.386$ 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

 $00:48:05.200 \longrightarrow 00:48:06.250$ my home base,

NOTE Confidence: 0.3330512

 $00{:}48{:}06{.}250 \dashrightarrow 00{:}48{:}09{.}010$ 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

 $00{:}48{:}13.816 \dashrightarrow 00{:}48{:}15.821$ 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

 $00:48:17.920 \longrightarrow 00:48:19.396$ hey, we're thinking about doing this,

NOTE Confidence: 0.3330512

 $00{:}48{:}19{.}400 \dashrightarrow 00{:}48{:}20{.}646$ but we want to make sure we

NOTE Confidence: 0.3330512

 $00{:}48{:}20.646 \dashrightarrow 00{:}48{:}21.719$ do it the right way.

NOTE Confidence: 0.3330512

 $00:48:21.720 \rightarrow 00:48:25.816$ So we spent a lot of time thinking

- NOTE Confidence: 0.3330512
- $00:48:25.816 \longrightarrow 00:48:28.610$ about whether and then how to do

 $00:48:28.610 \longrightarrow 00:48:30.704$ this in the most ethically sound

NOTE Confidence: 0.3330512

 $00:48:30.704 \rightarrow 00:48:32.880$ way with appropriate safeguards,

NOTE Confidence: 0.3330512

 $00:48:32.880 \rightarrow 00:48:35.394$ and what kinds of empirical ethics

NOTE Confidence: 0.3330512

 $00:48:35.394 \rightarrow 00:48:38.599$ research needs to be done to justify it.

NOTE Confidence: 0.3330512

 $00{:}48{:}38{.}600 \dashrightarrow 00{:}48{:}41{.}561$ 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

 $00:48:44.880 \longrightarrow 00:48:45.170$ which,

NOTE Confidence: 0.3330512

 $00{:}48{:}45{.}170 \dashrightarrow 00{:}48{:}47{.}200$ 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

 $00{:}48{:}49{.}004 \dashrightarrow 00{:}48{:}50{.}514$ went ahead and did it

NOTE Confidence: 0.9052156

 $00{:}48{:}52.680 \dashrightarrow 00{:}48{:}54.543$ all right. So there's going to be a lot

NOTE Confidence: 0.9052156

 $00{:}48{:}54{.}543 \dashrightarrow 00{:}48{:}56{.}160$ of stuff in here which is duplicative

NOTE Confidence: 0.9052156

 $00{:}48{:}56{.}160 \dashrightarrow 00{:}48{:}57{.}371$ of what's already been covered.

NOTE Confidence: 0.9052156

 $00{:}48{:}57{.}371 \dashrightarrow 00{:}48{:}59{.}379$ I'm going to race through it and get

 $00:48:59.379 \longrightarrow 00:49:01.199$ to hopefully the additive stuff.

NOTE Confidence: 0.9052156

 $00:49:01.200 \longrightarrow 00:49:02.216$ But the obvious thing,

NOTE Confidence: 0.9052156

 $00:49:02.216 \longrightarrow 00:49:03.740$ which was implied is that we

NOTE Confidence: 0.9052156

 $00:49:03.793 \longrightarrow 00:49:05.037$ don't have enough organs.

NOTE Confidence: 0.9052156

 $00:49:05.040 \longrightarrow 00:49:05.838$ And how do we do it?

NOTE Confidence: 0.9052156

 $00{:}49{:}05{.}840 \dashrightarrow 00{:}49{:}07{.}065$ And there was a National

NOTE Confidence: 0.9052156

00:49:07.065 --> 00:49:07.800 Academies of Science,

NOTE Confidence: 0.9052156

 $00:49:07.800 \longrightarrow 00:49:09.440$ 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

 $00{:}49{:}14.065 \dashrightarrow 00{:}49{:}16.284$ this country is to do more recovery

NOTE Confidence: 0.9052156

 $00:49:16.284 \rightarrow 00:49:18.000$ after circulatory determination of death.

NOTE Confidence: 0.9052156

 $00:49:18.000 \rightarrow 00:49:19.800$ And as Bob pointed out,

NOTE Confidence: 0.9052156

 $00:49:19.800 \longrightarrow 00:49:21.225$ 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

 $00:49:22.080 \longrightarrow 00:49:24.360$ the organs start dying as well.

- NOTE Confidence: 0.9052156
- $00:49:24.360 \longrightarrow 00:49:25.683$ 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
- $00:49:28.960 \longrightarrow 00:49:30.175$ optimized for transplant?
- NOTE Confidence: 0.8092196
- $00:49:30.175 \longrightarrow 00:49:32.799$ We can do it XC2 on machines
- NOTE Confidence: 0.8092196
- $00:49:32.799 \longrightarrow 00:49:34.797$ or in C2 in the body.
- NOTE Confidence: 0.8092196
- $00{:}49{:}34{.}800 \dashrightarrow 00{:}49{:}37{.}680$ So the traditional method of rapid
- NOTE Confidence: 0.8092196
- $00:49:37.680 \longrightarrow 00:49:39.063$ recovery is difficult because
- NOTE Confidence: 0.8092196
- $00{:}49{:}39{.}063 \dashrightarrow 00{:}49{:}40{.}869$ it leads to more is chemic time
- NOTE Confidence: 0.8092196
- $00{:}49{:}40.869 \dashrightarrow 00{:}49{:}42.757$ and the outcomes aren't as good.
- NOTE Confidence: 0.8092196
- $00:49:42.760 \longrightarrow 00:49:44.818$ 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
- $00:49:48.520 \longrightarrow 00:49:50.280$ job but have their own
- NOTE Confidence: 0.3718873
- $00{:}49{:}50{.}280 \dashrightarrow 00{:}49{:}52{.}040$ limitations in terms of cost.
- NOTE Confidence: 0.3718873
- $00:49:52.040 \longrightarrow 00:49:53.408$ We heard the estimates.
- NOTE Confidence: 0.3718873

 $00:49:53.408 \rightarrow 00:49:55.810$ I I you said that 65,000 for the

NOTE Confidence: 0.3718873

 $00{:}49{:}55{.}810 \dashrightarrow 00{:}49{:}58{.}386$ one time uses for XC2 machines

NOTE Confidence: 0.3718873

 $00{:}49{:}58{.}386 \dashrightarrow 00{:}50{:}01{.}048$ and what was it, 1500 for NC 2.

NOTE Confidence: 0.3718873

 $00{:}50{:}01{.}048 \dashrightarrow 00{:}50{:}03{.}108$ 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

 $00:50:08.714 \longrightarrow 00:50:11.360$ heart and around 5000 for NRP.

NOTE Confidence: 0.3718873

 $00:50:11.360 \longrightarrow 00:50:13.298$ 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

 $00:50:14.267 \longrightarrow 00:50:15.839$ 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

 $00{:}50{:}17.779 \dashrightarrow 00{:}50{:}20.011$ or how good the outcomes are, right? NOTE Confidence: 0.3718873

 $00:50:20.011 \rightarrow 00:50:22.237$ So we can't just be consequentialist.

NOTE Confidence: 0.3718873

 $00{:}50{:}22{.}240 \dashrightarrow 00{:}50{:}25{.}360$ We have to think about the rights of

NOTE Confidence: 0.3718873

 $00:50:25.360 \rightarrow 00:50:27.400$ individuals and also issues of justice,

NOTE Confidence: 0.3718873

 $00:50:27.400 \longrightarrow 00:50:28.244$ etcetera. OK.

- NOTE Confidence: 0.3718873
- $00:50:28.244 \rightarrow 00:50:30.354$ So enter the NRP picture.

 $00:50:30.360 \longrightarrow 00:50:32.040$ 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

 $00:50:34.920 \longrightarrow 00:50:37.056$ 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

 $00:50:39.360 \longrightarrow 00:50:41.360$ especially under physiologic conditions.

NOTE Confidence: 0.3718873

 $00:50:41.360 \longrightarrow 00:50:43.360$ The outcomes look great,

NOTE Confidence: 0.3718873

 $00:50:43.360 \longrightarrow 00:50:44.800$ but does undermine,

NOTE Confidence: 0.3718873

 $00:50:44.800 \rightarrow 00:50:48.160$ does NRP undermine the definition of death?

NOTE Confidence: 0.3718873

 $00{:}50{:}48.160 \dashrightarrow 00{:}50{:}50.176$ So we'll come back to this definition

NOTE Confidence: 0.3718873

 $00{:}50{:}50{.}176 \dashrightarrow 00{:}50{:}52{.}160$ which you have already seen today.

NOTE Confidence: 0.3718873

 $00:50:52.160 \longrightarrow 00:50:54.160$ Irreversible cessation of all circulatory

NOTE Confidence: 0.3718873

 $00:50:54.160 \rightarrow 00:50:56.462$ respiratory functions or irreversible

NOTE Confidence: 0.3718873

 $00{:}50{:}56{.}462 \dashrightarrow 00{:}50{:}58{.}639$ cessation of all functions of the brain,

NOTE Confidence: 0.3718873

 $00{:}50{:}58{.}640 \dashrightarrow 00{:}51{:}01{.}564$ including the brain stem.

- $00:51:01.564 \rightarrow 00:51:05.155$ So does NRP undermine this definition,
- NOTE Confidence: 0.3718873
- 00:51:05.155 --> 00:51:05.620 right?
- NOTE Confidence: 0.3718873
- $00{:}51{:}05{.}620 \dashrightarrow 00{:}51{:}07{.}480$ You declare them dead,
- NOTE Confidence: 0.3718873
- $00{:}51{:}07{.}480 \dashrightarrow 00{:}51{:}10{.}168$ you include brain blood flow and
- NOTE Confidence: 0.3718873
- $00{:}51{:}10.168 \dashrightarrow 00{:}51{:}11.960$ then you restart circulation,
- NOTE Confidence: 0.3718873
- $00{:}51{:}11{.}960 \dashrightarrow 00{:}51{:}14{.}613$ which is the one thing the definition
- NOTE Confidence: 0.3718873
- $00:51:14.613 \rightarrow 00:51:17.475$ 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
- $00{:}51{:}22.496 \dashrightarrow 00{:}51{:}25.000$ of the irreversibility standard
- NOTE Confidence: 0.89726275
- $00:51:25.000 \rightarrow 00:51:26.808$ versus the permanence standard
- NOTE Confidence: 0.89726275
- $00{:}51{:}26{.}808 \dashrightarrow 00{:}51{:}29{.}520$ 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
- $00:51:33.200 \rightarrow 00:51:35.876$ 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
- $00:51:40.080 \rightarrow 00:51:41.240$ It is physically impossible.

- NOTE Confidence: 0.89726275
- $00:51:41.240 \longrightarrow 00:51:43.389$ And the answer and it's not just

 $00:51:43.389 \longrightarrow 00:51:44.707$ 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

 $00:51:47.440 \dashrightarrow 00:51:49.880$ It's about circulation writ large.

NOTE Confidence: 0.89726275

 $00:51:49.880 \rightarrow 00:51:52.120$ That's not the case, right?

NOTE Confidence: 0.89726275

 $00:51:52.120 \rightarrow 00:51:55.080$ Because when you restart circulation,

NOTE Confidence: 0.89726275

 $00:51:55.080 \rightarrow 00:51:58.678$ you have proven that it's not irreversible.

NOTE Confidence: 0.89726275

 $00:51:58.680 \rightarrow 00:52:00.360$ But does it meet the permanent standard,

NOTE Confidence: 0.89726275

 $00:52:00.360 \rightarrow 00:52:00.866$ right?

NOTE Confidence: 0.89726275

 $00:52:00.866 \rightarrow 00:52:03.902$ And permanence is what is employed

NOTE Confidence: 0.89726275

 $00{:}52{:}03{.}902 \dashrightarrow 00{:}52{:}06{.}672$ in practice all across medicine,

NOTE Confidence: 0.89726275

 $00{:}52{:}06.672 \dashrightarrow 00{:}52{:}09.008$ regardless of organ donation

NOTE Confidence: 0.89726275

 $00:52:09.008 \rightarrow 00:52:11.114$ intentions or goals, right?

NOTE Confidence: 0.89726275

 $00:52:11.114 \rightarrow 00:52:13.592$ If we had to use the irreversibility

00:52:13.592 --> 00:52:15.720 standard to declare someone dead,

NOTE Confidence: 0.89726275

 $00:52:15.720 \rightarrow 00:52:19.088$ we would never declare anybody dead, right?

NOTE Confidence: 0.89726275

 $00{:}52{:}19.088 \dashrightarrow 00{:}52{:}22.032$ So in practice, we use a permanent standard,

NOTE Confidence: 0.89726275

 $00{:}52{:}22{.}040 \dashrightarrow 00{:}52{:}24{.}560$ which is that circulation has stopped,

NOTE Confidence: 0.89726275

 $00:52:24.560 \longrightarrow 00:52:26.996$ it cannot restart on its own,

NOTE Confidence: 0.89726275

 $00{:}52{:}27{.}000 \dashrightarrow 00{:}52{:}30{.}440$ and we will not attempt to restart it.

NOTE Confidence: 0.89726275

 $00:52:30.440 \longrightarrow 00:52:31.604$ Now here's where I'm going to

NOTE Confidence: 0.89726275

 $00:52:31.604 \rightarrow 00:52:32.760$ hopefully be a little additive.

NOTE Confidence: 0.89726275

 $00{:}52{:}32{.}760 \dashrightarrow 00{:}52{:}34{.}116$ We just did the crash course.

NOTE Confidence: 0.89726275

 $00{:}52{:}34{.}120 \dashrightarrow 00{:}52{:}36{.}136$ You would all ace the quiz on what NRP

NOTE Confidence: 0.89726275

 $00{:}52{:}36{.}136 \dashrightarrow 00{:}52{:}38{.}279$ 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

 $00:52:39.152 \longrightarrow 00:52:40.850$ But now I'm going to try to add

NOTE Confidence: 0.89726275

 $00{:}52{:}40{.}850 \dashrightarrow 00{:}52{:}41{.}715$ something a little bit more,

NOTE Confidence: 0.89726275

 $00:52:41.720 \longrightarrow 00:52:43.720$ which is,

NOTE Confidence: 0.89726275

 $00:52:43.720 \rightarrow 00:52:49.380$ is NRP any less permanent in terms

- NOTE Confidence: 0.89726275
- $00{:}52{:}49{.}380 \dashrightarrow 00{:}52{:}52{.}249$ of the cessation of function than
- NOTE Confidence: 0.89726275
- $00{:}52{:}52{.}249 \dashrightarrow 00{:}52{:}55{.}294$ 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
- $00:52:58.480 \longrightarrow 00:53:01.702$ the heart, in either the recipient
- NOTE Confidence: 0.89726275
- $00:53:01.702 \longrightarrow 00:53:05.800$ of that heart or on a machine?
- NOTE Confidence: 0.89726275
- $00{:}53{:}05{.}800 \dashrightarrow 00{:}53{:}08{.}760$ 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
- $00{:}53{:}09{.}220 \dashrightarrow 00{:}53{:}10{.}600$ Does recirculation undermine
- NOTE Confidence: 0.89726275
- $00:53:10.600 \longrightarrow 00:53:12.440$ the determination of death?
- NOTE Confidence: 0.89726275
- $00:53:12.440 \longrightarrow 00:53:13.840$ You've heard the yes argument.
- NOTE Confidence: 0.89726275
- $00{:}53{:}13.840 \dashrightarrow 00{:}53{:}15.392$ 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
- $00:53:19.320 \dashrightarrow 00:53:22.282$ 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
- $00{:}53{:}24{.}492 \dashrightarrow 00{:}53{:}26{.}640$ circulation inside the donor's body.
- NOTE Confidence: 0.89726275

- $00:53:26.640 \longrightarrow 00:53:28.335$ So yes, you,
- NOTE Confidence: 0.89726275
- $00{:}53{:}28{.}335 \dashrightarrow 00{:}53{:}30{.}595$ you've undermined the definition.
- NOTE Confidence: 0.89726275
- $00:53:30.600 \rightarrow 00:53:32.679$ And then when you remove the organs,
- NOTE Confidence: 0.89726275
- $00:53:32.680 \longrightarrow 00:53:34.894$ the dead donor rule is violated
- NOTE Confidence: 0.89726275
- $00{:}53{:}34{.}894 \dashrightarrow 00{:}53{:}36{.}760$ because that person wasn't dead.
- NOTE Confidence: 0.89726275
- $00{:}53{:}36{.}760 \dashrightarrow 00{:}53{:}37{.}960$ You take the organs out.
- NOTE Confidence: 0.89726275
- $00{:}53{:}37{.}960 \dashrightarrow 00{:}53{:}40{.}832$ You have caused death and so now you're
- NOTE Confidence: 0.89726275
- $00:53:40.832 \rightarrow 00:53:43.558$ liable for having killed that patient.
- NOTE Confidence: 0.89726275
- $00:53:43.560 \longrightarrow 00:53:44.440$ But what about this?
- NOTE Confidence: 0.5394423
- $00:53:46.760 \longrightarrow 00:53:49.186$ The circulation that is
- NOTE Confidence: 0.5394423
- 00:53:49.186 --> 00:53:51.746 restored is not resuscitation,
- NOTE Confidence: 0.5394423
- $00:53:51.746 \longrightarrow 00:53:54.518$ 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
- $00:53:59.440 \rightarrow 00:54:01.104$ The language says circulation,
- NOTE Confidence: 0.5394423
- $00:54:01.104 \rightarrow 00:54:02.662$ right, irreversible circulation.

- NOTE Confidence: 0.5394423
- $00:54:02.662 \longrightarrow 00:54:03.804$ You recirculated.

 $00:54:03.804 \rightarrow 00:54:05.856$ So that's enough, right?

NOTE Confidence: 0.5394423

 $00:54:05.856 \rightarrow 00:54:08.376$ You've undermined the the, the definition.

NOTE Confidence: 0.5394423

 $00:54:08.376 \rightarrow 00:54:13.080$ But if we are using the permanence standard,

NOTE Confidence: 0.5394423

 $00:54:13.080 \longrightarrow 00:54:14.760$ which we say is that the heart,

NOTE Confidence: 0.5394423

 $00:54:14.760 \longrightarrow 00:54:16.288$ the circulation has stopped,

NOTE Confidence: 0.5394423

 $00:54:16.288 \longrightarrow 00:54:18.198$ cannot restart on its own,

NOTE Confidence: 0.5394423

 $00{:}54{:}18{.}200 \dashrightarrow 00{:}54{:}21{.}040$ and we will not attempt to restart it,

NOTE Confidence: 0.5394423

 $00:54:21.040 \longrightarrow 00:54:23.632$ then you have to ask why you are

NOTE Confidence: 0.5394423

 $00:54:23.632 \longrightarrow 00:54:25.320$ not attempting to restart it.

NOTE Confidence: 0.5394423

 $00:54:25.320 \longrightarrow 00:54:26.484$ 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

 $00:54:27.939 \longrightarrow 00:54:29.238$ you attempt to restart it.

NOTE Confidence: 0.5394423

 $00{:}54{:}29{.}240 \dashrightarrow 00{:}54{:}31{.}646$ And the answer is because doing

NOTE Confidence: 0.5394423

 $00{:}54{:}31{.}646$ --> $00{:}54{:}33{.}835$ so would be medically ineffective

- $00:54:33.835 \longrightarrow 00:54:36.360$ to save that patient's life.
- NOTE Confidence: 0.5394423
- $00:54:36.360 \longrightarrow 00:54:39.760$ So the intention is inherent

 $00:54:39.760 \rightarrow 00:54:43.200$ in the permanence standard. OK.

NOTE Confidence: 0.5394423

 $00:54:43.200 \dashrightarrow 00:54:44.064$ 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

 $00{:}54{:}46{.}032 \dashrightarrow 00{:}54{:}46{.}264$ This.

NOTE Confidence: 0.5394423

 $00{:}54{:}46{.}264 \dashrightarrow 00{:}54{:}47{.}424$ And there's an interesting little

NOTE Confidence: 0.5394423

 $00:54:47.424 \dashrightarrow 00:54:48.645$ legal process theory for you, right.

NOTE Confidence: 0.5394423

 $00:54:48.645 \longrightarrow 00:54:49.875$ How many lawyers in the room?

NOTE Confidence: 0.5394423

 $00:54:49.880 \longrightarrow 00:54:52.392$ Not many. Yeah. Right.

NOTE Confidence: 0.5394423

 $00{:}54{:}52{.}392 \dashrightarrow 00{:}54{:}53{.}760$ 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

 $00:54:55.920 \longrightarrow 00:54:58.240$ certain judicial, you know,

NOTE Confidence: 0.5394423

 $00:54:58.240 \longrightarrow 00:54:59.420$ context will say, look,

NOTE Confidence: 0.5394423

 $00{:}54{:}59{.}420 \dashrightarrow 00{:}55{:}02{.}418$ all we can do to make a decision in this

NOTE Confidence: 0.5394423

 $00:55:02.418 \dashrightarrow 00:55:05.398$ case is look at the black letter of the law.

- NOTE Confidence: 0.5394423
- $00:55:05.400 \rightarrow 00:55:07.234$ We're not going to think about anything

 $00{:}55{:}07{.}234 \dashrightarrow 00{:}55{:}09{.}037$ outside of the letters on the page.

NOTE Confidence: 0.5394423

 $00:55:09.040 \longrightarrow 00:55:11.128$ And if you use this strict

NOTE Confidence: 0.5394423

 $00:55:11.128 \rightarrow 00:55:13.000$ determination of what is legal,

NOTE Confidence: 0.5394423

 $00{:}55{:}13.000 \dashrightarrow 00{:}55{:}14.800$ 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

 $00:55:17.200 \longrightarrow 00:55:18.750$ we're already using a different

NOTE Confidence: 0.5394423

 $00:55:18.750 \longrightarrow 00:55:19.680$ standard in practice,

NOTE Confidence: 0.5394423

 $00:55:19.680 \rightarrow 00:55:20.493$ which is permanent.

NOTE Confidence: 0.5394423

 $00:55:20.493 \longrightarrow 00:55:22.119$ 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

 $00{:}55{:}25{.}270 \dashrightarrow 00{:}55{:}26{.}919$ just look at the letter of the law,

NOTE Confidence: 0.5394423

 $00{:}55{:}26{.}920 \dashrightarrow 00{:}55{:}29{.}600$ because letters of the law have

 $00:55:29.600 \rightarrow 00:55:31.040$ no substance by themselves.

NOTE Confidence: 0.5394423

 $00{:}55{:}31{.}040 \dashrightarrow 00{:}55{:}32{.}800$ So you have to think about the intention.

NOTE Confidence: 0.5394423

 $00:55:32.800 \longrightarrow 00:55:34.557$ What was the goal of the statute?

NOTE Confidence: 0.5394423

 $00{:}55{:}34{.}560 \dashrightarrow 00{:}55{:}35{.}905$ What is the historical legal

NOTE Confidence: 0.5394423

 $00:55:35.905 \rightarrow 00:55:38.600$ context in which the law grew here?

NOTE Confidence: 0.5394423

 $00:55:38.600 \longrightarrow 00:55:39.944$ And in this case,

NOTE Confidence: 0.5394423

 $00{:}55{:}39{.}944 \dashrightarrow 00{:}55{:}41{.}960$ the definition of death exists to

NOTE Confidence: 0.5394423

 $00{:}55{:}42.032 \dashrightarrow 00{:}55{:}44.126$ delineate a line between the rights

NOTE Confidence: 0.5394423

 $00{:}55{:}44.126 \dashrightarrow 00{:}55{:}46.520$ that adhere for a living person,

NOTE Confidence: 0.5394423

 $00:55:46.520 \rightarrow 00:55:47.576$ quality of life,

NOTE Confidence: 0.5394423

 $00{:}55{:}47{.}576 \dashrightarrow 00{:}55{:}50{.}060$ the desire to continue living right

NOTE Confidence: 0.5394423

 $00{:}55{:}50{.}060 \dashrightarrow 00{:}55{:}53{.}000$ and the capacity to live a life,

NOTE Confidence: 0.5394423

 $00:55:53.000 \rightarrow 00:55:56.360$ and then the rights that no longer subsist.

NOTE Confidence: 0.5394423

 $00:55:56.360 \rightarrow 00:55:58.796$ 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

 $00:56:00.016 \longrightarrow 00:56:01.840$ so now here's the other piece.

- NOTE Confidence: 0.5394423
- $00{:}56{:}01{.}840 \dashrightarrow 00{:}56{:}04{.}600$ Just because we can read intention

 $00{:}56{:}04.600 \dashrightarrow 00{:}56{:}07.274$ into the definition and we can say,

NOTE Confidence: 0.5394423

 $00:56:07.280 \longrightarrow 00:56:07.496$ well,

NOTE Confidence: 0.5394423

 $00:56:07.496 \rightarrow 00:56:09.008$ you didn't intend to kill the patient

NOTE Confidence: 0.5394423

 $00{:}56{:}09{.}008 \dashrightarrow 00{:}56{:}10{.}819$ or to bring the patient back to life

NOTE Confidence: 0.5394423

 $00{:}56{:}10{.}819 \dashrightarrow 00{:}56{:}12{.}678$ and then take their organs and kill them.

NOTE Confidence: 0.5394423

 $00{:}56{:}12.680 \dashrightarrow 00{:}56{:}13.736$ You didn't mean to.

NOTE Confidence: 0.5394423

 $00:56:13.736 \longrightarrow 00:56:15.062$ Well, that's not enough,

NOTE Confidence: 0.5394423

 $00:56:15.062 \rightarrow 00:56:15.416$ right?

NOTE Confidence: 0.5394423

 $00:56:15.416 \longrightarrow 00:56:16.478$ Because you can.

NOTE Confidence: 0.5394423

 $00{:}56{:}16{.}480 \dashrightarrow 00{:}56{:}17{.}792$ And maybe you do,

NOTE Confidence: 0.5394423

 $00{:}56{:}17.792 \dashrightarrow 00{:}56{:}18.120$ right.

NOTE Confidence: 0.5394423

 $00:56:18.120 \longrightarrow 00:56:21.768$ So take another like adjacent scenario

NOTE Confidence: 0.5394423

 $00{:}56{:}21.768 \dashrightarrow 00{:}56{:}25.248$ where there is a patient who may be

NOTE Confidence: 0.5394423

 $00{:}56{:}25{.}248 \dashrightarrow 00{:}56{:}27{.}720$ doesn't quite meet the criteria for,

- 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
- $00{:}56{:}30.716 \dashrightarrow 00{:}56{:}33.210$ with draw support and you can have
- NOTE Confidence: 0.5394423
- $00:56:33.210 \longrightarrow 00:56:35.472$ the intention not to bring that
- NOTE Confidence: 0.5394423
- $00:56:35.472 \longrightarrow 00:56:37.892$ patient back to life and then kill
- NOTE Confidence: 0.5394423
- $00{:}56{:}37{.}892 \dashrightarrow 00{:}56{:}39{.}768$ 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
- $00{:}56{:}43{.}440 \dashrightarrow 00{:}56{:}45{.}200$ blood flow to the brain.
- NOTE Confidence: 0.5394423
- $00:56:45.200 \rightarrow 00:56:46.880$ So intention is enough.
- NOTE Confidence: 0.5394423
- 00:56:46.880 --> 00:56:47.720 Isn't enough,
- NOTE Confidence: 0.943472
- $00:56:47.720 \longrightarrow 00:56:50.200$ right? There has to be, in fact,
- NOTE Confidence: 0.943472
- $00:56:50.200 \dashrightarrow 00:56:54.688$ whether whether the patient is dead,
- NOTE Confidence: 0.943472
- $00:56:54.688 \rightarrow 00:56:58.478$ So is the donor in fact resuscitated?
- NOTE Confidence: 0.943472
- $00:56:58.480 \dashrightarrow 00:57:01.600$ OK, so here's the difference between
- NOTE Confidence: 0.943472
- $00:57:01.600 \dashrightarrow 00:57:03.160$ recirculation and resuscitation.

- NOTE Confidence: 0.943472
- $00:57:03.160 \longrightarrow 00:57:06.136$ And I would argue that under

 $00:57:06.136 \longrightarrow 00:57:08.120$ the right NRP protocol,

NOTE Confidence: 0.943472

 $00{:}57{:}08.120 \dashrightarrow 00{:}57{:}10.874$ there isn't resuscitation because of the

NOTE Confidence: 0.943472

 $00:57:10.874 \dashrightarrow 00:57:13.720$ occlusion of blood flow to the brain.

NOTE Confidence: 0.943472

 $00:57:13.720 \longrightarrow 00:57:16.100$ Now, does preventing blood flow

NOTE Confidence: 0.943472

 $00{:}57{:}16{.}100 \dashrightarrow 00{:}57{:}18{.}480$ to the brain 'cause death?

NOTE Confidence: 0.943472

 $00:57:18.480 \rightarrow 00:57:20.542$ The one argument is yes, right?

NOTE Confidence: 0.943472

 $00{:}57{:}20.542 \dashrightarrow 00{:}57{:}23.554$ The clinicians who are occluding blood

NOTE Confidence: 0.943472

 $00{:}57{:}23.560 \dashrightarrow 00{:}57{:}26.208$ 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

 $00:57:28.200 \rightarrow 00:57:30.600$ wait a minute, the patient was already dead.

NOTE Confidence: 0.943472

 $00{:}57{:}30{.}600 \dashrightarrow 00{:}57{:}31{.}975$ You declare them dead according

NOTE Confidence: 0.943472

00:57:31.975 --> 00:57:32.800 to circulatory criteria,

NOTE Confidence: 0.943472

 $00{:}57{:}32{.}800 \dashrightarrow 00{:}57{:}35{.}420$ and everything afterward is just

NOTE Confidence: 0.943472

 $00{:}57{:}35{.}420 \dashrightarrow 00{:}57{:}38{.}040$ perfusion and preservation and donation.

- $00:57:38.040 \longrightarrow 00:57:38.596$ All right,
- NOTE Confidence: 0.943472
- $00:57:38.596 \rightarrow 00:57:41.240$ we won't have to go through this all again.
- NOTE Confidence: 0.943472
- $00:57:41.240 \longrightarrow 00:57:43.380$ The problem is, look,
- NOTE Confidence: 0.943472
- $00{:}57{:}43.380 \dashrightarrow 00{:}57{:}47.959$ the dead donor rule is based on
- NOTE Confidence: 0.943472
- $00{:}57{:}47.960 \dashrightarrow 00{:}57{:}50.040$ 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
- $00:57:55.676 \rightarrow 00:57:59.267$ the dead donor rule in at least
- NOTE Confidence: 0.943472
- $00{:}57{:}59{.}267 \dashrightarrow 00{:}58{:}00{.}357$ some circumstances.
- NOTE Confidence: 0.943472
- $00:58:00.360 \dashrightarrow 00:58:03.840$ Just because the heart is beating
- NOTE Confidence: 0.943472
- $00:58:03.840 \rightarrow 00:58:07.725$ right doesn't necessarily mean that
- NOTE Confidence: 0.943472
- $00:58:07.725 \rightarrow 00:58:10.240$ this patient has any meaningful
- NOTE Confidence: 0.943472
- $00:58:10.240 \longrightarrow 00:58:11.520$ 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
- $00:58:15.472 \rightarrow 00:58:19.200$ 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
- $00:58:21.000 \rightarrow 00:58:22.520$ the dead donor rule, right,

 $00{:}58{:}22{.}520 \dashrightarrow 00{:}58{:}24{.}120$ and move on from it.

NOTE Confidence: 0.943472

00:58:24.120 --> 00:58:24.520 All right.

NOTE Confidence: 0.943472

 $00:58:24.520 \longrightarrow 00:58:25.520$ So I want to ask,

NOTE Confidence: 0.943472

 $00{:}58{:}25{.}520 \dashrightarrow 00{:}58{:}28{.}760$ I want to ask here sort of at the end.

NOTE Confidence: 0.943472

 $00:58:28.760 \dashrightarrow 00:58:30.279$ Let's forget the law for a moment.

NOTE Confidence: 0.943472

 $00:58:30.280 \rightarrow 00:58:32.080$ It's very easy to go down the rabbit hole.

NOTE Confidence: 0.943472

 $00:58:32.080 \longrightarrow 00:58:33.400$ As Bob mentioned,

NOTE Confidence: 0.943472

 $00:58:33.400 \longrightarrow 00:58:35.033$ who's harmed, who has helped?

NOTE Confidence: 0.943472

 $00:58:35.033 \rightarrow 00:58:36.037$ What are the consequences?

NOTE Confidence: 0.943472

 $00{:}58{:}36{.}040 \dashrightarrow 00{:}58{:}38{.}479$ Here we have to think about the organ donors,

NOTE Confidence: 0.943472

 $00{:}58{:}38{.}480 \dashrightarrow 00{:}58{:}40{.}765$ family members and consider their

NOTE Confidence: 0.943472

 $00{:}58{:}40.765 \dashrightarrow 00{:}58{:}43.465$ experience of having just lost a

NOTE Confidence: 0.943472

 $00:58:43.465 \longrightarrow 00:58:45.817$ loved one and having to make a

NOTE Confidence: 0.943472

 $00{:}58{:}45{.}817 \dashrightarrow 00{:}58{:}47{.}921$ decision about what that individual

 $00:58:47.921 \longrightarrow 00:58:50.186$ would have wanted and how to NOTE Confidence: 0.943472 $00{:}58{:}50{.}186 \dashrightarrow 00{:}58{:}51{.}998$ 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 $00:58:54.016 \rightarrow 00:58:56.040$ them to make this decision? NOTE Confidence: 0.943472 $00:58:56.040 \longrightarrow 00:58:59.554$ And also the ability to realize NOTE Confidence: 0.943472 $00:58:59.554 \rightarrow 00:59:01.924$ the family members desires to NOTE Confidence: 0.943472 $00:59:01.924 \longrightarrow 00:59:04.918$ 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 $00:59:08.448 \rightarrow 00:59:10.320$ 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 $00:59:11.910 \rightarrow 00:59:13.440$ they do if you're doing something NOTE Confidence: 0.943472 $00:59:13.440 \longrightarrow 00:59:15.040$ wrong in the first instance. NOTE Confidence: 0.943472 $00:59:15.040 \longrightarrow 00:59:15.958$ So let's get to the organ NOTE Confidence: 0.943472 $00:59:15.960 \rightarrow 00:59:17.840$ donor for just a moment. NOTE Confidence: 0.943472 $00:59:17.840 \longrightarrow 00:59:19.916$ Their decision to be a donor. 104

- NOTE Confidence: 0.943472
- $00:59:19.920 \longrightarrow 00:59:22.363$ For those of you who are are

00:59:22.363 --> 00:59:24.199 authorized donors in this room,

NOTE Confidence: 0.943472

 $00:59:24.200 \rightarrow 00:59:29.240$ hopefully you feel that if and when you die,

NOTE Confidence: 0.943472

 $00:59:29.240 \rightarrow 00:59:31.976$ 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

 $00:59:34.380 \longrightarrow 00:59:37.280$ But at the same time,

NOTE Confidence: 0.943472

 $00{:}59{:}37{.}280 \dashrightarrow 00{:}59{:}39{.}896$ you don't want the experience of

NOTE Confidence: 0.943472

 $00{:}59{:}39{.}896 \dashrightarrow 00{:}59{:}43{.}357$ donation to be any way harmful to you.

NOTE Confidence: 0.943472

 $00{:}59{:}43.360 \dashrightarrow 00{:}59{:}45.145$ So the occlusion of blood flow to

NOTE Confidence: 0.943472

 $00{:}59{:}45{.}145 \dashrightarrow 00{:}59{:}47{.}080$ the brain is a critical question.

NOTE Confidence: 0.943472

 $00{:}59{:}47.080 \dashrightarrow 00{:}59{:}48.977$ And we haven't talked about some of

NOTE Confidence: 0.943472

 $00{:}59{:}48.977 \dashrightarrow 00{:}59{:}50.960$ the pushback on the current protocol,

NOTE Confidence: 0.943472

 $00{:}59{:}50{.}960 \dashrightarrow 00{:}59{:}53{.}851$ which is the ligation of the aortic

NOTE Confidence: 0.943472

 $00{:}59{:}53{.}851 \dashrightarrow 00{:}59{:}56{.}039$ arch vessels and the possibility

NOTE Confidence: 0.943472

 $00{:}59{:}56{.}039 \dashrightarrow 00{:}59{:}58{.}757$ that there is some collateral flow

 $00:59:58.760 \rightarrow 01:00:00.536$ to the brain through other channels,

NOTE Confidence: 0.943472

 $01{:}00{:}00.536 \dashrightarrow 01{:}00{:}03.000$ including through the spine.

NOTE Confidence: 0.943472

 $01{:}00{:}03{.}000 \dashrightarrow 01{:}00{:}05{.}292$ And there's now this question about NOTE Confidence: 0.943472

 $01:00:05.292 \rightarrow 01:00:07.339$ whether the occlusion is sufficient

NOTE Confidence: 0.943472

 $01{:}00{:}07{.}339 \dashrightarrow 01{:}00{:}09{.}960$ to prevent enough blood flow

NOTE Confidence: 0.9428858

 $01{:}00{:}09{.}960 \dashrightarrow 01{:}00{:}12{.}588$ that could potentially lead to some NOTE Confidence: 0.9428858

 $01:00:12.588 \rightarrow 01:00:15.040$ sort of meaningful cerebral activity.

NOTE Confidence: 0.9428858

 $01{:}00{:}15{.}040 \dashrightarrow 01{:}00{:}16{.}822$ And if we haven't answered that

NOTE Confidence: 0.9428858

 $01:00:16.822 \longrightarrow 01:00:18.251$ question, that's a problem.

NOTE Confidence: 0.9428858

 $01:00:18.251 \rightarrow 01:00:21.409$ There was a paper that came out pretty NOTE Confidence: 0.9428858

 $01{:}00{:}21{.}409 \dashrightarrow 01{:}00{:}24{.}043$ recently from NYU that suggests based NOTE Confidence: 0.9428858

 $01{:}00{:}24.043 \dashrightarrow 01{:}00{:}26.672$ on 2 donors, there was no meaningful

NOTE Confidence: 0.9428858

 $01{:}00{:}26.672 \dashrightarrow 01{:}00{:}28.312$ collateral flow to the brain.

NOTE Confidence: 0.9428858

 $01:00:28.320 \longrightarrow 01:00:30.032$ 2 is not a big enough number to

NOTE Confidence: 0.9428858

 $01{:}00{:}30{.}032 \dashrightarrow 01{:}00{:}31{.}676$ 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
- $01:00:33.055 \longrightarrow 01:00:34.345$ So we need to find ways

 $01:00:34.345 \longrightarrow 01:00:36.519$ to replicate this study.

NOTE Confidence: 0.9428858

 $01:00:36.520 \longrightarrow 01:00:37.895$ There have been updates to

NOTE Confidence: 0.9428858

 $01:00:37.895 \rightarrow 01:00:39.451$ the protocol which says, OK,

NOTE Confidence: 0.9428858

 $01:00:39.451 \rightarrow 01:00:42.157$ let's not just ligate the vessels,

NOTE Confidence: 0.9428858

 $01{:}00{:}42.160 \dashrightarrow 01{:}00{:}44.536$ let's sever the vessels so that if you

NOTE Confidence: 0.9428858

 $01{:}00{:}44.536 \dashrightarrow 01{:}00{:}46.679$ open them to atmospheric pressure,

NOTE Confidence: 0.9428858

 $01{:}00{:}46.680 \dashrightarrow 01{:}00{:}48.884$ the blood will drain out and there

NOTE Confidence: 0.9428858

 $01{:}00{:}48.884 \dashrightarrow 01{:}00{:}50.998$ 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

 $01{:}00{:}52.626 \dashrightarrow 01{:}00{:}54.460$ 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

 $01{:}00{:}56{.}560 \dashrightarrow 01{:}00{:}59{.}888$ So even that might not be sufficient to

NOTE Confidence: 0.9428858

 $01{:}00{:}59{.}888 \dashrightarrow 01{:}01{:}02{.}680$ 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,

 $01{:}01{:}04{.}280 \dashrightarrow 01{:}01{:}05{.}810$ 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

 $01:01:08.336 \rightarrow 01:01:11.440$ if we're not sure that severing is enough,

NOTE Confidence: 0.9428858

 $01:01:11.440 \longrightarrow 01:01:14.291$ 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

 $01:01:15.440 \longrightarrow 01:01:16.572$ What are you talking about?

NOTE Confidence: 0.9428858

 $01:01:16.572 \longrightarrow 01:01:17.476$ That's crazy.

NOTE Confidence: 0.9428858

 $01:01:17.476 \rightarrow 01:01:20.640$ But I'll say from an ethics perspective,

NOTE Confidence: 0.9428858

 $01:01:20.640 \longrightarrow 01:01:23.560$ 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

 $01:01:27.720 \longrightarrow 01:01:28.306$ Right. If.

NOTE Confidence: 0.9428858

 $01:01:28.306 \longrightarrow 01:01:29.478$ Well, it's going to,

NOTE Confidence: 0.9428858

 $01:01:29.480 \longrightarrow 01:01:31.656$ if that's going to maximize the goal and

NOTE Confidence: 0.9428858

 $01{:}01{:}31.656 \dashrightarrow 01{:}01{:}33.876$ ensure that this donor experiences no harm,

NOTE Confidence: 0.9428858

01:01:33.880 --> 01:01:34.266 right.
- NOTE Confidence: 0.9428858
- $01:01:34.266 \rightarrow 01:01:36.582$ 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
- $01{:}01{:}38.096 \dashrightarrow 01{:}01{:}40.198$ 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
- $01:01:41.986 \longrightarrow 01:01:42.292$ Last thing,
- NOTE Confidence: 0.9428858
- $01:01:42.292 \longrightarrow 01:01:44.340$ back to the issue of what
- NOTE Confidence: 0.9428858
- $01:01:44.340 \longrightarrow 01:01:45.960$ 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
- $01:01:54.240 \rightarrow 01:01:56.439$ you're you're in this this crazy world.
- NOTE Confidence: 0.9428858
- $01{:}01{:}56{.}440 \dashrightarrow 01{:}01{:}58{.}320$ What information would you want?
- NOTE Confidence: 0.9428858
- $01:01:58.320 \rightarrow 01:02:00.994$ 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
- $01:02:02.952 \rightarrow 01:02:04.520$ 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
- $01:02:07.445 \rightarrow 01:02:09.917$ project to study donor perspectives,
- NOTE Confidence: 0.9428858
- $01:02:09.920 \rightarrow 01:02:13.358$ donor family member perspectives on NRP.
- NOTE Confidence: 0.9428858
- $01{:}02{:}13.360 \dashrightarrow 01{:}02{:}16.040$ Because even if all of this works great,
- NOTE Confidence: 0.9428858
- $01{:}02{:}16.040 \dashrightarrow 01{:}02{:}18.154$ and even if us ethicists in the
- NOTE Confidence: 0.9428858
- $01{:}02{:}18{.}154 \dashrightarrow 01{:}02{:}19{.}795$ ivory tower decide that this
- NOTE Confidence: 0.9428858
- $01:02:19.795 \longrightarrow 01:02:21.475$ is ethical under some rubric,
- NOTE Confidence: 0.9428858
- $01:02:21.480 \longrightarrow 01:02:23.916$ it doesn't matter if this abuses
- NOTE Confidence: 0.9428858
- $01:02:23.916 \longrightarrow 01:02:26.819$ 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
- $01:02:28.600 \rightarrow 01:02:30.880$ about organ transplant and so both,
- NOTE Confidence: 0.9428858
- $01:02:30.880 \longrightarrow 01:02:32.990$ both from a deontological perspective
- NOTE Confidence: 0.9428858
- $01:02:32.990 \rightarrow 01:02:34.678$ and a consequences perspective,

- NOTE Confidence: 0.9428858
- $01{:}02{:}34.680 \dashrightarrow 01{:}02{:}36.480$ this could have massive blowback.

 $01:02:36.480 \longrightarrow 01:02:37.440$ So the issue is trust.

NOTE Confidence: 0.9428858

 $01{:}02{:}37{.}440 \dashrightarrow 01{:}02{:}39{.}240$ And I want to end with just one point,

NOTE Confidence: 0.9428858

 $01:02:39.240 \longrightarrow 01:02:41.228$ which is we have to go back

NOTE Confidence: 0.9428858

 $01:02:41.228 \longrightarrow 01:02:43.120$ to this issue of permanence.

NOTE Confidence: 0.9428858

 $01{:}02{:}43.120 \dashrightarrow 01{:}02{:}47.146$ And I think the most important ethics

NOTE Confidence: 0.9428858

 $01{:}02{:}47.146 \dashrightarrow 01{:}02{:}51.076$ challenge is ensuring that upstream

NOTE Confidence: 0.9428858

 $01:02:51.080 \rightarrow 01:02:54.200$ two donors who are otherwise similarly

NOTE Confidence: 0.9428858

 $01:02:54.200 \longrightarrow 01:02:58.000$ situated are not treated differently.

NOTE Confidence: 0.9428858

01:02:58.000 --> 01:02:58.342 I'm sorry,

NOTE Confidence: 0.9428858

 $01:02:58.342 \longrightarrow 01:02:59.197$ not donors at this point.

NOTE Confidence: 0.9428858

 $01{:}02{:}59{.}200 \dashrightarrow 01{:}03{:}01{.}040$ But patients are not treated

NOTE Confidence: 0.9428858

 $01:03:01.040 \longrightarrow 01:03:02.880$ differently such that one is

NOTE Confidence: 0.9428858

 $01{:}03{:}02{.}948 \dashrightarrow 01{:}03{:}05{.}078$ routed for continued medical care

NOTE Confidence: 0.9428858

 $01{:}03{:}05{.}078 \dashrightarrow 01{:}03{:}07{.}208$ because there's a possibility we

 $01:03:07.277 \longrightarrow 01:03:09.485$ might be able to restore some

NOTE Confidence: 0.8777135

 $01:03:09.485 \longrightarrow 01:03:10.957$ meaningful quality of life.

NOTE Confidence: 0.8777135

 $01{:}03{:}10{.}960 \dashrightarrow 01{:}03{:}13{.}326$ 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

 $01:03:15.839 \rightarrow 01:03:18.194$ support and an organ donation.

NOTE Confidence: 0.8777135

 $01:03:18.200 \longrightarrow 01:03:20.350$ Simply by virtue of the first

NOTE Confidence: 0.8777135

 $01{:}03{:}20{.}350 \dashrightarrow 01{:}03{:}22{.}520$ patient being of a particular socio

NOTE Confidence: 0.8777135

 $01:03:22.520 \rightarrow 01:03:23.920$ economic demographic being white,

NOTE Confidence: 0.8777135

 $01{:}03{:}23{.}920 \dashrightarrow 01{:}03{:}26{.}320$ having family members to advocate for them,

NOTE Confidence: 0.8777135

 $01{:}03{:}26{.}320 \dashrightarrow 01{:}03{:}28{.}576$ 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

 $01:03:31.384 \rightarrow 01:03:33.942$ their wishes and wanting to, you know,

NOTE Confidence: 0.8777135

 $01:03:33.942 \rightarrow 01:03:35.719$ 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

 $01:03:38.833 \rightarrow 01:03:41.360$ objectivity around these decisions,

NOTE Confidence: 0.8777135

 $01:03:41.360 \longrightarrow 01:03:43.558$ then hopefully we can do a better

- NOTE Confidence: 0.8777135
- $01:03:43.558 \rightarrow 01:03:45.737$ job of trusting that the rest of
- NOTE Confidence: 0.8777135
- $01{:}03{:}45{.}737 \dashrightarrow 01{:}03{:}47{.}880$ this process is going to lead to
- NOTE Confidence: 0.38107035
- 01:03:53.220 $\operatorname{-->}$ 01:03:55.285 decision that respects the donor
- NOTE Confidence: 0.38107035
- $01{:}03{:}55{.}285 \dashrightarrow 01{:}03{:}56{.}540$ wishes, respects the community
- NOTE Confidence: 0.38107035
- $01:03:56.540 \longrightarrow 01:03:59.300$ and leads to good outcomes.
- NOTE Confidence: 0.38107035
- $01{:}03{:}59{.}300 \dashrightarrow 01{:}04{:}00{.}140$ All right, I'll stop there.
- NOTE Confidence: 0.38107035
- $01:04:02.300 \longrightarrow 01:04:03.239$ Thank you, Brendan.
- NOTE Confidence: 0.38107035
- $01:04:03.239 \longrightarrow 01:04:04.792$ 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
- $01:04:07.620 \longrightarrow 01:04:08.976$ Yeah. Bob has some artwork there
- NOTE Confidence: 0.38107035
- $01{:}04{:}08{.}976 \dashrightarrow 01{:}04{:}11{.}820$ for speak on Sound up there.
- NOTE Confidence: 0.38107035
- $01:04:11.820 \longrightarrow 01:04:13.458$ There you go. That looks nice.
- NOTE Confidence: 0.38107035
- $01:04:13.460 \longrightarrow 01:04:14.072$ We'll leave that up.
- NOTE Confidence: 0.38107035
- $01:04:14.072 \longrightarrow 01:04:15.860$ 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
 $\operatorname{-->}$ 01:04:20.420 and Brendan to have a seat here

NOTE Confidence: 0.38107035

 $01{:}04{:}20{.}420 \dashrightarrow 01{:}04{:}22{.}355$ and we'll turn those mics on and

NOTE Confidence: 0.38107035

 $01:04:22.355 \rightarrow 01:04:23.275$ 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

 $01:04:26.226 \longrightarrow 01:04:27.316$ take as moderator,

NOTE Confidence: 0.38107035

 $01:04:27.316 \longrightarrow 01:04:28.806$ I take my prerogative to

NOTE Confidence: 0.38107035

 $01{:}04{:}28.806 \dashrightarrow 01{:}04{:}30.280$ ask the first question.

NOTE Confidence: 0.38107035

 $01{:}04{:}30{.}280 \dashrightarrow 01{:}04{:}31{.}654$ I'm going to actually ask the

NOTE Confidence: 0.38107035

 $01{:}04{:}31{.}654 \dashrightarrow 01{:}04{:}32{.}813$ second question because I want

NOTE Confidence: 0.38107035

 $01{:}04{:}32{.}813 \dashrightarrow 01{:}04{:}34{.}199$ to open up to the first question.

NOTE Confidence: 0.38107035

 $01:04:34.200 \longrightarrow 01:04:35.575$ Was there a kindly offer

NOTE Confidence: 0.38107035

 $01:04:35.575 \longrightarrow 01:04:36.675$ to explain the technology.

NOTE Confidence: 0.38107035

 $01{:}04{:}36{.}680 \dashrightarrow 01{:}04{:}39{.}440$ So before we get in to a conversation

NOTE Confidence: 0.38107035

 $01:04:39.440 \longrightarrow 01:04:40.615$ about the ethical and legal

NOTE Confidence: 0.38107035

 $01:04:40.615 \rightarrow 01:04:42.085$ issues that have been so nicely

- NOTE Confidence: 0.38107035
- $01:04:42.085 \longrightarrow 01:04:43.555$ laid out by all three speakers.

01:04:43.560 --> 01:04:44.120 In fact,

NOTE Confidence: 0.38107035

 $01:04:44.120 \longrightarrow 01:04:45.800$ I just want to be sure,

NOTE Confidence: 0.38107035

 $01:04:45.800 \rightarrow 01:04:48.441$ is there someone in the audience And please,

NOTE Confidence: 0.38107035

 $01{:}04{:}48{.}441 \dashrightarrow 01{:}04{:}50{.}049$ please feel free cause a lot of this

NOTE Confidence: 0.38107035

 $01:04:50.049 \rightarrow 01:04:51.410$ stuff is technical and everybody's

NOTE Confidence: 0.38107035

 $01:04:51.410 \dashrightarrow 01:04:52.800$ got varying degrees of expertise.

NOTE Confidence: 0.38107035

 $01:04:52.800 \longrightarrow 01:04:55.320$ If anybody in the audience has a

NOTE Confidence: 0.38107035

 $01{:}04{:}55{.}320 \dashrightarrow 01{:}04{:}57{.}060$ question specifically about how the

NOTE Confidence: 0.38107035

 $01{:}04{:}57.060 \dashrightarrow 01{:}04{:}58.965$ technique is done that they want to ask

NOTE Confidence: 0.38107035

 $01{:}04{:}58.965 \dashrightarrow 01{:}05{:}00.448$ which Eric had offered to answer before,

NOTE Confidence: 0.38107035

 $01{:}05{:}00.448 \dashrightarrow 01{:}05{:}01.353$ which we can do now.

NOTE Confidence: 0.38107035

 $01{:}05{:}01{.}353 \dashrightarrow 01{:}05{:}02{.}984$ So anyone have a question they want

NOTE Confidence: 0.38107035

 $01:05:02.984 \longrightarrow 01:05:04.119$ to specifically ask about that?

NOTE Confidence: 0.38107035

 $01{:}05{:}04{.}120 \dashrightarrow 01{:}05{:}04{.}454$ Yes Sir.

- $01:05:04.454 \longrightarrow 01:05:04.788$ So wait,
- NOTE Confidence: 0.38107035
- $01:05:04.788 \longrightarrow 01:05:06.080$ wait for the mic if you would.

 $01{:}05{:}06{.}080 \dashrightarrow 01{:}05{:}07{.}837$ So the folks on Zoom can also

NOTE Confidence: 0.38107035

 $01:05:07.837 \longrightarrow 01:05:09.359$ 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

 $01:05:17.720 \longrightarrow 01:05:20.705$ the ex vivo method that it's it's

NOTE Confidence: 0.52961653

 $01{:}05{:}20.705 \dashrightarrow 01{:}05{:}23.000$ 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

 $01{:}05{:}26.860 \dashrightarrow 01{:}05{:}29.000$ NRP or is it like a patient in the

NOTE Confidence: 0.69472426

 $01:05:29.000 \longrightarrow 01:05:30.975$ 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

 $01:05:34.162 \longrightarrow 01:05:35.640$ it transferred in vivo in,

NOTE Confidence: 0.69472426

 $01:05:35.640 \rightarrow 01:05:37.719$ in the case of in the case of NRP?

- NOTE Confidence: 0.69472426
- $01{:}05{:}40{.}280 \dashrightarrow 01{:}05{:}42{.}115$ Not sure I understand except that they're

 $01{:}05{:}42.115 \dashrightarrow 01{:}05{:}44.246$ both done in the operating room like the if,

NOTE Confidence: 0.69472426

 $01:05:44.246 \rightarrow 01:05:47.238$ if the if the donor was right here

NOTE Confidence: 0.69472426

 $01:05:47.240 \rightarrow 01:05:50.040$ you're you're resuscitating the organs

NOTE Confidence: 0.41375446

 $01{:}05{:}50{.}160 \dashrightarrow 01{:}05{:}52{.}080$ inside that donor. And if

NOTE Confidence: 0.41375446

 $01{:}05{:}52{.}360 \dashrightarrow 01{:}05{:}54{.}799$ if, if you were going to use that transmedics

NOTE Confidence: 0.41375446

 $01:05:54.800 \rightarrow 01:05:56.360$ machine, the machine's sitting right there.

NOTE Confidence: 0.41375446

 $01:05:56.360 \longrightarrow 01:05:59.052$ So I I think the I got it, I got it so.

NOTE Confidence: 0.41375446

 $01:05:59.052 \rightarrow 01:06:01.840$ So when you get it has to go, it stays,

NOTE Confidence: 0.41375446

 $01:06:02.280 \longrightarrow 01:06:03.800$ it stays on that machine

NOTE Confidence: 0.41375446

 $01{:}06{:}04.280 \dashrightarrow 01{:}06{:}05.798$ 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

 $01{:}06{:}09{.}640 \dashrightarrow 01{:}06{:}11{.}400$ a cardboard box that's insulated

NOTE Confidence: 0.6020811

 $01:06:11.800 \rightarrow 01:06:13.879$ potentially and the outcomes are still good,

01:06:13.880 --> 01:06:15.350 right, because you have improved

NOTE Confidence: 0.6020811

 $01:06:15.350 \longrightarrow 01:06:17.087$ after the ischemic time even though

NOTE Confidence: 0.6020811

 $01{:}06{:}17.087 \dashrightarrow 01{:}06{:}18.995$ it has to go back in a cardboard box,

NOTE Confidence: 0.6020811

 $01{:}06{:}19{.}000 \dashrightarrow 01{:}06{:}21{.}616$ but often the donor and recipient

NOTE Confidence: 0.6020811

 $01:06:21.616 \longrightarrow 01:06:23.510$ could be Co located, right.

NOTE Confidence: 0.6020811

 $01:06:23.510 \longrightarrow 01:06:24.560$ So your your point you said what

NOTE Confidence: 0.6020811

 $01{:}06{:}24.560 \dashrightarrow 01{:}06{:}25.437$ if they're in the same place,

NOTE Confidence: 0.6020811

 $01:06:25.440 \longrightarrow 01:06:27.312$ 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

 $01{:}06{:}29{.}232 \dashrightarrow 01{:}06{:}31{.}040$ losing that that is chemic time, right.

NOTE Confidence: 0.6020811

 $01:06:31.040 \longrightarrow 01:06:32.640$ And the other possibility,

NOTE Confidence: 0.6020811

 $01{:}06{:}32{.}640 \dashrightarrow 01{:}06{:}34{.}400$ something we didn't talk about

NOTE Confidence: 0.6020811

 $01{:}06{:}34{.}400 \dashrightarrow 01{:}06{:}37{.}228$ 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

 $01{:}06{:}38{.}821 \dashrightarrow 01{:}06{:}40{.}909$ So you do it inside the body and

NOTE Confidence: 0.6020811

 $01:06:40.909 \longrightarrow 01:06:42.838$ then you can put it on a machine

- NOTE Confidence: 0.6020811
- $01:06:42.840 \longrightarrow 01:06:45.720$ for a little bit at least. Yeah.

 $01:06:45.720 \longrightarrow 01:06:46.386$ Thank you.

NOTE Confidence: 0.6020811

01:06:46.386 --> 01:06:46.719 Thank

NOTE Confidence: 0.92064226

 $01:06:46.720 \longrightarrow 01:06:50.596$ you very much. So let me,

NOTE Confidence: 0.92064226

 $01:06:50.600 \longrightarrow 01:06:52.520$ let me ask the first question.

NOTE Confidence: 0.92064226

 $01:06:52.520 \longrightarrow 01:06:55.480$ And and this would be to to

NOTE Confidence: 0.92064226

 $01:06:55.480 \rightarrow 01:06:57.400$ anyone who wants to address it.

NOTE Confidence: 0.92064226

 $01{:}06{:}57{.}400 \dashrightarrow 01{:}06{:}59{.}713$ 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

 $01:07:01.790 \longrightarrow 01:07:03.200$ the country who was watching this.

NOTE Confidence: 0.92064226

 $01:07:03.200 \longrightarrow 01:07:04.600$ This is the fun of doing a list of fun.

NOTE Confidence: 0.92064226

 $01{:}07{:}04.600 \dashrightarrow 01{:}07{:}06.118$ Zoom was watching this and says,

NOTE Confidence: 0.92064226

 $01:07:06.120 \longrightarrow 01:07:06.840$ 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

 $01:07:07.520 \longrightarrow 01:07:08.520$ I'm going to ask all three of them.

- $01:07:08.520 \longrightarrow 01:07:09.756$ 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
- $01:07:12.040 \longrightarrow 01:07:12.872$ is that so?
- NOTE Confidence: 0.92064226
- $01:07:12.872 \longrightarrow 01:07:14.960$ 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
- $01{:}07{:}18.095 \dashrightarrow 01{:}07{:}19.547$ calis then ics to convince ourselves
- NOTE Confidence: 0.92064226
- $01:07:19.547 \longrightarrow 01:07:21.362$ that somebody's dead in order
- NOTE Confidence: 0.92064226
- 01:07:21.362 $\operatorname{-->}$ 01:07:23.290 to make it OK to take the organs
- NOTE Confidence: 0.92064226
- $01{:}07{:}23.357 \dashrightarrow 01{:}07{:}25.478$ because we have the dead donor rule.
- NOTE Confidence: 0.92064226
- $01:07:25.480 \longrightarrow 01:07:26.920$ And so another solution to this,
- NOTE Confidence: 0.92064226
- $01{:}07{:}26.920 \dashrightarrow 01{:}07{:}28.845$ rather than 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
- $01:07:31.120 \longrightarrow 01:07:32.548$ is what about just getting rid
- NOTE Confidence: 0.92064226
- $01:07:32.548 \longrightarrow 01:07:33.800$ of the dead donor duel?
- NOTE Confidence: 0.92064226
- $01:07:33.800 \rightarrow 01:07:35.292$ The dead donor rule.

- NOTE Confidence: 0.92064226
- $01:07:35.292 \rightarrow 01:07:36.038$ 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
- $01:07:42.400 \longrightarrow 01:07:44.880$ you you suggested this and
- NOTE Confidence: 0.25249273
- $01{:}07{:}44.880 \dashrightarrow 01{:}07{:}49.451$ I could be persuaded that that's not
- NOTE Confidence: 0.25249273
- $01{:}07{:}49{.}451 \dashrightarrow 01{:}07{:}53{.}040$ an unreasonable way of resolving this.
- NOTE Confidence: 0.25249273
- $01{:}07{:}53.800 \dashrightarrow 01{:}07{:}54.560$ And I mean, what
- NOTE Confidence: 0.877189
- $01:07:55.120 \rightarrow 01:07:57.514$ one of the big advantages of doing
- NOTE Confidence: 0.877189
- $01{:}07{:}57{.}514 \dashrightarrow 01{:}08{:}00{.}368$ that is that we would cut through all
- NOTE Confidence: 0.877189
- $01{:}08{:}00.368 \dashrightarrow 01{:}08{:}02.672$ of what many people would view as the
- NOTE Confidence: 0.877189
- $01:08:02.672 \rightarrow 01:08:05.840$ charade we go through to to be able to,
- NOTE Confidence: 0.877189
- $01{:}08{:}05{.}840 \dashrightarrow 01{:}08{:}08{.}656$ if not convince ourselves,
- NOTE Confidence: 0.877189
- $01:08:08.656 \rightarrow 01:08:10.680$ convince lawyers and other people
- NOTE Confidence: 0.877189
- $01{:}08{:}10.680 \dashrightarrow 01{:}08{:}12.840$ that that the person is dead.
- NOTE Confidence: 0.877189
- $01{:}08{:}12.840 \dashrightarrow 01{:}08{:}14.112$ Why not right at the beginning
- NOTE Confidence: 0.877189

- $01:08:14.112 \rightarrow 01:08:14.960$ 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
- $01{:}08{:}17.630 \dashrightarrow 01{:}08{:}20.770$ dose of fentanyl and we wouldn't have to
- NOTE Confidence: 0.877189
- $01:08:20.770 \rightarrow 01:08:23.496$ worry about whatever happened after that.
- NOTE Confidence: 0.877189
- $01{:}08{:}23.496 \dashrightarrow 01{:}08{:}26.280$ I mean, the patient,
- NOTE Confidence: 0.877189
- $01{:}08{:}26{.}280 \dashrightarrow 01{:}08{:}27{.}995$ 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
- $01:08:29.760 \longrightarrow 01:08:31.020$ this was somebody who we know
- NOTE Confidence: 0.877189
- $01:08:31.020 \longrightarrow 01:08:32.240$ is going to die anyway,
- NOTE Confidence: 0.877189
- $01:08:32.240 \rightarrow 01:08:34.000$ they want to donate their organs.
- NOTE Confidence: 0.877189
- $01{:}08{:}34.000 \dashrightarrow 01{:}08{:}36.216$ That seems to me the least we could do is
- NOTE Confidence: 0.877189
- $01:08:36.216 \rightarrow 01:08:38.232$ just absolutely guarantee that they're
- NOTE Confidence: 0.877189
- $01:08:38.232 \dashrightarrow 01:08:41.048$ 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
- $01:08:43.604 \rightarrow 01:08:46.481$ upon either getting rid of the dead
- NOTE Confidence: 0.877189
- 01:08:46.481 --> 01:08:48.967 donor rule or or viewing NRP

- NOTE Confidence: 0.877189
- $01:08:48.967 \rightarrow 01:08:51.080$ as kind of an exception that makes

 $01{:}08{:}51{.}080 \dashrightarrow 01{:}08{:}53{.}198$ sense where the dead donor rule can

NOTE Confidence: 0.877189

 $01:08:53.200 \rightarrow 01:08:54.639$ be honored in the breach, if at all.

NOTE Confidence: 0.9418989

 $01{:}08{:}56{.}000 \dashrightarrow 01{:}08{:}58{.}184$ So this is a very important question that

NOTE Confidence: 0.9418989

 $01{:}08{:}58{.}184 \dashrightarrow 01{:}09{:}00{.}519$ I think we need to be asking right now.

NOTE Confidence: 0.9418989

 $01{:}09{:}00.520 \dashrightarrow 01{:}09{:}02.354$ And I think one of the most

NOTE Confidence: 0.9418989

 $01:09:02.360 \rightarrow 01:09:03.857$ 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

 $01:09:07.426 \longrightarrow 01:09:11.935$ rule is the impact on trust, right.

NOTE Confidence: 0.9418989

 $01{:}09{:}11{.}935 \dashrightarrow 01{:}09{:}17{.}065$ And this push, particularly in this

NOTE Confidence: 0.9418989

 $01:09:17.065 \rightarrow 01:09:20.158$ country to try to get more organs,

NOTE Confidence: 0.9418989

 $01{:}09{:}20.160 \dashrightarrow 01{:}09{:}26.288$ which is a good cause and the potential

NOTE Confidence: 0.9418989

 $01{:}09{:}26.288 \dashrightarrow 01{:}09{:}29.920$ economic motivations to pursue

NOTE Confidence: 0.9418989

 $01{:}09{:}29{.}920 \dashrightarrow 01{:}09{:}32{.}448$ organ transplant in some regards.

NOTE Confidence: 0.9418989

 $01:09:32.448 \longrightarrow 01:09:36.055$ And the lack of trust that already

 $01:09:36.055 \rightarrow 01:09:38.360$ exists among many communities both in

NOTE Confidence: 0.9418989

 $01{:}09{:}38{.}360 \dashrightarrow 01{:}09{:}40{.}881$ 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

 $01:09:42.762 \rightarrow 01:09:44.876$ because they're afraid that if they do,

NOTE Confidence: 0.9418989

 $01{:}09{:}44.880 \dashrightarrow 01{:}09{:}47.679$ you won't try as hard to save their life,

NOTE Confidence: 0.9418989

 $01:09:47.680 \longrightarrow 01:09:48.000$ right.

NOTE Confidence: 0.9418989

 $01:09:48.000 \rightarrow 01:09:49.920$ And that's a really important consideration.

NOTE Confidence: 0.9418989

 $01:09:49.920 \longrightarrow 01:09:51.040$ So that now if we,

NOTE Confidence: 0.9418989

 $01{:}09{:}51{.}040 \dashrightarrow 01{:}09{:}53{.}920$ if we try to create a culture where we say,

NOTE Confidence: 0.9418989

 $01:09:53.920 \longrightarrow 01:09:55.944$ oh, you don't even have to be dead

NOTE Confidence: 0.9418989

 $01:09:55.944 \rightarrow 01:09:58.008$ to take your organs, but don't worry,

NOTE Confidence: 0.9418989

 $01:09:58.008 \rightarrow 01:09:59.544$ 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

 $01{:}10{:}01{.}318 \dashrightarrow 01{:}10{:}04{.}104$ That might sort of breach a line

NOTE Confidence: 0.9418989

 $01:10:04.104 \rightarrow 01:10:06.555$ that actually allows some of the

- NOTE Confidence: 0.9418989
- $01:10:06.555 \longrightarrow 01:10:08.520$ other motivations to sort of
- NOTE Confidence: 0.90322334
- $01{:}10{:}10{.}640 \dashrightarrow 01{:}10{:}12{.}340$ overwhelm the prioritization of
- NOTE Confidence: 0.90322334
- $01{:}10{:}12{.}340 \dashrightarrow 01{:}10{:}14{.}465$ clinical care and well-being of
- NOTE Confidence: 0.90322334
- $01:10:14.465 \rightarrow 01:10:16.676$ 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
- $01:10:20.880 \rightarrow 01:10:22.120$ is it necessarily the case?
- NOTE Confidence: 0.90322334
- $01:10:22.120 \longrightarrow 01:10:22.802$ Not necessarily.
- NOTE Confidence: 0.90322334
- $01:10:22.802 \longrightarrow 01:10:25.530$ 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
- $01:10:28.040 \longrightarrow 01:10:29.825$ to make sure that individuals
- NOTE Confidence: 0.90322334
- $01:10:29.825 \longrightarrow 01:10:32.000$ are empowered to have the right
- NOTE Confidence: 0.90322334
- $01:10:32.000 \rightarrow 01:10:33.680$ 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
- $01{:}10{:}35{.}455 \dashrightarrow 01{:}10{:}36{.}875$ realizing their transplant wishes.
- NOTE Confidence: 0.90322334

 $01{:}10{:}36{.}880 \dashrightarrow 01{:}10{:}40{.}072$ 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

 $01:10:45.420 \longrightarrow 01:10:46.750$ 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

 $01:10:49.240 \longrightarrow 01:10:50.712$ in such a way that it could

NOTE Confidence: 0.90322334

 $01{:}10{:}50{.}712 \dashrightarrow 01{:}10{:}51{.}596$ save other people's lives,

NOTE Confidence: 0.90322334

 $01{:}10{:}51{.}600 \dashrightarrow 01{:}10{:}52{.}560$ well then let's do that.

NOTE Confidence: 0.90322334

 $01:10:52.560 \rightarrow 01:10:55.199$ Could you imagine that in this country?

NOTE Confidence: 0.90322334

 $01:10:55.200 \rightarrow 01:10:56.112$ Not, not yet.

NOTE Confidence: 0.90322334

 $01:10:56.112 \longrightarrow 01:10:58.240$ And I also want to point out,

NOTE Confidence: 0.90322334

 $01{:}10{:}58{.}240 \dashrightarrow 01{:}11{:}00{.}720$ I think some body else's work in this room.

NOTE Confidence: 0.9082717

 $01{:}11{:}03.080 \dashrightarrow 01{:}11{:}05.803$ So there have been some studies to

NOTE Confidence: 0.9082717

 $01:11:05.803 \rightarrow 01:11:08.674$ suggest that if you are honest with

- NOTE Confidence: 0.9082717
- $01:11:08.674 \rightarrow 01:11:12.535$ people about what happens that they

01:11:12.535 --> 01:11:14.847 don't necessarily feel like they

NOTE Confidence: 0.9082717

 $01:11:14.847 \longrightarrow 01:11:17.462$ have to be dead in order for their

NOTE Confidence: 0.9082717

 $01:11:17.462 \rightarrow 01:11:20.480$ organs to save other people's lives.

NOTE Confidence: 0.9082717

 $01:11:20.480 \longrightarrow 01:11:24.864$ As long as you know that death

NOTE Confidence: 0.9082717

 $01{:}11{:}24.864 \dashrightarrow 01{:}11{:}27.708$ is imminent and that this could

NOTE Confidence: 0.9082717

 $01:11:27.708 \longrightarrow 01:11:30.390$ 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

 $01{:}11{:}32.486 \dashrightarrow 01{:}11{:}34.184$ transparent and giving them the best

NOTE Confidence: 0.9082717

 $01:11:34.184 \longrightarrow 01:11:35.639$ clinical care at the end of life.

NOTE Confidence: 0.9082717

 $01{:}11{:}35{.}640 \dashrightarrow 01{:}11{:}38{.}240$ 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

 $01:11:40.840 \rightarrow 01:11:43.320$ 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

 $01:11:46.632 \rightarrow 01:11:49.596$ 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 $\operatorname{-->}$ 01:11:53.168 know but by the way we're going to

NOTE Confidence: 0.5016402

 $01{:}11{:}53{.}207 \dashrightarrow 01{:}11{:}54{.}359$ 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

 $01{:}11{:}56{.}360 \dashrightarrow 01{:}11{:}58{.}320$ 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

 $01{:}12{:}00{.}300 \dashrightarrow 01{:}12{:}02{.}181$ 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

 $01{:}12{:}04.045 \dashrightarrow 01{:}12{:}06.079$ 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

 $01{:}12{:}09{.}747 \dashrightarrow 01{:}12{:}11{.}579$ 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

 $01{:}12{:}13.048 \dashrightarrow 01{:}12{:}14.680$ 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
- $01{:}12{:}15{.}960 \dashrightarrow 01{:}12{:}18{.}223$ 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
- $01:12:19.448 \longrightarrow 01:12:20.240$ wanted to say something.
- NOTE Confidence: 0.5016402
- $01{:}12{:}20.240 \dashrightarrow 01{:}12{:}22.355$ But what I'm going to ask is we have
- NOTE Confidence: 0.5016402
- $01:12:22.360 \longrightarrow 01:12:24.033$ a number of individuals here who are
- NOTE Confidence: 0.5016402
- $01:12:24.033 \rightarrow 01:12:26.159$ leaders in the transplant community locally,
- NOTE Confidence: 0.5016402
- $01:12:26.160 \longrightarrow 01:12:26.976$ nationally and otherwise.
- NOTE Confidence: 0.5016402
- $01{:}12{:}26.976 \dashrightarrow 01{:}12{:}29.174$ So we don't ordinarily do this but just
- NOTE Confidence: 0.5016402
- $01:12:29.174 \rightarrow 01:12:30.917$ 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
- $01:12:33.128 \longrightarrow 01:12:34.232$ 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

 $01:12:40.031 \rightarrow 01:12:41.916$ what university you represent etcetera.

NOTE Confidence: 0.5016402

 $01:12:41.920 \longrightarrow 01:12:43.719$ And by the way, to my friends,

NOTE Confidence: 0.5016402

 $01:12:43.720 \longrightarrow 01:12:45.796$ the students who are here that

NOTE Confidence: 0.5016402

 $01:12:45.800 \longrightarrow 01:12:46.649$ whether you're the,

NOTE Confidence: 0.5016402

 $01{:}12{:}46.649 \dashrightarrow 01{:}12{:}48.347$ 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

 $01:12:52.520 \rightarrow 01:12:53.960$ we want to hear from everybody

NOTE Confidence: 0.5016402

 $01{:}12{:}53.960 \dashrightarrow 01{:}12{:}54.680$ in this conversation.

NOTE Confidence: 0.5016402

01:12:54.680 --> 01:12:55.776 Everybody's opinions and thoughts

NOTE Confidence: 0.5016402

 $01:12:55.776 \longrightarrow 01:12:56.598$ 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

 $01:12:59.840 \longrightarrow 01:13:00.431$ So with that,

NOTE Confidence: 0.5016402

01:13:00.431 --> 01:13:01.416 I think Doctor Formica has

NOTE Confidence: 0.5016402

 $01:13:01.416 \longrightarrow 01:13:02.759$ the mic and we'll start there.

- NOTE Confidence: 0.5016402
- $01:13:02.760 \longrightarrow 01:13:03.240$ So Rich
- NOTE Confidence: 0.58682066
- 01:13:03.240 $\operatorname{-->}$ 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
- $01:13:06.702 \rightarrow 01:13:08.037$ 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
- $01:13:10.040 \rightarrow 01:13:11.144$ I thought the way it was
- NOTE Confidence: 0.58682066
- $01:13:11.144 \rightarrow 01:13:11.880$ presented was really great.
- NOTE Confidence: 0.58682066
- $01{:}13{:}11{.}880 \dashrightarrow 01{:}13{:}14{.}292$ But I want to ask the reciprocal of what
- NOTE Confidence: 0.58682066
- $01{:}13{:}14.292 \dashrightarrow 01{:}13{:}17.572$ you just asked about doing gymnastics with
- NOTE Confidence: 0.58682066
- $01:13:17.572 \rightarrow 01:13:20.472$ 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 some body's
- NOTE Confidence: 0.58682066
- 01:13:24.288 --> 01:13:26.152 live because those of us who have
- NOTE Confidence: 0.58682066
- $01:13:26.152 \rightarrow 01:13:27.597$ attended the deaths of patients,
- NOTE Confidence: 0.58682066
- $01:13:27.600 \longrightarrow 01:13:29.718$ like the individuals who we are
- NOTE Confidence: 0.58682066

 $01{:}13{:}29{.}720 \dashrightarrow 01{:}13{:}32{.}960$ Speaking of have had a tragic accident.

NOTE Confidence: 0.58682066

 $01{:}13{:}32{.}960 \dashrightarrow 01{:}13{:}34{.}945$ They are neurologically so damaged

NOTE Confidence: 0.58682066

 $01{:}13{:}34{.}945 \dashrightarrow 01{:}13{:}37{.}520$ that when we with draw 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

 $01{:}13{:}42.445 \dashrightarrow 01{:}13{:}44.680$ stopped for an additional 5 minutes.

NOTE Confidence: 0.58682066

 $01:13:44.680 \rightarrow 01:13:47.172$ So keep the conversation going,

NOTE Confidence: 0.58682066

 $01:13:47.172 \longrightarrow 01:13:48.687$ 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

 $01:13:50.120 \longrightarrow 01:13:52.780$ like you're really trying to make this

NOTE Confidence: 0.58682066

 $01:13:52.780 \rightarrow 01:13:55.120$ person still alive to come up with language,

NOTE Confidence: 0.58682066

 $01:13:55.120 \longrightarrow 01:13:55.869$ which I think we have to be

NOTE Confidence: 0.58682066

 $01:13:55.869 \longrightarrow 01:13:56.520$ 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

 $01:13:58.452 \rightarrow 01:13:59.960$ context because trust is important.

NOTE Confidence: 0.58682066

 $01:13:59.960 \rightarrow 01:14:02.276$ But give me that, You know,

- NOTE Confidence: 0.58682066
- $01:14:02.280 \longrightarrow 01:14:03.720$ give me the opposite argument.
- NOTE Confidence: 0.58682066
- $01:14:03.720 \longrightarrow 01:14:05.850$ Why are they alive versus why
- NOTE Confidence: 0.58682066
- $01:14:05.850 \longrightarrow 01:14:06.915$ aren't they dead?
- NOTE Confidence: 0.58682066
- $01{:}14{:}06{.}920 \dashrightarrow 01{:}14{:}07{.}212$ That too.
- NOTE Confidence: 0.58682066
- 01:14:07.212 --> 01:14:07.358 Nice
- NOTE Confidence: 0.40299097
- $01:14:12.480 \rightarrow 01:14:16.680$ 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
- $01:14:19.880 \longrightarrow 01:14:21.772$ 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
- $01{:}14{:}23{.}536 \dashrightarrow 01{:}14{:}25{.}792$ you might be able to cause them to die,
- NOTE Confidence: 0.8539521
- $01{:}14{:}25{.}792 \dashrightarrow 01{:}14{:}28{.}206$ allow them to die in a way that it then
- NOTE Confidence: 0.8539521
- $01{:}14{:}28.206 \dashrightarrow 01{:}14{:}29.880$ 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
- $01:14:31.640 \longrightarrow 01:14:32.959$ say they're as good as dead,
- NOTE Confidence: 0.8539521

 $01:14:32.960 \rightarrow 01:14:34.624$ then let's just give them a big dose

NOTE Confidence: 0.8539521

 $01:14:34.624 \rightarrow 01:14:35.958$ of fentanyl and take the organs.

NOTE Confidence: 0.8539521

 $01:14:35.960 \longrightarrow 01:14:37.664$ 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

 $01:14:40.781 \longrightarrow 01:14:42.010$ presumption that they're not

NOTE Confidence: 0.8539521

 $01{:}14{:}42.010 \dashrightarrow 01{:}14{:}43.600$ 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 NRNRP procedure.

NOTE Confidence: 0.7634172

 $01:14:50.720 \longrightarrow 01:14:52.760$ Their 5 minutes has elapsed,

NOTE Confidence: 0.7634172

 $01{:}14{:}52.760 \dashrightarrow 01{:}14{:}54.760$ Their medical team has declared

NOTE Confidence: 0.7634172

 $01:14:54.760 \rightarrow 01:14:56.760$ them dead by circulatory death,

NOTE Confidence: 0.7634172

 $01:14:56.760 \longrightarrow 01:14:59.960$ 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

 $01:15:08.240 \rightarrow 01:15:09.880$ and this is, this is kind of my point, right.

NOTE Confidence: 0.57259375

 $01:15:09.880 \longrightarrow 01:15:12.839$ And and I feel that the law is

NOTE Confidence: 0.57259375

 $01:15:12.840 \longrightarrow 01:15:14.932$ a blunt instrument that has to

NOTE Confidence: 0.57259375

 $01:15:14.932 \rightarrow 01:15:16.876$ delineate a moment when people are

NOTE Confidence: 0.57259375

 $01:15:16.876 \longrightarrow 01:15:18.919$ 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

 $01:15:20.320 \longrightarrow 01:15:21.755$ this is probably one of the few

NOTE Confidence: 0.57259375

 $01:15:21.755 \rightarrow 01:15:22.931$ rooms where probably everybody knows

NOTE Confidence: 0.57259375

 $01:15:22.931 \longrightarrow 01:15:24.720$ it's messier than that, right.

NOTE Confidence: 0.57259375

 $01{:}15{:}24.720 \dashrightarrow 01{:}15{:}28.408$ And absolute clarity on dead versus

NOTE Confidence: 0.57259375

 $01:15:28.408 \longrightarrow 01:15:30.352$ living is kind of impossible to

NOTE Confidence: 0.57259375

 $01{:}15{:}30{.}352 \dashrightarrow 01{:}15{:}32{.}497$ come by especially and this is

NOTE Confidence: 0.57259375

 $01:15:32.497 \rightarrow 01:15:34.633$ like the perfect example of that.

NOTE Confidence: 0.57259375

 $01{:}15{:}34.640 \dashrightarrow 01{:}15{:}38.960$ And I feel that there are already the the,

NOTE Confidence: 0.57259375

 $01{:}15{:}38.960 \dashrightarrow 01{:}15{:}41.992$ the verbal gymnastics to to be able to

 $01:15:41.992 \rightarrow 01:15:44.968$ declare people dead in light of the

NOTE Confidence: 0.57259375

 $01:15:44.968 \longrightarrow 01:15:47.113$ broken or insufficient legal definition

NOTE Confidence: 0.57259375

 $01{:}15{:}47{.}187 \dashrightarrow 01{:}15{:}50{.}120$ of death going to the permanent standard.

NOTE Confidence: 0.57259375

 $01{:}15{:}50{.}120 \dashrightarrow 01{:}15{:}51{.}704$ So for I think that is the work

NOTE Confidence: 0.57259375

 $01:15:51.704 \longrightarrow 01:15:53.116$ that's sort of being done to say,

NOTE Confidence: 0.57259375

 $01:15:53.120 \longrightarrow 01:15:55.520$ OK, they're they're still alive.

NOTE Confidence: 0.57259375

 $01:15:55.520 \rightarrow 01:15:57.440$ And so that's why I try to get out of,

NOTE Confidence: 0.57259375

 $01:15:57.440 \rightarrow 01:15:58.800$ out of the, the rabbit hole and say,

NOTE Confidence: 0.57259375

 $01{:}15{:}58.800 \dashrightarrow 01{:}16{:}01.218$ OK, what are the actual consequences

NOTE Confidence: 0.57259375

 $01{:}16{:}01{.}218 \dashrightarrow 01{:}16{:}04{.}882$ 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

 $01:16:08.458 \longrightarrow 01:16:09.760$ 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

 $01{:}16{:}13.040 \dashrightarrow 01{:}16{:}16.008$ I think the consensus at least on the

NOTE Confidence: 0.35680017

 $01:16:16.008 \rightarrow 01:16:18.055$ 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
- $01:16:19.880 \longrightarrow 01:16:21.944$ 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
- $01:16:25.040 \rightarrow 01:16:27.798$ they are willing to donate their organs.
- NOTE Confidence: 0.35680017
- $01{:}16{:}27{.}800 \dashrightarrow 01{:}16{:}28{.}970$ That's not the question I'm trying
- NOTE Confidence: 0.35680017
- $01{:}16{:}28{.}970 \dashrightarrow 01{:}16{:}32{.}240$ to ask because there's a lot of
- NOTE Confidence: 0.35680017
- $01:16:32.240 \rightarrow 01:16:33.900$ 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
- $01:16:39.813 \rightarrow 01:16:41.784$ has been really constrained by the
- NOTE Confidence: 0.35680017
- $01{:}16{:}41.784 \dashrightarrow 01{:}16{:}44.360$ UDA and the and the terminology
- NOTE Confidence: 0.35680017
- $01{:}16{:}44{.}360 \dashrightarrow 01{:}16{:}46{.}152$ like what irreversibility means.
- NOTE Confidence: 0.35680017
- $01{:}16{:}46.160 \dashrightarrow 01{:}16{:}50.360$ And I think we may be most people don't know,
- NOTE Confidence: 0.35680017
- $01{:}16{:}50{.}360 \dashrightarrow 01{:}16{:}52{.}005$ but the Uniform Law Commission
- NOTE Confidence: 0.35680017

 $01:16:52.005 \rightarrow 01:16:53.983$ recently said that they aren't going

NOTE Confidence: 0.35680017

 $01:16:53.983 \rightarrow 01:16:55.915$ to make major revisions on the UDA.

NOTE Confidence: 0.35680017

 $01{:}16{:}55{.}920 \dashrightarrow 01{:}16{:}57{.}918$ 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

 $01{:}17{:}01{.}000 \dashrightarrow 01{:}17{:}03{.}776$ for the UDA to and make NRP

NOTE Confidence: 0.35680017

 $01{:}17{:}03.776 \dashrightarrow 01{:}17{:}05.596$ acceptable and change the language,

NOTE Confidence: 0.35680017

 $01:17:05.600 \longrightarrow 01:17:07.120$ what does that look like?

NOTE Confidence: 0.7980077

 $01{:}17{:}13.560 \dashrightarrow 01{:}17{:}15.920$ 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

 $01:17:19.264 \rightarrow 01:17:21.560$ don't have a great answer, right.

NOTE Confidence: 0.7980077

 $01:17:25.080 \rightarrow 01:17:31.826$ This is part of why I think we should NOTE Confidence: 0.7980077

 $01:17:31.826 \rightarrow 01:17:35.569$ maintain the determination of death.

NOTE Confidence: 0.7980077

 $01{:}17{:}35{.}569 \dashrightarrow 01{:}17{:}38{.}816$ I think we I I think there's some

NOTE Confidence: 0.7980077

 $01:17:38.816 \rightarrow 01:17:41.376$ work that's done by by changing

NOTE Confidence: 0.7980077

 $01{:}17{:}41{.}376 \dashrightarrow 01{:}17{:}44{.}640$ 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,

 $01{:}17{:}49{.}600 \dashrightarrow 01{:}17{:}51{.}544$ as was seen right when they tried to

NOTE Confidence: 0.7980077

 $01:17:51.544 \rightarrow 01:17:53.479$ update the Determination of Death Act.

NOTE Confidence: 0.7980077

 $01{:}17{:}53.480 \dashrightarrow 01{:}17{:}55.405$ 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

 $01:17:57.972 \rightarrow 01:17:59.316$ by neurologic criteria altogether,

NOTE Confidence: 0.7980077

 $01:17:59.320 \longrightarrow 01:18:00.904$ 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

 $01:18:03.910 \longrightarrow 01:18:05.860$ who's dead by neurologic criteria

NOTE Confidence: 0.7980077

 $01:18:05.920 \longrightarrow 01:18:07.480$ 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

 $01{:}18{:}12{.}394 \dashrightarrow 01{:}18{:}17{.}040$ 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?

01:18:21.364 --> 01:18:23.170 I disagree with the way you're

NOTE Confidence: 0.76564515

 $01:18:23.233 \longrightarrow 01:18:25.220$ using this idea of switching to

NOTE Confidence: 0.76564515

 $01:18:25.220 \longrightarrow 01:18:28.320$ a permanent standard of death.

NOTE Confidence: 0.76564515

01:18:28.320 $\operatorname{-->}$ 01:18:30.760 You know when the code team arrives at

NOTE Confidence: 0.76564515

 $01{:}18{:}30.760 \dashrightarrow 01{:}18{:}33.195$ the bedside of a patient in the hospital,

NOTE Confidence: 0.76564515

 $01{:}18{:}33{.}200 \dashrightarrow 01{:}18{:}36{.}077$ they don't go. It's been 6 minutes.

NOTE Confidence: 0.76564515

 $01:18:36.080 \longrightarrow 01:18:37.816$ They fulfill the permanent

NOTE Confidence: 0.76564515

 $01:18:37.816 \longrightarrow 01:18:39.118$ 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

 $01:18:40.695 \longrightarrow 01:18:41.955$ try to resuscitate them.

NOTE Confidence: 0.76564515

 $01:18:41.960 \longrightarrow 01:18:43.848$ 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

 $01:18:50.800 \longrightarrow 01:18:52.920$ If if without that promise,

NOTE Confidence: 0.76564515

 $01:18:52.920 \rightarrow 01:18:54.834$ of course you should be trying

- NOTE Confidence: 0.76564515
- $01:18:54.834 \longrightarrow 01:18:56.446$ 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 $\operatorname{-->}$ 01:19:05.157 idea that by by the the permanence,
- NOTE Confidence: 0.76564515
- $01{:}19{:}05{.}160 \dashrightarrow 01{:}19{:}06{.}345$ the permanent standard would say
- NOTE Confidence: 0.76564515
- $01:19:06.345 \longrightarrow 01:19:08.001$ that at 5 minutes we can say
- NOTE Confidence: 0.76564515
- $01{:}19{:}08.001 \dashrightarrow 01{:}19{:}08.837$ 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
- $01:19:12.320 \longrightarrow 01:19:13.760$ 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

 $01{:}19{:}20.680 \dashrightarrow 01{:}19{:}23.840$ the NRP violates that promise. The the

NOTE Confidence: 0.31066307

 $01{:}19{:}24.640 \dashrightarrow 01{:}19{:}27.398$ promise not to attempt to recirculate the

NOTE Confidence: 0.31066307

 $01:19:27.440 \longrightarrow 01:19:29.150$ patient NRP with the full

NOTE Confidence: 0.31066307

 $01:19:29.150 \longrightarrow 01:19:30.860$ expectation that you are going

NOTE Confidence: 0.31066307

 $01:19:30.930 \longrightarrow 01:19:32.560$ 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

 $01:19:36.640 \longrightarrow 01:19:38.172$ this is the difference.

NOTE Confidence: 0.31066307

 $01:19:38.172 \longrightarrow 01:19:40.956$ 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

 $01:19:43.000 \rightarrow 01:19:46.320$ That's the promise, the recirculation,

NOTE Confidence: 0.31066307

 $01:19:46.320 \rightarrow 01:19:48.760$ this is the issue, right. It's well

NOTE Confidence: 0.3105167

 $01{:}19{:}51{.}360 \dashrightarrow 01{:}19{:}53{.}390$ intent, but also so is the intention

NOTE Confidence: 0.3105167

 $01{:}19{:}53{.}390 \dashrightarrow 01{:}19{:}55{.}443$ and there was a slide that that

NOTE Confidence: 0.3105167

 $01:19:55.443 \rightarrow 01:19:57.117$ you had which which there was,

NOTE Confidence: 0.3105167

 $01{:}19{:}57{.}120 \dashrightarrow 01{:}19{:}58{.}624$ I forget what it was, but there was sort

NOTE Confidence: 0.3105167

 $01:19:58.624 \rightarrow 01:20:00.239$ of a distinction 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
- $01{:}20{:}05{.}175 \dashrightarrow 01{:}20{:}08{.}000$ 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
- $01:20:10.680 \longrightarrow 01:20:13.560$ And my claim is that the
- NOTE Confidence: 0.3105167
- $01:20:13.560 \longrightarrow 01:20:15.480$ promise not to resuscitate.
- NOTE Confidence: 0.3105167
- $01{:}20{:}15{.}480 \dashrightarrow 01{:}20{:}17{.}139$ Has been met and continues to be
- NOTE Confidence: 0.3105167
- $01:20:17.139 \rightarrow 01:20:18.680$ 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
- $01:20:20.500 \longrightarrow 01:20:22.812$ of the other actions, right. And so.
- NOTE Confidence: 0.3105167
- $01:20:22.812 \rightarrow 01:20:25.880$ So that's that's the distinction, right.
- NOTE Confidence: 0.3105167
- $01{:}20{:}25{.}880 \dashrightarrow 01{:}20{:}28{.}000$ 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
- $01:20:28.240 \longrightarrow 01:20:29.236$ Sarah, one thing before you see,
- NOTE Confidence: 0.69934237
- $01{:}20{:}29{.}240 \dashrightarrow 01{:}20{:}31{.}000$ so I just to let folks know there's
- NOTE Confidence: 0.69934237
- $01:20:31.000 \rightarrow 01:20:32.478$ not going to be time for much.
- NOTE Confidence: 0.69934237

 $01:20:32.480 \longrightarrow 01:20:33.758$ 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

 $01{:}20{:}35{.}460 \dashrightarrow 01{:}20{:}36{.}520$ clarification might be interesting.

NOTE Confidence: 0.69934237

 $01{:}20{:}36{.}520 \dashrightarrow 01{:}20{:}39{.}650$ Someone asked and by the way lots of

NOTE Confidence: 0.69934237

 $01{:}20{:}39.650 \dashrightarrow 01{:}20{:}41.720$ praise for this conference for your

NOTE Confidence: 0.69934237

 $01{:}20{:}41.720 \dashrightarrow 01{:}20{:}44.197$ talks from as far away as Berlin here.

NOTE Confidence: 0.69934237

 $01:20:44.200 \rightarrow 01:20:45.520$ 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

 $01{:}20{:}49{.}400 \dashrightarrow 01{:}20{:}51{.}430$ Doctor Thompson, a question for you, please.

NOTE Confidence: 0.69934237

 $01{:}20{:}51{.}430 \dashrightarrow 01{:}20{:}54{.}160$ In your personal experience in your new role,

NOTE Confidence: 0.69934237

 $01:20:54.160 \rightarrow 01:20:57.556$ 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

 $01:20:58.681 \rightarrow 01:20:59.886$ 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

 $01:21:01.390 \longrightarrow 01:21:02.534$ mentioned 120 cases ballpark.
- NOTE Confidence: 0.69934237
- $01:21:02.534 \longrightarrow 01:21:03.726$ What percentage of the

01:21:03.726 --> 01:21:05.119 cases you've done with NRP,

NOTE Confidence: 0.69934237

 $01:21:05.120 \longrightarrow 01:21:07.388$ 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

 $01{:}21{:}09{.}800 \dashrightarrow 01{:}21{:}11{.}560$ 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

 $01:21:13.440 \longrightarrow 01:21:14.580$ there are approximately

NOTE Confidence: 0.8967935

01:21:14.580 --> 01:21:15.760 3000 heart transplants

NOTE Confidence: 0.8967935

 $01:21:15.760 \longrightarrow 01:21:18.120$ 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

 $01{:}21{:}22{.}520 \dashrightarrow 01{:}21{:}24{.}160$ 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

 $01{:}21{:}29{.}480 \dashrightarrow 01{:}21{:}31{.}184$ significant number And as far as

01:21:31.184 --> 01:21:32.820 my experience I've done, I've had

NOTE Confidence: 0.8967935

 $01:21:32.820 \longrightarrow 01:21:35.520$ 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

 $01{:}21{:}39{.}360 \dashrightarrow 01{:}21{:}41{.}946$ I have I have some bad feelings about this.

NOTE Confidence: 0.8967935

 $01{:}21{:}41{.}946 \dashrightarrow 01{:}21{:}44{.}332$ We we have postponed going ahead

NOTE Confidence: 0.8967935

 $01:21:44.332 \rightarrow 01:21:46.496$ 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

 $01{:}21{:}50.640 \dashrightarrow 01{:}21{:}52.584$ 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

 $01{:}21{:}54.886 \dashrightarrow 01{:}21{:}57.077$ centers have said we're not doing this

NOTE Confidence: 0.32795218

 $01{:}21{:}57{.}080 \dashrightarrow 01{:}21{:}59{.}236$ and the conversation because and I know

NOTE Confidence: 0.32795218

 $01{:}21{:}59{.}236 \dashrightarrow 01{:}22{:}01{.}216$ that that Bob and Brendan are

NOTE Confidence: 0.32795218

 $01{:}22{:}01{.}216 \dashrightarrow 01{:}22{:}02{.}800$ both the leaders in this conversation.

NOTE Confidence: 0.32795218

 $01:22:02.800 \longrightarrow 01:22:04.624$ So we have time for Doctor Hull

- NOTE Confidence: 0.32795218
- $01:22:04.624 \rightarrow 01:22:05.896$ and then perhaps one more after

 $01:22:05.896 \longrightarrow 01:22:07.119$ 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

 $01:22:09.720 \longrightarrow 01:22:11.385$ Thank you all for this

NOTE Confidence: 0.32795218

01:22:11.385 --> 01:22:12.486 really wonderful conference.

NOTE Confidence: 0.32795218

 $01{:}22{:}12{.}486 \dashrightarrow 01{:}22{:}15{.}167$ This has been been so illuminating and

NOTE Confidence: 0.32795218

 $01:22:15.167 \rightarrow 01:22:17.558$ really insightful 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

 $01{:}22{:}22{.}920 \dashrightarrow 01{:}22{:}24{.}992$ the gymnastics that we're doing either to

NOTE Confidence: 0.32795218

 $01{:}22{:}24.992 \dashrightarrow 01{:}22{:}27.395$ 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

 $01:22:28.146 \longrightarrow 01:22:30.757$ 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,

- $01:22:33.090 \rightarrow 01:22:34.358$ 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
- $01{:}22{:}35{.}944 \dashrightarrow 01{:}22{:}38{.}028$ but really if we sort of step back and
- NOTE Confidence: 0.32795218
- $01{:}22{:}38{.}028 \dashrightarrow 01{:}22{:}39{.}333$ 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
- $01:22:41.019 \longrightarrow 01:22:42.156$ 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
- $01:22:44.494 \longrightarrow 01:22:46.370$ have perfusion to the brain it's
- NOTE Confidence: 0.32795218
- $01{:}22{:}46{.}370 \dashrightarrow 01{:}22{:}47{.}904$ kind of hard to argue they're alive.
- NOTE Confidence: 0.32795218
- $01:22:47.904 \longrightarrow 01:22:49.594$ But at the same time if if you
- NOTE Confidence: 0.32795218
- $01:22:49.594 \rightarrow 01:22:50.759$ can restart their heart beating,
- NOTE Confidence: 0.32795218
- $01:22:50.760 \rightarrow 01:22:52.632$ 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
- $01:22:54.136 \longrightarrow 01:22:55.569$ sort of talking about what kind
- NOTE Confidence: 0.32795218
- $01:22:55.569 \rightarrow 01:22:57.462$ of language that we can use that
- NOTE Confidence: 0.32795218
- $01:22:57.462 \rightarrow 01:22:58.782$ more accurately captures what's

- NOTE Confidence: 0.32795218
- $01{:}22{:}58{.}782 \dashrightarrow 01{:}23{:}00{.}800$ going on both biologically and I
- NOTE Confidence: 0.32795218
- $01:23:00.800 \longrightarrow 01:23:02.240$ think sort of metaphysically.
- NOTE Confidence: 0.32795218
- $01:23:02.240 \longrightarrow 01:23:03.616$ 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
- $01:23:04.160 \longrightarrow 01:23:06.400$ I I think about the language of
- NOTE Confidence: 0.32795218
- $01:23:06.400 \longrightarrow 01:23:08.144$ of liminality like is there a
- NOTE Confidence: 0.32795218
- $01:23:08.144 \longrightarrow 01:23:10.160$ sort of a third state or is this
- NOTE Confidence: 0.32795218
- $01:23:10.160 \longrightarrow 01:23:11.600$ sort of liminal state that that
- NOTE Confidence: 0.32795218
- $01:23:11.600 \longrightarrow 01:23:13.790$ 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
- $01{:}23{:}17{.}740 \dashrightarrow 01{:}23{:}19{.}365$ and dead and also neither alive and NOTE Confidence: 0.32795218
- 01:23:19.365 --> 01:23:20.925 dead and maybe do we need to NOTE Confidence: 0.32795218
- $01{:}23{:}20{.}925 \dashrightarrow 01{:}23{:}22{.}428$ sort of take a step back from this
- NOTE Confidence: 0.32795218

- $01:23:22.428 \rightarrow 01:23:23.820$ dichotomy because that dichotomy is
- NOTE Confidence: 0.32795218
- $01:23:23.820 \rightarrow 01:23:25.280$ not serving us in this discussion.
- NOTE Confidence: 0.32795218
- 01:23:25.280 --> 01:23:25.400 Did
- NOTE Confidence: 0.9419601
- $01:23:29.400 \rightarrow 01:23:30.120$ you want to say something?
- NOTE Confidence: 0.29624143
- $01:23:35.000 \rightarrow 01:23:36.216$ Let us know who you are and you're
- NOTE Confidence: 0.29624143
- $01:23:36.216 \rightarrow 01:23:37.394$ kind enough to come and join the
- NOTE Confidence: 0.29624143
- $01:23:37.394 \longrightarrow 01:23:38.234$ conversation I'd like to hear.
- NOTE Confidence: 0.29624143
- $01:23:38.240 \rightarrow 01:23:40.235$ I have to echo thanks to everyone.
- NOTE Confidence: 0.29624143
- $01{:}23{:}40{.}240 \dashrightarrow 01{:}23{:}41{.}335$ 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 Brick University Stony Brick Medicine,
- NOTE Confidence: 0.29624143
- 01:23:46.400 --> 01:23:50.000 and also Startup University Professor
- NOTE Confidence: 0.29624143
- $01{:}23{:}50{.}000 \dashrightarrow 01{:}23{:}53{.}800$ of Bioethics, Public Health and English.
- NOTE Confidence: 0.29624143
- $01:23:53.800 \longrightarrow 01:23:55.000$ 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
- $01:23:56.120 \rightarrow 01:23:58.359$ I'm sitting next to my wonderful Vice chair,

 $01:23:58.360 \rightarrow 01:24:03.210$ Sanjay, and Bob is the intellectual

NOTE Confidence: 0.29624143

 $01:24:03.210 \longrightarrow 01:24:07.040$ 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

 $01:24:09.470 \longrightarrow 01:24:11.352$ did explaining my reservations,

NOTE Confidence: 0.29624143

 $01:24:11.352 \rightarrow 01:24:13.596$ not getting rid of the dead donor roll,

NOTE Confidence: 0.29624143

 $01{:}24{:}13.600 \dashrightarrow 01{:}24{:}15.707$ both with respect to trust and with

NOTE Confidence: 0.29624143

 $01{:}24{:}15.707 \dashrightarrow 01{:}24{:}17.639$ respect to our current culture.

NOTE Confidence: 0.29624143

 $01:24:17.640 \longrightarrow 01:24:19.272$ And Bob, you've made that point

NOTE Confidence: 0.29624143

 $01:24:19.272 \longrightarrow 01:24:21.400$ as well in in person meetings.

NOTE Confidence: 0.29624143

 $01{:}24{:}21{.}400 \dashrightarrow 01{:}24{:}24{.}560$ So let's just assume for the sake of

NOTE Confidence: 0.29624143

 $01{:}24{:}24{.}560 \dashrightarrow 01{:}24{:}26{.}200$ argument with the compelling weight

NOTE Confidence: 0.29624143

 $01{:}24{:}26{.}200 \dashrightarrow 01{:}24{:}28{.}600$ of that de facto state of affairs.

NOTE Confidence: 0.29624143

 $01:24:28.600 \longrightarrow 01:24:29.800$ 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

 $01{:}24{:}30{.}840 \dashrightarrow 01{:}24{:}32{.}520$ and I don't think we should

- $01:24:32.520 \longrightarrow 01:24:33.513$ for ethical reasons.
- NOTE Confidence: 0.29624143
- 01:24:33.513 --> 01:24:35.168 I have slippery slope concerns

 $01:24:35.168 \longrightarrow 01:24:36.040$ about getting in.

NOTE Confidence: 0.29624143

 $01{:}24{:}36.040 \dashrightarrow 01{:}24{:}38.880$ 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

 $01:24:41.568 \longrightarrow 01:24:43.360$ that solves any problem

NOTE Confidence: 0.35457134

 $01:24:45.600 \rightarrow 01:24:47.144$ because I'm completely compelled

NOTE Confidence: 0.35457134

 $01:24:47.144 \longrightarrow 01:24:49.440$ 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

 $01{:}24{:}52{.}400 \dashrightarrow 01{:}24{:}54{.}495$ the occlusion of these critical

NOTE Confidence: 0.35457134

 $01{:}24{:}54{.}495 \dashrightarrow 01{:}24{:}56{.}275$ 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

 $01:24:57.792 \rightarrow 01:24:59.199$ version of the dead dollar rule,

NOTE Confidence: 0.35457134

 $01{:}24{:}59{.}200 \dashrightarrow 01{:}25{:}01{.}853$ which is that you can't get organs

NOTE Confidence: 0.35457134

 $01:25:01.853 \rightarrow 01:25:04.608$ by virtue of causing death sold.

- NOTE Confidence: 0.35457134
- $01:25:04.608 \rightarrow 01:25:08.512$ And there in lie my reservations with NRP.

 $01:25:08.520 \longrightarrow 01:25:10.320$ But I have real questions for

NOTE Confidence: 0.35457134

 $01:25:10.320 \longrightarrow 01:25:12.040$ you and maybe all of you,

NOTE Confidence: 0.35457134

 $01:25:12.040 \rightarrow 01:25:14.000$ with regard to your number one argument.

NOTE Confidence: 0.35457134

 $01{:}25{:}14.000 \dashrightarrow 01{:}25{:}15.645$ And this is a wkward for me because

NOTE Confidence: 0.35457134

 $01:25:15.645 \rightarrow 01:25:17.440$ 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

 $01:25:19.480 \longrightarrow 01:25:21.280$ published a piece in JAMA,

NOTE Confidence: 0.35457134

01:25:21.280 --> 01:25:22.513 a viewpoint piece,

NOTE Confidence: 0.35457134

 $01:25:22.513 \rightarrow 01:25:24.576$ where we argue that intention,

NOTE Confidence: 0.35457134

 $01:25:24.576 \longrightarrow 01:25:26.240$ even the best intentions,

NOTE Confidence: 0.35457134

 $01:25:26.240 \longrightarrow 01:25:28.344$ does not override actions.

NOTE Confidence: 0.35457134

 $01:25:28.344 \rightarrow 01:25:29.700$ I completely agree.

NOTE Confidence: 0.35457134

 $01{:}25{:}29{.}700 \dashrightarrow 01{:}25{:}31{.}251$ From a legal perspective,

NOTE Confidence: 0.35457134

 $01:25:31.251 \longrightarrow 01:25:32.919$ it doesn't and can't.

- 01:25:32.920 --> 01:25:33.799 And that, frankly,
- NOTE Confidence: 0.35457134
- $01{:}25{:}33{.}800 \dashrightarrow 01{:}25{:}36{.}110$ is the argument that Alex and Alex

 $01:25:36.110 \longrightarrow 01:25:38.358$ made in the piece to which you alluded.

NOTE Confidence: 0.35457134

 $01{:}25{:}38{.}360 \dashrightarrow 01{:}25{:}40{.}380$ 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

 $01{:}25{:}42{.}240 \dashrightarrow 01{:}25{:}45{.}860$ Why should, from an ethical perspective,

NOTE Confidence: 0.35457134

 $01:25:45.860 \rightarrow 01:25:48.435$ that be the overriding thing?

NOTE Confidence: 0.35457134

 $01:25:48.440 \longrightarrow 01:25:50.462$ We all agreed at the beginning

NOTE Confidence: 0.35457134

 $01:25:50.462 \longrightarrow 01:25:51.473$ of our deliberations,

NOTE Confidence: 0.35457134

 $01{:}25{:}51{.}480 \dashrightarrow 01{:}25{:}53{.}650$ both with regard to the work group and

NOTE Confidence: 0.35457134

 $01{:}25{:}53.650 \dashrightarrow 01{:}25{:}55.600$ then subsequently on the Ethics Committee,

NOTE Confidence: 0.35457134

 $01{:}25{:}55{.}600 \dashrightarrow 01{:}25{:}57{.}196$ that utility would not carry the day.

NOTE Confidence: 0.35457134

 $01:25:57.200 \longrightarrow 01:25:59.728$ So I categorically reject a

NOTE Confidence: 0.35457134

 $01:25:59.728 \rightarrow 01:26:01.664$ consequentialist conclusion to this

NOTE Confidence: 0.35457134

 $01:26:01.664 \rightarrow 01:26:05.178$ 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
- $01:26:07.174 \longrightarrow 01:26:08.671$ that won't work.
- NOTE Confidence: 0.35457134
- $01:26:08.680 \longrightarrow 01:26:11.284$ We are here to make sure that
- NOTE Confidence: 0.35457134
- $01:26:11.284 \rightarrow 01:26:12.400$ utility doesn't overrun.
- NOTE Confidence: 0.35457134
- $01:26:12.400 \rightarrow 01:26:15.076$ Why doesn't intention count more how
- NOTE Confidence: 0.35457134
- $01{:}26{:}15.080 \dashrightarrow 01{:}26{:}17.524$ we we say we balance these principles,
- NOTE Confidence: 0.35457134
- $01{:}26{:}17.524 \dashrightarrow 01{:}26{:}19.212$ 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
- $01{:}26{:}23.360 \dashrightarrow 01{:}26{:}26.860$ Why are we giving such a massive
- NOTE Confidence: 0.35457134
- $01:26:26.860 \rightarrow 01:26:30.425$ coefficient to the variable of action?
- NOTE Confidence: 0.35457134
- $01:26:30.425 \longrightarrow 01:26:32.200$ I understand the answer legally,
- NOTE Confidence: 0.35457134
- $01:26:32.200 \longrightarrow 01:26:35.836$ but why in terms of ethics?
- NOTE Confidence: 0.35457134
- $01:26:35.840 \longrightarrow 01:26:37.398$ So this is ultimately,
- NOTE Confidence: 0.35457134
- $01{:}26{:}37{.}400 \dashrightarrow 01{:}26{:}39{.}297$ and I'm going to all ude to Sanjay
- NOTE Confidence: 0.35457134
- 01:26:39.297 --> 01:26:40.912 now because Sanjay is the first
- NOTE Confidence: 0.35457134

 $01:26:40.912 \longrightarrow 01:26:42.476$ person who said this out loud to me,

NOTE Confidence: 0.35457134

 $01{:}26{:}42{.}480 \dashrightarrow 01{:}26{:}43{.}760$ this is ultimately a values

NOTE Confidence: 0.35457134

 $01:26:43.760 \longrightarrow 01:26:44.879$ question for society.

NOTE Confidence: 0.45887506

 $01:26:46.960 \longrightarrow 01:26:48.395$ Are we in a position to answer?

NOTE Confidence: 0.45887506

 $01{:}26{:}48{.}400 \dashrightarrow 01{:}26{:}50{.}395$ 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

 $01:26:58.320 \longrightarrow 01:26:58.998$ take a breath.

NOTE Confidence: 0.45887506

 $01{:}26{:}58.998 \dashrightarrow 01{:}27{:}00.354$ Because what's going to happen now,

NOTE Confidence: 0.45887506

 $01:27:00.360 \longrightarrow 01:27:01.634$ 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

 $01{:}27{:}03{.}327 \dashrightarrow 01{:}27{:}05{.}028$ think that what's going to happen now

NOTE Confidence: 0.45887506

 $01{:}27{:}05{.}028 \dashrightarrow 01{:}27{:}06{.}880$ is that anything that either or all of

NOTE Confidence: 0.45887506

 $01:27:06.880 \longrightarrow 01:27:08.680$ the three of you would like to say,

NOTE Confidence: 0.45887506

 $01{:}27{:}08.680 \dashrightarrow 01{:}27{:}09.320$ I'd like you to say.

NOTE Confidence: 0.45887506

 $01{:}27{:}09{.}320 \dashrightarrow 01{:}27{:}10{.}594$ 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
- $01:27:13.360 \longrightarrow 01:27:14.277$ And I won't take the last word.
- NOTE Confidence: 0.89236563
- $01{:}27{:}14.280 \dashrightarrow 01{:}27{:}15.280$ 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
- $01{:}27{:}17.765 \dashrightarrow 01{:}27{:}19.200$ 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
- $01:27:21.118 \longrightarrow 01:27:23.001$ important point that you have made
- NOTE Confidence: 0.89236563
- $01:27:23.001 \longrightarrow 01:27:24.676$ that intention isn't enough alone.
- NOTE Confidence: 0.89236563
- $01{:}27{:}24.680 \dashrightarrow 01{:}27{:}26.360$ 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
- $01{:}27{:}28{.}400 \dashrightarrow 01{:}27{:}30{.}659$ to kill the patient doesn't mean
- NOTE Confidence: 0.89236563
- $01{:}27{:}30.659 \dashrightarrow 01{:}27{:}32.719$ you're not actually doing that,
- NOTE Confidence: 0.89236563
- $01:27:32.720 \longrightarrow 01:27:35.149$ which I think goes back to why
- NOTE Confidence: 0.89236563
- $01:27:35.149 \longrightarrow 01:27:37.480$ we maintain the dead donor rule.
- NOTE Confidence: 0.89236563
- $01:27:37.480 \longrightarrow 01:27:39.040$ And that dead donor rule
- NOTE Confidence: 0.85294175

- $01:27:41.080 \rightarrow 01:27:43.925$ corresponds to an ethically founded
- NOTE Confidence: 0.85294175
- $01{:}27{:}43.925 \dashrightarrow 01{:}27{:}48.240$ notion of the line between life and death.
- NOTE Confidence: 0.85294175
- $01:27:48.240 \longrightarrow 01:27:49.160$ And what is that notion?
- NOTE Confidence: 0.85294175
- $01{:}27{:}49{.}160 \dashrightarrow 01{:}27{:}51{.}356$ I did the best I could to represent it,
- NOTE Confidence: 0.85294175
- $01{:}27{:}51{.}360 \dashrightarrow 01{:}27{:}53{.}630$ which is what actually matters
- NOTE Confidence: 0.85294175
- $01{:}27{:}53.630 \dashrightarrow 01{:}27{:}56.360$ about when we declare someone dead,
- NOTE Confidence: 0.85294175
- $01:27:56.360 \longrightarrow 01:27:59.000$ the heart stopped, can't restart on its own,
- NOTE Confidence: 0.85294175
- $01:27:59.000 \rightarrow 01:28:00.488$ and we're not going to try
- NOTE Confidence: 0.85294175
- $01{:}28{:}00{.}488 \dashrightarrow 01{:}28{:}01{.}480$ to resuscitate the patient.
- NOTE Confidence: 0.85294175
- 01:28:01.480 --> 01:28:04.900 So I see that that is the intention and
- NOTE Confidence: 0.85294175
- $01:28:04.978 \longrightarrow 01:28:08.317$ that if NRP protocol is followed correctly,
- NOTE Confidence: 0.85294175
- $01:28:08.320 \longrightarrow 01:28:11.477$ that patient is not in fact resuscitated.
- NOTE Confidence: 0.85294175
- $01{:}28{:}11{.}480 \dashrightarrow 01{:}28{:}14{.}040$ So my biggest ethics issues and I'll end
- NOTE Confidence: 0.85294175
- $01:28:14.040 \rightarrow 01:28:17.040$ 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
- $01{:}28{:}18{.}940 \dashrightarrow 01{:}28{:}20{.}080$ interesting conversation that

- NOTE Confidence: 0.85294175
- $01:28:20.137 \longrightarrow 01:28:21.637$ takes us down the rabbit hole.

01:28:21.640 --> 01:28:24.525 But really is this protocol

NOTE Confidence: 0.85294175

 $01:28:24.525 \rightarrow 01:28:25.679$ empirically valid?

NOTE Confidence: 0.85294175

 $01:28:25.680 \rightarrow 01:28:28.374$ Are we actually ensuring that there

NOTE Confidence: 0.85294175

 $01:28:28.374 \longrightarrow 01:28:31.278$ 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

 $01{:}28{:}32{.}570 \dashrightarrow 01{:}28{:}35{.}580$ can we be honest enough with potential

NOTE Confidence: 0.85294175

 $01:28:35.664 \rightarrow 01:28:38.472$ donors and their family members that

NOTE Confidence: 0.85294175

 $01{:}28{:}38{.}472 \dashrightarrow 01{:}28{:}42{.}016$ they can make informed decisions about

NOTE Confidence: 0.85294175

 $01:28:42.016 \longrightarrow 01:28:46.160$ whether to to authorize this or not?

NOTE Confidence: 0.79564667

 $01:28:49.280 \longrightarrow 01:28:50.240$ 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

 $01{:}28{:}50{.}920 \dashrightarrow 01{:}28{:}52{.}040$ We're happy to hear if there's some.

NOTE Confidence: 0.76333

 $01{:}28{:}54{.}200 \dashrightarrow 01{:}28{:}55{.}040$ I'm going to address your your

NOTE Confidence: 0.76333

 $01:28:55.200 \rightarrow 01:28:56.960$ point, Where are we going?

01:28:56.960 --> 01:28:59.200 I'm old enough to remember when DCD NOTE Confidence: 0.76333 $01{:}28{:}59{.}200 \dashrightarrow 01{:}29{:}00{.}786$ was first getting started back in NOTE Confidence: 0.76333 $01:29:00.786 \longrightarrow 01:29:02.560$ the 1990s and they were the same NOTE Confidence: 0.76333 $01:29:02.560 \rightarrow 01:29:04.200$ 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 $01:29:06.384 \rightarrow 01:29:09.518$ the loss of of Pulse is not NOTE Confidence: 0.76333 $01:29:09.518 \rightarrow 01:29:10.850$ irreversible and several people NOTE Confidence: 0.76333 $01:29:10.850 \rightarrow 01:29:14.945$ were actually charged with homicide NOTE Confidence: 0.76333 $01:29:14.945 \longrightarrow 01:29:17.320$ for participating in DCD donations. NOTE Confidence: 0.76333 $01:29:17.320 \rightarrow 01:29:20.458$ But the utility of saving lives NOTE Confidence: 0.76333 $01:29:20.458 \rightarrow 01:29:23.279$ through that ultimately just won the NOTE Confidence: 0.76333 $01:29:23.279 \rightarrow 01:29:25.106$ 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 $01:29:27.672 \rightarrow 01:29:30.520$ with virtually no objections. NOTE Confidence: 0.76333 $01:29:30.520 \rightarrow 01:29:32.056$ I predict that the same thing NOTE Confidence: 0.76333 $01:29:32.056 \rightarrow 01:29:33.400$ is going to happen here,

- NOTE Confidence: 0.76333
- $01:29:33.400 \longrightarrow 01:29:36.306$ that the utility and the

 $01:29:36.306 \longrightarrow 01:29:37.280$ incredible success of

NOTE Confidence: 0.70694613

 $01{:}29{:}37{.}280 \dashrightarrow 01{:}29{:}40{.}000$ NRP is going to become a standard. And

NOTE Confidence: 0.70694613

 $01{:}29{:}40.000 \dashrightarrow 01{:}29{:}42.238$ 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

 $01:29:48.180 \longrightarrow 01:29:49.480$ 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

 $01:29:53.480 \longrightarrow 01:29:55.062$ the guy who's actually a lot of

NOTE Confidence: 0.70694613

 $01{:}29{:}55.062 \dashrightarrow 01{:}29{:}56.545$ 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

 $01{:}29{:}57{.}795 \dashrightarrow 01{:}29{:}59{.}357$ of the guys who's doing that.

NOTE Confidence: 0.70694613

 $01{:}29{:}59{.}360 \dashrightarrow 01{:}30{:}01{.}712$ And I appreciate that you raised this

NOTE Confidence: 0.70694613

 $01{:}30{:}01{.}712 \dashrightarrow 01{:}30{:}04{.}014$ important question for us to have a

- $01:30:04.014 \rightarrow 01:30:05.554$ conversation as a bioethics community
- NOTE Confidence: 0.70694613
- $01:30:05.554 \rightarrow 01:30:07.996$ here and as a sa medical community here.
- NOTE Confidence: 0.70694613
- 01:30:08.000 --> 01:30:09.600 Having heard all of this,
- NOTE Confidence: 0.70694613
- $01{:}30{:}09{.}600 \dashrightarrow 01{:}30{:}10{.}716$ I wonder any thoughts you might
- NOTE Confidence: 0.70694613
- $01:30:10.716 \longrightarrow 01:30:11.840$ want to share with the crew?
- NOTE Confidence: 0.70694613
- $01:30:11.840 \longrightarrow 01:30:14.120$ We'd be happy to hear.
- NOTE Confidence: 0.69422686
- $01{:}30{:}14.120 \dashrightarrow 01{:}30{:}16.514$ Well first I want to thank you for doing
- NOTE Confidence: 0.69422686
- $01{:}30{:}16{.}520 \dashrightarrow 01{:}30{:}18{.}120$ this because I think it was a great
- NOTE Confidence: 0.69422686
- $01{:}30{:}18{.}120 \dashrightarrow 01{:}30{:}20{.}840$ idea to have this this was Mark's idea NOTE Confidence:0.69422686
- $01:30:20.840 \rightarrow 01:30:22.964$ 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
- $01{:}30{:}24.600 \dashrightarrow 01{:}30{:}26.536$ and said Mark this is bothers me what NOTE Confidence: 0.69422686
- $01:30:26.536 \longrightarrow 01:30:28.529$ 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
- $01:30:30.840 \rightarrow 01:30:32.520$ sure I speak for everybody that's
- NOTE Confidence: 0.69422686
- $01{:}30{:}32{.}577 \dashrightarrow 01{:}30{:}34{.}396$ 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
- $01:30:37.960 \longrightarrow 01:30:38.878$ whether that's gonna
- NOTE Confidence: 0.66974014
- $01:30:40.040 \longrightarrow 01:30:42.304$ whether it's it's gonna fit the
- NOTE Confidence: 0.66974014
- $01:30:42.304 \rightarrow 01:30:43.560$ 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
- $01:30:45.080 \rightarrow 01:30:46.656$ 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
- $01{:}30{:}49{.}160 \dashrightarrow 01{:}30{:}52{.}558$ controversy at all from any body. And if we
- NOTE Confidence: 0.7921712
- $01:30:52.560 \longrightarrow 01:30:54.240$ go on ADCD case,
- NOTE Confidence: 0.7921712
- $01:30:55.520 \rightarrow 01:30:58.560$ there is always an issue of something
- NOTE Confidence: 0.7921712
- $01:30:58.560 \rightarrow 01:31:01.000$ 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
- $01:31:03.120 \longrightarrow 01:31:05.208$ 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

 $01:31:11.360 \longrightarrow 01:31:13.440$ 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

 $01{:}31{:}18{.}200 \dashrightarrow 01{:}31{:}19{.}916$ and and clearly the patients are not

NOTE Confidence: 0.8472248

 $01:31:19.920 \longrightarrow 01:31:21.160$ dead. I mean they're not,

NOTE Confidence: 0.8472248

 $01:31:23.560 \longrightarrow 01:31:26.080$ they're they're they're

NOTE Confidence: 0.8472248

 $01:31:26.080 \dashrightarrow 01:31:27.550$ alive when you start. They are, they're

NOTE Confidence: 0.8472248

01:31:27.550 --> 01:31:29.920 a
live 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

 $01{:}31{:}33{.}160 \dashrightarrow 01{:}31{:}35{.}407$ it's going to, I'm not sure the

NOTE Confidence: 0.8472248

 $01{:}31{:}35{.}407 \dashrightarrow 01{:}31{:}37{.}520$ controversy is going to go away. Well,

NOTE Confidence: 0.8472248

 $01{:}31{:}37{.}880 \dashrightarrow 01{:}31{:}39{.}217$ thank you very much all three of

NOTE Confidence: 0.8472248

01:31:39.217 $\operatorname{-->}$ 01:31:40.840 you for a fantastic presentation

NOTE Confidence: 0.37724227

 $01{:}31{:}45.840 \dashrightarrow 01{:}31{:}46.080$ and the

NOTE Confidence: 0.37724227

 $01:31:48.600 \longrightarrow 01:31:50.172$ really it was a remarkable

NOTE Confidence: 0.37724227

 $01:31:50.172 \longrightarrow 01:31:52.230$ night and the and the beauty

NOTE Confidence: 0.37724227

 $01:31:52.310 \longrightarrow 01:31:54.956$ of it is you each get some Yale swag.

- NOTE Confidence: 0.37724227
- $01:31:54.960 \longrightarrow 01:31:56.453$ 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
- $01:31:57.520 \longrightarrow 01:31:58.320$ Thank you all for coming.
- NOTE Confidence: 0.37724227
- $01{:}31{:}58{.}320 \dashrightarrow 01{:}31{:}59{.}279$ 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
- $01{:}32{:}00.600 \dashrightarrow 01{:}32{:}01.920$ Auditorium in two weeks.
- NOTE Confidence: 0.37724227
- 01:32:01.920 --> 01:32:04.000 Good night. Thank you.