WEBVTT

NOTE duration: "00:03:53.0450000"

NOTE language:en-us

NOTE Confidence: 0.813721656799316

 $00:00:00.000 \longrightarrow 00:00:01.600$ Hello everyone, I'm Carlos Oliveira.

NOTE Confidence: 0.813721656799316

 $00:00:01.600 \longrightarrow 00:00:04.462$ I'm one of the Co leads for the

NOTE Confidence: 0.813721656799316

 $00{:}00{:}04.462 \dashrightarrow 00{:}00{:}06.054$ vaccine Network initiatives here.

NOTE Confidence: 0.813721656799316

00:00:06.060 --> 00:00:08.252 Yell and I have the great honor of

NOTE Confidence: 0.813721656799316

 $00:00:08.252 \longrightarrow 00:00:10.058$ introducing our keynote speaker today.

NOTE Confidence: 0.813721656799316

00:00:10.060 --> 00:00:10.999 Doctor Peter Marks,

NOTE Confidence: 0.813721656799316

 $00:00:10.999 \longrightarrow 00:00:13.620$ who is the director of the Center for

NOTE Confidence: 0.813721656799316

00:00:13.620 --> 00:00:16.154 Biologics Evaluation and Research at the FDA.

NOTE Confidence: 0.813721656799316

 $00{:}00{:}16.160 \dashrightarrow 00{:}00{:}18.134$ Doctor Marks is a Brooklyn native

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00:00:18.134 --> 00:00:20.607 who received both his MDM PhD New

NOTE Confidence: 0.813721656799316

 $00:00:20.607 \longrightarrow 00:00:22.437$ York University after medical school.

NOTE Confidence: 0.813721656799316

00:00:22.440 --> 00:00:24.813 He moved to Boston to complete residency

NOTE Confidence: 0.813721656799316

 $00:00:24.813 \longrightarrow 00:00:26.950$ in internal medicine and fellowship in

NOTE Confidence: 0.813721656799316

 $00:00:26.950 \longrightarrow 00:00:29.062$ Human can Brigham and Women's Hospital.

00:00:29.070 --> 00:00:30.795 After Fellowship Doctor Marks remaining

NOTE Confidence: 0.813721656799316

 $00{:}00{:}30.795 \dashrightarrow 00{:}00{:}33.269$ program where in addition to serving as

NOTE Confidence: 0.813721656799316

00:00:33.269 --> 00:00:35.009 the clinical director for hematology,

NOTE Confidence: 0.813721656799316

 $00:00:35.010 \longrightarrow 00:00:36.750$ he was actually quite an

NOTE Confidence: 0.813721656799316

 $00:00:36.750 \longrightarrow 00:00:37.446$ accomplished musician.

NOTE Confidence: 0.813721656799316

 $00:00:37.450 \longrightarrow 00:00:39.871$ Here he is 20 years ago as a member

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00:00:39.871 --> 00:00:42.338 of the longer Symphony Orchestra.

NOTE Confidence: 0.813721656799316

 $00{:}00{:}42.340 \dashrightarrow 00{:}00{:}45.105$ Doctor Marks went on to work at

NOTE Confidence: 0.813721656799316

 $00:00:45.105 \longrightarrow 00:00:46.962$ the Pharmaceutical industry for a

NOTE Confidence: 0.813721656799316

00:00:46.962 --> 00:00:49.048 few years prior to come into Yale.

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 $00:00:49.050 \longrightarrow 00:00:50.892$ To lead our adult leukemia program

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 $00:00:50.892 \longrightarrow 00:00:53.344$ on the top left, believe it or not,

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 $00:00:53.344 \longrightarrow 00:00:54.874$ is doctor Marks in 2007.

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00:00:54.880 --> 00:00:57.096 At that point he was speaking about the

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 $00:00:57.096 \longrightarrow 00:00:59.178$ novel Count Cancer Therapeutics on NPR.

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 $00:00:59.180 \longrightarrow 00:01:01.896$ I believe in it on the bottom.

NOTE Confidence: 0.813721656799316

 $00{:}01{:}01{:}00.900 \dashrightarrow 00{:}01{:}04.280$ Is Doctor Mark said smile Cancer Hospital

NOTE Confidence: 0.813721656799316

 $00:01:04.280 \longrightarrow 00:01:06.581$ where he served as the Chief Clinical

NOTE Confidence: 0.813721656799316

00:01:06.581 --> 00:01:08.770 Officer after it was built in 2010?

NOTE Confidence: 0.813721656799316

 $00:01:08.770 \longrightarrow 00:01:10.516$ He remained here again until 2012

NOTE Confidence: 0.813721656799316

00:01:10.516 --> 00:01:12.876 when he joined the FDA and was quickly

NOTE Confidence: 0.813721656799316

 $00:01:12.876 \longrightarrow 00:01:15.104$ promoted to the director of the Center

NOTE Confidence: 0.813721656799316

00:01:15.104 --> 00:01:16.936 for Biologics Evaluation Research.

NOTE Confidence: 0.81372165679931600:01:16.940 --> 00:01:17.486 Currently I,

NOTE Confidence: 0.813721656799316

 $00:01:17.486 \longrightarrow 00:01:19.670$ as one of the top official at the

NOTE Confidence: 0.813721656799316

00:01:19.736 --> 00:01:21.666 FDA Doctor Marks overseas more

NOTE Confidence: 0.813721656799316

00:01:21.666 --> 00:01:22.824 than 1200 scientists,

NOTE Confidence: 0.813721656799316

 $00:01:22.830 \longrightarrow 00:01:24.768$ including the team of vaccine knowledge

NOTE Confidence: 0.813721656799316

 $00:01:24.768 \longrightarrow 00:01:26.446$ is who are currently reviewing

NOTE Confidence: 0.813721656799316

 $00:01:26.446 \longrightarrow 00:01:28.384$ the data for the covid vaccines,

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 $00:01:28.390 \longrightarrow 00:01:30.665$ which we've all been very excited about

 $00:01:30.665 \longrightarrow 00:01:33.370$ over the last few months as I've learned.

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 $00{:}01{:}33.370 \dashrightarrow 00{:}01{:}35.830$ More about Doctor Markson I've realized

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 $00:01:35.830 \longrightarrow 00:01:39.040$ that I have all his accomplishments.

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 $00:01:39.040 \longrightarrow 00:01:41.242$ The one achievement that's the most

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 $00:01:41.242 \longrightarrow 00:01:44.010$ impressive to me at least is the one

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 $00{:}01{:}44.010 \dashrightarrow 00{:}01{:}46.673$ that he gets the least amount of credit

NOTE Confidence: 0.813721656799316

00:01:46.673 --> 00:01:48.923 for which his operation warp speed.

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 $00:01:48.930 \longrightarrow 00:01:51.653$ But many people argue is the most

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 $00:01:51.653 \longrightarrow 00:01:52.820$ significant scientific achievements

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 $00:01:52.885 \longrightarrow 00:01:54.577$ since the landing on the moon.

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00:01:54.580 --> 00:01:56.710 And although the president and his

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 $00{:}01{:}56.710 \dashrightarrow 00{:}01{:}58.526$ secretaries love to take credit

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 $00{:}01{:}58.526 --> 00{:}01{:}59.519 \ \mathrm{for \ warp \ speed},$

NOTE Confidence: 0.813721656799316

 $00:01:59.520 \longrightarrow 00:02:01.285$ the operation was actually the

NOTE Confidence: 0.813721656799316

 $00:02:01.285 \longrightarrow 00:02:02.697$ brainchild of Doctor Marks.

NOTE Confidence: 0.813721656799316

 $00:02:02.700 \longrightarrow 00:02:04.854$ Who I'm told is an unabashed

NOTE Confidence: 0.813721656799316

 $00:02:04.854 \longrightarrow 00:02:06.290$ as Star Trek enthusiasts.

NOTE Confidence: 0.813721656799316

 $00:02:06.290 \longrightarrow 00:02:08.240$ And the term want speed is

NOTE Confidence: 0.813721656799316

 $00:02:08.240 \longrightarrow 00:02:09.780$ actually quite interesting to me.

NOTE Confidence: 0.813721656799316

 $00:02:09.780 \longrightarrow 00:02:11.622$ It refers to traveling at speeds

NOTE Confidence: 0.813721656799316

 $00:02:11.622 \longrightarrow 00:02:13.260$ that are faster than light,

NOTE Confidence: 0.813721656799316

 $00:02:13.260 \longrightarrow 00:02:15.684$ something that we all know is not possible

NOTE Confidence: 0.813721656799316

 $00:02:15.684 \longrightarrow 00:02:18.019$ based on the current laws of physics.

NOTE Confidence: 0.813721656799316 00:02:18.020 --> 00:02:18.337 However, NOTE Confidence: 0.813721656799316

00:02:18.337 --> 00:02:20.556 as a fellow Star Trek nerd myself,

NOTE Confidence: 0.813721656799316

 $00{:}02{:}20.560 \dashrightarrow 00{:}02{:}22.952$ I can tell you that is actually quite

NOTE Confidence: 0.813721656799316

 $00:02:22.952 \longrightarrow 00:02:24.989$ an appropriate term for this operation.

NOTE Confidence: 0.813721656799316 00:02:24.990 --> 00:02:25.626 You see, NOTE Confidence: 0.813721656799316

 $00{:}02{:}25.626 \dashrightarrow 00{:}02{:}26.898$ the idea of warps,

NOTE Confidence: 0.813721656799316

 $00:02:26.900 \longrightarrow 00:02:28.909$ we comes from the thought that if

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 $00{:}02{:}28.909 \dashrightarrow 00{:}02{:}31.501$ we can warp space or full space we

 $00:02:31.501 \longrightarrow 00:02:33.550$ can travel faster than linear line.

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 $00:02:33.550 \longrightarrow 00:02:36.403$ So if you can imagine space is a piece

NOTE Confidence: 0.813721656799316

 $00:02:36.403 \longrightarrow 00:02:39.274$ of paper and you draw a line in it.

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 $00:02:39.280 \longrightarrow 00:02:41.331$ You can get from the beginning to

NOTE Confidence: 0.813721656799316

 $00:02:41.331 \longrightarrow 00:02:43.807$ the end of that line much faster if

NOTE Confidence: 0.813721656799316

00:02:43.807 --> 00:02:46.338 you fold the piece of paper in half,

NOTE Confidence: 0.813721656799316

 $00:02:46.340 \longrightarrow 00:02:48.158$ so by skipping all that that

NOTE Confidence: 0.813721656799316

 $00{:}02{:}48.158 {\: -->\:} 00{:}02{:}49.370$ space you can go

NOTE Confidence: 0.836539804935455

 $00:02:49.442 \dashrightarrow 00:02:51.866$ from point A to point B much faster,

NOTE Confidence: 0.836539804935455

 $00:02:51.870 \longrightarrow 00:02:54.494$ and this is in many ways with Doctor

NOTE Confidence: 0.836539804935455

00:02:54.494 --> 00:02:56.568 Marx envisioned or or thought of when

NOTE Confidence: 0.836539804935455

 $00{:}02{:}56.568 {\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}} 00{:}02{:}58.916$ it came to warp speed because he was

NOTE Confidence: 0.836539804935455

 $00{:}02{:}58.916 \dashrightarrow 00{:}03{:}01.079$ able to eliminate all of this Dead

NOTE Confidence: 0.836539804935455

 $00{:}03{:}01.080 \to 00{:}03{:}03.124$ Space from what was previously a fairly

NOTE Confidence: 0.836539804935455

 $00:03:03.124 \longrightarrow 00:03:04.450$ linear vaccine development pipeline.

NOTE Confidence: 0.836539804935455

 $00:03:04.450 \longrightarrow 00:03:07.213$ And as a result we have now not one,

NOTE Confidence: 0.836539804935455

 $00{:}03{:}07.220 \to 00{:}03{:}09.446$ but two covert vaccines within a year.

NOTE Confidence: 0.836539804935455

 $00:03:09.450 \longrightarrow 00:03:12.756$ And which is a remarkable achievement.

NOTE Confidence: 0.836539804935455

 $00:03:12.760 \longrightarrow 00:03:14.644$ I saw something that if you

NOTE Confidence: 0.836539804935455

 $00:03:14.644 \longrightarrow 00:03:16.649$ had asked me a year ago,

NOTE Confidence: 0.836539804935455

00:03:16.650 --> 00:03:18.906 if I ask any of the vaccine ologist

NOTE Confidence: 0.836539804935455

 $00:03:18.906 \longrightarrow 00:03:21.357$ in the panel year ago they would

NOTE Confidence: 0.836539804935455

 $00{:}03{:}21.357 \dashrightarrow 00{:}03{:}23.780$ have said it's impossible to do this.

NOTE Confidence: 0.836539804935455

 $00:03:23.780 \longrightarrow 00:03:25.395$ According to all the laws

NOTE Confidence: 0.836539804935455

 $00:03:25.395 \longrightarrow 00:03:26.364$ of modern vaccinology.

NOTE Confidence: 0.836539804935455

 $00:03:26.370 \longrightarrow 00:03:28.818$ So I will finish with this slide because

NOTE Confidence: 0.836539804935455

00:03:28.818 --> 00:03:31.425 I really like the way the title of this

NOTE Confidence: 0.836539804935455

 $00:03:31.425 \longrightarrow 00:03:33.820$ New York Park Washington Post article,

NOTE Confidence: 0.836539804935455

 $00:03:33.820 \longrightarrow 00:03:36.088$ because it summarizes fairly well when I,

NOTE Confidence: 0.836539804935455

00:03:36.090 --> 00:03:38.358 when I've learned about Doctor Mark switches,

NOTE Confidence: 0.836539804935455

 $00:03:38.360 \longrightarrow 00:03:38.984$ he's ineffective.

 $00:03:38.984 \longrightarrow 00:03:41.168$ A brilliant physician scientist who is humble

NOTE Confidence: 0.836539804935455

 $00{:}03{:}41.168 \dashrightarrow 00{:}03{:}43.247$ and really uninterested in the spotlight.

NOTE Confidence: 0.836539804935455

 $00{:}03{:}43.250 \dashrightarrow 00{:}03{:}46.218$ But who's important work has and continues

NOTE Confidence: 0.836539804935455

 $00{:}03{:}46.218 \dashrightarrow 00{:}03{:}49.308$ to ensure the health of this country.

NOTE Confidence: 0.836539804935455

 $00:03:49.310 \longrightarrow 00:03:53.042$ So without further ado Doctor marks.