



SPEAKING
OUT
ON UAP

M E R G E D
P O D C A S T

1

00:00:00,000 --> 00:00:07,140

are we alone is this evidence of extraterrestrial
activity or something that's maybe already been

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00:00:07,140 --> 00:00:10,980

here or was here forever and before us
which opens the question of do we really

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00:00:10,980 --> 00:00:15,420

own this planet the other answer is just as
interesting it might be depressing the other

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00:00:15,420 --> 00:00:19,620

answer is we are alone at least here and
nothing has been here that's interesting

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00:00:19,620 --> 00:00:23,400

but it still begs the question what is it
that everybody's seeing right so you still

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00:00:23,400 --> 00:00:26,700

have to explain it so no matter what the
answer is here the answer is interesting

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00:00:30,540 --> 00:00:32,340

thank you

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00:00:34,740 --> 00:00:39,840

Dr Gary Nolan is the director of
proteomics Center and professor of

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00:00:39,840 --> 00:00:43,620

microbiology and Immunology at the
Stanford University School of Medicine

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00:00:44,280 --> 00:00:49,800

Dr Nolan received his PhD from the Department of
genetics at Stanford at the herzenberg laboratory

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00:00:50,400 --> 00:00:54,780
and his BS in genetics from Cornell
University he was a post-doctorate

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00:00:54,780 --> 00:00:58,800
fellow in the laboratory of Dr David
Baltimore MIT in Rockefeller University

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00:00:59,700 --> 00:01:04,620
he is the author of over 120 peer-reviewed
papers and holds numerous issued patents and was

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00:01:04,620 --> 00:01:10,440
recently honored as one of the top 25 inventors at
Stanford University so Gary thanks for joining us

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00:01:10,440 --> 00:01:17,520
today we've met before a couple times once at a
scientific Coalition for UAP studies conference

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00:01:18,060 --> 00:01:22,140
um actually I think that was only time but
it's it's a pleasure to to see you again yeah

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00:01:22,140 --> 00:01:27,420
well thanks to you guys for setting this up and
inviting me it's gonna be fun discussion awesome

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00:01:28,380 --> 00:01:32,640
um so let's kind of cut to the chase here you
know you're a very well respected scientist

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00:01:32,640 --> 00:01:36,600
you've been involved in the UAP topic and have
been vocal about it in a way other people haven't

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00:01:37,620 --> 00:01:42,600
um just lately we're now you know just to kind
of set the stage where we're about a month and

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00:01:42,600 --> 00:01:48,900

a half away or we've been waiting for a month and a half for this latest UAP report to come out uh

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00:01:48,900 --> 00:01:56,040

the National Defense authorization Act of 2023 uh there's a a final version of that that is ready

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00:01:56,040 --> 00:02:02,760

to be voted on which has about 33 Pages worth of UAP related uh whistleblower protections and

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00:02:02,760 --> 00:02:08,340

um accountability office you know research projects and going all the way back to 1945

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00:02:08,340 --> 00:02:14,760

uh 1947 was on the original version now we're looking at 1945 uh to go back for that analysis

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00:02:16,140 --> 00:02:20,760

um at the same time we also have major media Publications such as New York Times and wash

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00:02:20,760 --> 00:02:26,880

uh the Wall Street Journal um communicating and expressing that you know the UAP bubble

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00:02:26,880 --> 00:02:32,400

has popped and that this is all nonsense uh more or less and that that was really communicated

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00:02:33,420 --> 00:02:39,060

um on the day that the original UAP report was due to come out uh and all those are all the all

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00:02:39,060 --> 00:02:43,380

that reporting seemed to kind of poo the idea that this reported anything substantial to say

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00:02:44,460 --> 00:02:48,900

um now those articles came and went and now it's a\h
month and a half later and the report's still not\h\h

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00:02:48,900 --> 00:02:53,940

finished uh what do you make of those articles and\h
and kind of the general communication that we're\h\h

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00:02:53,940 --> 00:03:00,480

seeing from the mainstream media on this topic\h
well it certainly leaves the impression that the\h\h

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00:03:00,480 --> 00:03:05,880

Articles were planned but what excites me about\h
that so-called planning is it shows you frankly\h\h

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00:03:05,880 --> 00:03:11,580

how disorganized they are because if they didn't\h
even understand that the ndaa uh or the sorry the\h\h

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00:03:11,580 --> 00:03:15,540

UAP report was going to come out in a couple of\h
months it meant that they basically mistimed it\h\h

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00:03:15,540 --> 00:03:20,580

and so that to me tells me that whoever the\h
opposition is is not to be feared as much as\h\h

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00:03:20,580 --> 00:03:26,220

uh something that they should be who do you think\h
that opposition is do you think there is just a\h\h

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00:03:26,220 --> 00:03:31,740

general uh skeptical crowd inside that thinks\h
that this is a waste of resources is that kind\h\h

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00:03:31,740 --> 00:03:36,120

of the type of person that you think this would\h
be or the group well I mean without getting all\h\h

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00:03:36,120 --> 00:03:44,160

conspiracy conspiracy minded you know there are of\h
course those people who are on the inside who as\h\h

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00:03:44,160 --> 00:03:49,800

you say they don't want to see wasted resources\h
but also you know this is an existential change\h\h

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00:03:49,800 --> 00:03:55,200

in how it is that Humanity sees itself and\h
so whether or not you're religious or whether\h\h

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00:03:55,200 --> 00:04:01,680

you're a religious uh changing where you are in\h
the hierarchy of things is an important change\h\h

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00:04:01,680 --> 00:04:07,680

in your psychological structure so there's always\h
going to be a pushback on that mentally but also\h\h

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00:04:08,220 --> 00:04:14,940

you know also there's the crowd effect that\h
happens individually as I find for instance in The\h\h

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00:04:14,940 --> 00:04:20,100

Sciences individually I can talk to a scientist\h
and they're all open on the idea and they want to\h\h

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00:04:20,100 --> 00:04:24,720

know everything about it but in the crowd they\h
become another person and so I think there's a\h\h

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00:04:24,720 --> 00:04:31,920

little bit of that kind of a psychology going on\h
and because people often need outside validation\h\h

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00:04:31,920 --> 00:04:38,520

not just on these ideas but for themselves and\h
so if the more we start to see other individuals\h\h

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00:04:38,520 --> 00:04:43,620

outside in the community at large who are saying\h
this is okay to talk about the further than\h\h

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00:04:43,620 --> 00:04:49,260

those who are on the inside will feel comfortable\h
coming out and doing things if that makes sense it\h\h

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00:04:49,260 --> 00:04:53,220

does yeah that's interesting and that's pretty\h
much what I've seen as we've been interviewing\h\h

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00:04:53,220 --> 00:04:58,200

different Pilots the more that they are sharing\h
their experiences the more they're learning from\h\h

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00:04:58,200 --> 00:05:02,880

other pilots on the air crew that they're sharing\h
the same experiences and they just weren't talking\h\h

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00:05:02,880 --> 00:05:10,560

about it before so yeah I think that's that's very\h
sweet Point um so you know I'm a pilot or I was um\h\h

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00:05:10,560 --> 00:05:16,860

I'm not I don't have the the educational pedigree\h
that you have um when we approach this topic as a\h\h

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00:05:16,860 --> 00:05:22,920

as Pilots for us it's very pragmatic we're looking\h
at this uh from an aviation safety perspective uh\h\h

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00:05:22,920 --> 00:05:26,160

and that's really how I got involved because we\h
were almost hitting these things and we didn't\h\h

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00:05:26,160 --> 00:05:30,660

know what to do and we're canceling training\h
um how did you get involved in this topic\h\h

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00:05:32,580 --> 00:05:38,100

well a couple of different angles I mean the\h
first one was uh working on that mummy that\h\h

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00:05:38,100 --> 00:05:44,400

people thought was an alien and I looked at that\h
and I was intrigued and I said well okay you say\h\h

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00:05:44,400 --> 00:05:49,980

that but okay who's doing the science to prove it\h
well I can do the science and so that was when I\h\h

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00:05:49,980 --> 00:05:56,760

reached out to the people who had it and uh got\h
access to some material from it we did the studies\h\h

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00:05:56,760 --> 00:06:01,800

we published it we showed it wasn't and that's\h
fine and I did something very similar it wasn't\h\h

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00:06:01,800 --> 00:06:08,700

an alien it was it was an unfortunate probably uh\h
pre-term birth uh with a lot of genetic anomalies\h\h

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00:06:09,360 --> 00:06:13,080

um and you know we of course brought in\h
the world's experts in all of the various\h\h

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00:06:13,080 --> 00:06:17,820

sub-disciplines that were required to analyze\h
the thing everything from South American genetics\h\h

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00:06:17,820 --> 00:06:26,160

The Specialist happened to be at Stanford the\h
specialist in uh in um genetic bone disorders Etc\h\h

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00:06:27,060 --> 00:06:31,140

um because that's what you need to do with\h
these kinds of things if you can do it and\h\h

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00:06:31,140 --> 00:06:36,300

is easy enough you need to bring in then make a
final statement about some of this stuff and so

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00:06:36,300 --> 00:06:42,540

for me and this is another this is the honest way
that I was going about it for me the the the doing

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00:06:42,540 --> 00:06:48,600

of that study uh the undertaking of that study
was because I really wanted to send a flag up as

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00:06:48,600 --> 00:06:55,140

I we were talking earlier a smoke signal to the
scientific community at large to see what other

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00:06:55,140 --> 00:07:02,160

scientists are able or willing to come forward
now that there's somebody willing to be out

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00:07:02,160 --> 00:07:09,720

there talking about this kind of thing openly um
because and part of what drove me were discussions

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00:07:09,720 --> 00:07:15,300

I'd had with other scientists earlier on who told
me that I was going to ruin my career by getting

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00:07:15,300 --> 00:07:20,160

involved in this at any level and to be honest
that just got me angry and in fact if anything

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00:07:20,160 --> 00:07:24,600

it got me more determined that I should be doing
something about this because they were telling me

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00:07:24,600 --> 00:07:31,560

that something was clearly logical and well within
the realm of scientific analysis and study they

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00:07:31,560 --> 00:07:37,320

were telling me not to do it which to me just said\n they're more religious and cult-like than most \h\h

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00:07:37,320 --> 00:07:44,460

think scientists should be I mean to me if you're\n if you've agreed to be a scientist you've agreed\h\h

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00:07:44,460 --> 00:07:50,580

to a certain set of rules about how you explore\n reality or nature and if you're breaking some of\h\h

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00:07:50,580 --> 00:07:57,660

the basic tenets of those rules then I I you need\n to be disciplined and so for me it was part of\h\h

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00:07:57,660 --> 00:08:03,480

this impetus was this is something that I should\n be doing or because I should I don't like people\h\h

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00:08:03,480 --> 00:08:09,660

telling me I shouldn't be doing doing something\n when I know it's right and so that brought me to\h\h

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00:08:09,660 --> 00:08:14,460

the attention of a number of other scientists who\n actually were there who had been doing this kind\h\h

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00:08:14,460 --> 00:08:22,560

of work for decades as it turns out uh and um you\n know I could I I felt the community growing and it\h\h

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00:08:22,560 --> 00:08:30,540

really but everything was going along I think in\n a more Subterranean manner until eventually uh Lou\h\h

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00:08:30,540 --> 00:08:38,100

Elizondo reached out to me uh and uh with others\n said this is what we're about to release and \h\h

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00:08:38,100 --> 00:08:44,940

remember basically the day I was in Washington DC\h
uh we met in Crystal City overlooking the Pentagon\h\h

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00:08:44,940 --> 00:08:49,620

at a bar and he showed me the video of what was\h
supposed to be coming out the Gimbal and the go\h\h

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00:08:49,620 --> 00:08:56,880

fast videos uh and that to me was an energizing\h
moment realizing that okay here it is this is it\h\h

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00:08:56,880 --> 00:09:02,040

uh this is you know whether that is sufficient\h
proof or not the fact that we knew that it was\h\h

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00:09:02,040 --> 00:09:07,620

going to be coming out of the New York Times I was\h
ready for uh what was coming and excited about it\h\h

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00:09:07,620 --> 00:09:10,620

I realized it wasn't going to be the end of\h
the story that was just the beginning of it\h\h

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00:09:11,220 --> 00:09:14,820

but for me it was the first thing I sent\h
around to the people the scientist friends\h\h

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00:09:14,820 --> 00:09:19,680

of mine who'd said you know this is something\h
you shouldn't be doing I said look at this and\h\h

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00:09:19,680 --> 00:09:26,340

what's exciting now now fast forward what four\h
or five years later uh now there's so many of\h\h

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00:09:26,340 --> 00:09:32,400

my scientific friends who the first thing they\h
want to ask once we're dispensed with the usual\h\h

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00:09:32,400 --> 00:09:37,680

pleasantries about whatever science is they're\h
doing Gary what's going on about the UFO stuff\h\h

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00:09:37,680 --> 00:09:43,560

I really want to hear well do they want it here\h
they want to do something about it so yes so\h\h

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00:09:43,560 --> 00:09:52,140

um Sean Parker who funds uh my lab um the Napster\h
Facebook Sean Parker funds my lab through um\h\h

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00:09:52,140 --> 00:10:02,880

through his immunotherapy of Cancer Foundation uh\h
he actually put down a fair amount of money at one\h\h

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00:10:02,880 --> 00:10:12,360

of the conferences that he ran for me to have a uh\h
basically the an evening uh of talking about this\h\h

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00:10:12,360 --> 00:10:21,240

matter flew in Lu Elizondo we brought in Chris\h
Mellon via Zoom uh Lady Gaga was at the back uh\h\h

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00:10:22,020 --> 00:10:29,520

um uh hidden uh and um and I know he\h
put a fair amount of money into this now\h\h

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00:10:29,520 --> 00:10:34,860

was there sufficient data most these were my\h
scientific colleagues and many of them came up\h\h

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00:10:34,860 --> 00:10:39,420

to me afterwards and said well Gary you didn't\h
really show any data and I said well the reason\h\h

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00:10:39,420 --> 00:10:46,260

there's no data is because nobody else is helping\h
and so several of them said how can I help so\h\h

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00:10:46,260 --> 00:10:51,720

that's what changes you know it's it's you always\h
do need somebody who has whatever the reputation\h\h

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00:10:51,720 --> 00:10:57,780

is that is necessary they can say okay well if and\h
I've heard this many times I wouldn't believe it\h\h

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00:10:57,780 --> 00:11:04,620

if it weren't for you and so you know people say\h
oh you're you're wonderful you're whatever it's\h\h

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00:11:04,620 --> 00:11:10,680

like no I'm I'm not wonderful I'm just telling you\h
that if you if you've agreed to the set of rules\h\h

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00:11:10,680 --> 00:11:15,240

like I was talking about before then and you're\h
not going to follow them then I'm not going to\h\h

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00:11:15,240 --> 00:11:21,900

think I'm not going to listen to your criticisms\h
so it's a that's a very interesting philosophy \h\h

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00:11:21,900 --> 00:11:27,000

would say or similar philosophy to some of the the\h
airline captains we've spoken to right they have\h\h

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00:11:27,000 --> 00:11:31,320

accepted the responsibility for all those lives\h
on the aircraft before they even stepped on the\h\h

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00:11:31,320 --> 00:11:36,660

aircraft they viewed the weather they've looked\h
at you know solar activity for solar flares \h\h

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00:11:36,660 --> 00:11:42,300

mean everything you can imagine health of the uh\h
the the passengers right if someone is you know\h\h

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00:11:42,300 --> 00:11:47,520

has a potential heart attack on the plane be a\h
problem and so it's very simple you've agreed that\h\h

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00:11:47,520 --> 00:11:52,620

you've accepted that responsibility not just the\h
pilots of cells but the the carriers themselves\h\h

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00:11:52,620 --> 00:11:59,040

the companies themselves and yet this is an issue\h
that they have a hard time reporting they uh have\h\h

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00:11:59,040 --> 00:12:03,660

received some of the pilots have interviewed\h
have received uh to see some resist letters\h\h

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00:12:04,440 --> 00:12:10,980

um and the their companies are just frankly not\h
supportive of that conversation um and I see it\h\h

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00:12:10,980 --> 00:12:16,560

being extremely similar parallel to the you know\h
the scientific methodology that you've agreed to\h\h

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00:12:16,560 --> 00:12:20,760

you've looked at you've agreed to look at the data\h
and so when there is data available you're doing\h\h

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00:12:20,760 --> 00:12:27,000

scientific servers by not actually looking at it\h
right I mean and one of the premises that I've\h\h

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00:12:27,000 --> 00:12:33,000

pushed and this is you know I engage on Twitter\h
and I just started on Reddit is you know how do\h\h

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00:12:33,000 --> 00:12:40,560

we teach the let's say the uh the lay public\h
who's interested in this matter to talk about\h\h

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00:12:40,560 --> 00:12:45,600

the matter in a scientific way because I mean\h
let's let's sort of take a couple of steps back\h\h

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00:12:46,860 --> 00:12:51,540

um how does a scientist believe what it\h
is that they see what how do we how do we\h\h

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00:12:51,540 --> 00:12:57,000

validate something so if you're a so-called\h
experiencer you experience something and as\h\h

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00:12:57,000 --> 00:13:03,240

many people know I experienced something when\h
I was young I saw a craft go right over my head\h\h

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00:13:04,440 --> 00:13:12,420

um so but I didn't know what it was at the\h
time there was no ufology at the time so for\h\h

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00:13:12,420 --> 00:13:18,960

me that was an experience and it's in many ways\h
in conventional terms it's an anecdote but I want\h\h

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00:13:18,960 --> 00:13:25,440

to talk about the word anecdote a little bit in\h
a minute um and so I don't need proof of anything\h\h

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00:13:26,280 --> 00:13:33,180

to know that it's real but if I want to convince\h
my scientific colleagues then the agreement has\h\h

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00:13:33,180 --> 00:13:38,460

to be that there's another language that's being\h
used right so that language is the language of\h\h

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00:13:38,460 --> 00:13:42,480

science is something that I can create data\h
sets that can be handed to other people they\h\h

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00:13:42,480 --> 00:13:47,100

can either believe or not my conclusions
or my assumptions my speculations about

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00:13:47,100 --> 00:13:54,600

what that data means so what I've been trying to
teach the uh the let's say the the lay public is

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00:13:56,280 --> 00:14:01,200

prove that the data is valid you don't
have to come to a conclusion you don't

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00:14:01,200 --> 00:14:06,960

have to believe it's the Pleiadians you know
from Alpha Centauri or something right you

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00:14:06,960 --> 00:14:10,440

just have to convince another scientist or
another individual that the data is real

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00:14:11,040 --> 00:14:17,580

once the data is real you get to actually turn
the tables you now aren't responsible for coming

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00:14:17,580 --> 00:14:23,280

up with the answer you can now say look we're
scientists to the extent that you're interested in

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00:14:23,280 --> 00:14:30,180

this data you tell me what it is that you think it
is help me speculate I'll give you a if I give

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00:14:30,180 --> 00:14:35,700

you a speculation I'm not looking for you to throw
it on the ground stomp on it I'm looking for you

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00:14:35,700 --> 00:14:43,020

to work with me to figure out what the angles are
that best describe the data that we're observing

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00:14:43,620 --> 00:14:48,720

I agree 100 and I see that a lot of times people\h
they either don't want to look at the data and you\h\h

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00:14:48,720 --> 00:14:52,080

really can't force them to really look at it you\h
kind of have to wait for them to be in a mental\h\h

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00:14:52,080 --> 00:14:55,740

state where they say okay I think that there\h
might be something here I'm going to look at it\h\h

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00:14:55,740 --> 00:15:00,000

but at the end of the day we we need more data so\h
you know maybe we can talk a little bit about how\h\h

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00:15:00,000 --> 00:15:04,560

we could do that do you have any ideas about how\h
we can expand uh our understanding and let's just\h\h

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00:15:04,560 --> 00:15:09,240

maybe let's pray maybe break this down to two\h
different ways we can talk about maybe sensing\h\h

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00:15:09,240 --> 00:15:13,260

and how we're going to understand where these are\h
and then maybe we can kind of talk about further\h\h

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00:15:13,260 --> 00:15:17,160

understanding them on the material side if that's\h
possible and I know you have a little expert well\h\h

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00:15:17,160 --> 00:15:22,620

more than a little expertise but lots of expertise\h
and most likely both of these but um what do we\h\h

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00:15:22,620 --> 00:15:26,820

know as far as the sensing goes we know that we\h
can detect these at least some of these objects\h\h

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00:15:27,480 --> 00:15:33,720

um we've done it uh with our Radars um varying the powers of radar and we've seen progression of the

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00:15:33,720 --> 00:15:38,220

Fidelity of the radar track files as we increase that power so we think that there is some type

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00:15:38,220 --> 00:15:45,240

of relationship there we know where to look we need to perhaps modify the tools and the sensors

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00:15:45,240 --> 00:15:52,920

so that it's specific for this task in some sense these all seem like pretty achievable uh problems

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00:15:52,920 --> 00:15:59,700

here what's what's the holdup well I think the hold up frankly is that people are waiting for

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00:15:59,700 --> 00:16:06,960

Daddy to give them the data and daddy in this case is the government and the government

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00:16:06,960 --> 00:16:13,440

has we know the best sensors but you know we also know that as technology progresses a lot of those

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00:16:13,440 --> 00:16:19,260

sensor systems actually eventually become publicly available it might be in some way uh dumbed down

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00:16:19,260 --> 00:16:27,000

and not as sensitive as what's available there are accessible systems so the Galileo project that I'm

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00:16:27,000 --> 00:16:34,620

a part of that Avi lobe at Harvard started uh he's setting up a sensor system it's expensive

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00:16:35,640 --> 00:16:43,740

um he's using uh I would say more uh let's say uh
an astrophysicists tool kit to look at the skies

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00:16:43,740 --> 00:16:49,800

uh but there are of course many other tool kits
that could be brought to bear uh and so you know

173

00:16:49,800 --> 00:16:56,100

I think that to me the exciting part is well
let's collect the data on what this phenomena

174

00:16:56,100 --> 00:17:02,100

is because once you see something moving in a
non-conventional manner it begs the question how

175

00:17:02,100 --> 00:17:09,180

did it do it I'm I'm less interested who in who
might be behind them then what it is that they're

176

00:17:09,180 --> 00:17:16,560

doing because what it is that they're doing breaks
our current understanding of if they're real

177

00:17:16,560 --> 00:17:23,160

mean I'm gonna always be I'm going to remain
a skeptic to the at least for my scientific

178

00:17:23,160 --> 00:17:30,060

colleagues to say because they don't necessarily
believe what it is that I think it is are so can

179

00:17:30,060 --> 00:17:33,840

we collect enough data that tells us about what
it is and how it is that they're moving and then

180

00:17:33,840 --> 00:17:39,840

can we look at the equations of physics that tell
us how it is that we might do something similar

181

00:17:39,840 --> 00:17:46,980

because if if they are doing these things that are\h
unconventional or frankly impossible as you know\h\h

182

00:17:46,980 --> 00:17:53,700

as a pilot then uh somebody has access to either\h
levels of power or levels of physics understanding\h\h

183

00:17:53,700 --> 00:18:02,640

that we don't appreciate I see a huge commercial\h
gold mine in that and so I mean I'll just jump\h\h

184

00:18:02,640 --> 00:18:09,660

why do I think that way my whole career has\h
been creating technologies that I think of\h\h

185

00:18:09,660 --> 00:18:16,800

as inevitable I look at something and I say ah we\h
need this kind of data nobody else has it because\h\h

186

00:18:16,800 --> 00:18:22,920

if we have that kind of data we can jump here and\h
so then I spend the time to invent that technology\h\h

187

00:18:22,920 --> 00:18:29,400

every time that I sit in a lecture the first thing\h
that comes to mind when I'm watching stuff is okay\h\h

188

00:18:29,400 --> 00:18:33,420

how can I use how can they use that what's the\h
best how how can we use this for patient benefit\h\h

189

00:18:34,800 --> 00:18:41,880

um so with that same mindset I look at all of\h
the things that are going on right now in the UAP\h\h

190

00:18:41,880 --> 00:18:48,360

Arena and say okay how can we do that what's the\h
what are the Exotic technologies that people are\h\h

191

00:18:48,360 --> 00:18:53,460

already beginning to develop that might be part of the solution to what it is that those things

192

00:18:53,460 --> 00:18:59,820

are doing because it's it's like you know those those sins-like games where you build structure

193

00:18:59,820 --> 00:19:04,020

you build something that builds something that builds something you know are we going to be

194

00:19:04,020 --> 00:19:09,900

flying around an anti-gravity craft next year no but we'll anything along the path towards that

195

00:19:09,900 --> 00:19:14,940

is an extraordinary Advantage even just small you know improvements in efficiency or weight you're

196

00:19:14,940 --> 00:19:20,760

writing those things yeah absolutely it's an evolutionary process I mean you you know you you

197

00:19:20,760 --> 00:19:28,500

have to have a goal though Evolution doesn't think but an evolutionary process can be brought to bear

198

00:19:28,500 --> 00:19:33,960

on all of this because what you need to do is you need to have what I've called a virtuous feedback

199

00:19:33,960 --> 00:19:40,740

cycle where let's say that we we let's say we had a piece of material from a craft from these

200

00:19:40,740 --> 00:19:48,720

alleged crash retrievals you know the the word on the street is from within that nobody understands

201

00:19:48,720 --> 00:19:53,520

how these things operate they don't know where the
battery is they don't know where the engine is uh

202

00:19:53,520 --> 00:19:58,500

they don't know so uh somehow they are embedded
in the structure of the craft or maybe they're

203

00:19:58,500 --> 00:20:01,680

beaming the power from somewhere else and I'm
just making all of this stuff up as I go along

204

00:20:01,680 --> 00:20:06,420

so for the people out there who want to say that
I'm claiming all of this I'm not taking notes

205

00:20:07,020 --> 00:20:15,180

um is so so okay so they're they're craft are made
of things apparently that are either extracting

206

00:20:15,180 --> 00:20:21,300

energy or by themselves are the engine okay so
those are probably made right down at the atomic

207

00:20:21,300 --> 00:20:28,200

level there's some material aspect of these things
we can imagine that we don't know about we don't

208

00:20:28,200 --> 00:20:36,420

understand just gaining that information will
say okay there's something here why did they

209

00:20:36,420 --> 00:20:42,000

put this atom next to that atom next to that
atom now it might not that's not the solution

210

00:20:42,000 --> 00:20:48,540

but seeing it first of all if it's something
that we can't make right or we have not ever

211

00:20:48,540 --> 00:20:54,360

made well that's about as close to Smoking Gun\h
evidence you're going to get but again I'm not\h\h

212

00:20:54,360 --> 00:20:59,760

interested in saying who made it I'm interested\h
in saying or asking the question what does it do\h\h

213

00:21:00,660 --> 00:21:07,560

because the understanding that will come from that\h
once something like that is available uh which is\h\h

214

00:21:07,560 --> 00:21:14,820

not publicly available yet uh then you can bring\h
in the kinds of material scientists to say to sit\h\h

215

00:21:14,820 --> 00:21:19,980

around a table and play what if because that's\h
what scientists are really good at and frankly\h\h

216

00:21:19,980 --> 00:21:24,300

I think that one of the problems you know to\h
the extent that any of the stories about Crash\h\h

217

00:21:24,300 --> 00:21:29,160

retrievals are true where they say that they can't\h
understand it is because they haven't done this\h\h

218

00:21:29,160 --> 00:21:33,780

sort of open science that can be done now open\h
science doesn't mean it needs to be talked about\h\h

219

00:21:33,780 --> 00:21:40,680

you know it publicly in Academia but bringing\h
in academics is important so one of the so I\h\h

220

00:21:40,680 --> 00:21:48,480

wrote a white paper to one of the intelligence\h
committees uh in the run-up to the ndaa uh and\h\h

221

00:21:48,480 --> 00:21:53,400

one of the things that I put in that was you need\h
to bring in academics you need to get them uh\h\h

222

00:21:53,400 --> 00:21:59,160

clearances and is that a publicly available paper\h
what's that is that publication I have to ask\h\h

223

00:22:00,360 --> 00:22:07,860

um but uh the uh the long and the short of it was\h
guess what's in the language there's language at\h\h

224

00:22:07,860 --> 00:22:11,400

least I didn't check the last one but it was in\h
the language that said we'll start to bring in\h\h

225

00:22:11,400 --> 00:22:16,740

academic scientists and it's it's not because\h
academic scientists are better it's not like\h\h

226

00:22:16,740 --> 00:22:21,660

they're you know there there's lots of fantastic\h
scientists in the government in the military it's\h\h

227

00:22:21,660 --> 00:22:29,520

because they have a mindset of asking questions\h
that have uh not been answered they have an\h\h

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00:22:29,520 --> 00:22:34,620

exploratory way of doing things because there's\h
there's two kinds of science that are generally\h\h

229

00:22:34,620 --> 00:22:39,240

done one is called basic research and the other\h
is translational if you have only a translational\h\h

230

00:22:39,240 --> 00:22:45,060

mindset if you look at something and you can't\h
figure out what its translatability is to utility\h\h

231

00:22:45,060 --> 00:22:51,240

then you might just walk away yeah as opposed to\h
at least the time in which I grew up the basic\h\h

232

00:22:51,240 --> 00:22:56,280

science is let's just collect information because\h
we don't know what the heck anything is this was\h\h

233

00:22:56,280 --> 00:23:02,100

like the what happened for the last two centuries\h
but suddenly you have this extraordinary resource\h\h

234

00:23:02,100 --> 00:23:09,720

and library of facts and factoids that with better\h
understanding now with a translational eye you can\h\h

235

00:23:09,720 --> 00:23:15,000

go in and say I can put this together with this\h
and this so the tinkerer you know comes along\h\h

236

00:23:15,000 --> 00:23:20,220

and says Ah this is the kind of things that I can\h
do with it so that's I think that's part of where\h\h

237

00:23:20,220 --> 00:23:25,260

I mean we're at the you know even if again these\h
alleged things are are real we're at the beginning\h\h

238

00:23:25,260 --> 00:23:31,860

of collecting the basic information and then\h
saying how can we use this and you would think\h\h

239

00:23:31,860 --> 00:23:37,980

that exists better under the material science\h
umbrella oh definitely yeah I mean you know so\h\h

240

00:23:37,980 --> 00:23:42,480

let's look at the kinds of instruments that\h
are out there right now they're crude I mean\h\h

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00:23:42,480 --> 00:23:48,000

really are I mean you know the the best mass\h
spectrometers uh that tell you what things are\h\h

242

00:23:48,000 --> 00:23:53,100

made of for instance what atoms and Isotopes are\h
there I don't mean radioactive isotopes I mean\h\h

243

00:23:53,100 --> 00:24:02,640

just variations of flavors of iron and flavors of\h
different um different elements uh understanding\h\h

244

00:24:02,640 --> 00:24:08,460

what is there is not just saying there's this\h
percentage of iron and there's this percentage\h\h

245

00:24:08,460 --> 00:24:16,080

of that it's knowing the exact structure of where\h
those atoms are so you know one of my friends and\h\h

246

00:24:16,080 --> 00:24:23,880

colleagues who's actually the guy who helped found\h
the Galileo project is Frank lockian so Frank uh\h\h

247

00:24:23,880 --> 00:24:32,220

owns uh the CEO of Brooker Brooker is a huge mass\h
spectrometry company everybody in my field knows\h\h

248

00:24:32,220 --> 00:24:38,580

this so guess what he's interested in he happens\h
to be interested in the UAP issue uh he's he's\h\h

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00:24:38,580 --> 00:24:46,560

funded that and uh so but even he realizes that\h
the technology is insufficient the granularity\h\h

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00:24:46,560 --> 00:24:54,600

that we require to understand these things is uh\h
not there now are we closed yes we're very I think\h\h

251

00:24:54,600 --> 00:24:59,940

we're very close yeah there's there's several ways
that I'm pursuing that uh will will get us there

252

00:25:01,500 --> 00:25:12,060

um but I think the way to to look at it is that
even if all of the suppositions about UAP are

253

00:25:12,060 --> 00:25:19,560

some kind of illusion or mistake developing the
Technologies in expectation of understanding we

254

00:25:19,560 --> 00:25:25,740

can turn those same tools towards simply you
know conventional materials because as I've

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00:25:25,740 --> 00:25:30,840

said you know to friends of mine we don't
even understand the structure of glass we

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00:25:30,840 --> 00:25:37,140

don't even understand frankly the structure of
water an ice and we can make we can model it but

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00:25:37,140 --> 00:25:42,480

we don't know it and why would you want to know
that because if and you were involved in a sort

258

00:25:42,480 --> 00:25:49,920

of a generative AI uh approach for materials is
there's this whole thing called structure function

259

00:25:51,120 --> 00:25:55,380

um you can make a structure of something
and you determine its function and if the

260

00:25:55,380 --> 00:26:02,520

structure works and and in a way that you want
then that's fine but usually Evolution you vary

261

00:26:02,520 --> 00:26:06,600

the structure a little bit and then you say\h
did the function change is it better or worse\h\h

262

00:26:07,800 --> 00:26:15,780

um but the feedback cycle is best let's say\h
enabled and fed by an exact understanding of\h\h

263

00:26:15,780 --> 00:26:23,040

what that structure is not a modeled understanding\h
that you did in silico and so this is the kind of\h\h

264

00:26:23,040 --> 00:26:32,760

thing that better Imaging approaches of Imaging\h
of materials in situ will vastly improve our uh\h\h

265

00:26:32,760 --> 00:26:39,960

larger industrial capabilities and then should\h
somebody say oh well that's a great capability\h\h

266

00:26:39,960 --> 00:26:45,600

I have this thing in a vault that's been there for\h
40 years maybe I should bring it out because maybe\h\h

267

00:26:45,600 --> 00:26:51,060

you can help me with it yeah so this this type\h
of Technology we would be it now are we is is\h\h

268

00:26:51,060 --> 00:26:54,960

this like a kind of pre-quantum level we're not\h
getting down to the area where Quantum effects\h\h

269

00:26:54,960 --> 00:27:01,380

take place no it's um I mean that that of course\h
would be the next level uh this is just knowing\h\h

270

00:27:01,380 --> 00:27:08,880

where the atoms are in 3D space at the at the\h
subangstrom level uh because down at that level\h\h

271

00:27:08,880 --> 00:27:16,740

you can start to make best guesses as to the
bond structure of the objects uh but this gets

272

00:27:16,740 --> 00:27:25,620

into a slightly different area right and that's
um so Jacque Valley a friend of mine uh brought

273

00:27:25,620 --> 00:27:35,700

me any of a number of materials that uh had a very
decent history Witnesses uh and chain of evidence

274

00:27:37,140 --> 00:27:41,760

um involved with them and one of the materials
he brought was the so-called and very well-known

275

00:27:41,760 --> 00:27:51,000

ubatuba event and so I went uh with Jacques over
to an instrument on Stanford's campus and the

276

00:27:51,000 --> 00:27:58,380

engineering quad uh it's called a secondary ion
Mass Spec it's called the nanosims made by Kamika

277

00:27:59,880 --> 00:28:06,480

um and uh we put uh basically on
something that looked like this

278

00:28:07,740 --> 00:28:14,700

uh this would be the disc where you have several
samples on that disk and so he had two versions

279

00:28:14,700 --> 00:28:21,300

of this material this metallic material that had
supposedly come from an A an explosion of a craft

280

00:28:21,960 --> 00:28:26,400

uh and they had two different samples that had
two different chains of evidence they both looked

281

00:28:26,400 --> 00:28:34,380

identical as far as I could tell um and then we\h
did the uh the secondary iron Mass Spec of it we\h\h

282

00:28:34,380 --> 00:28:38,940

but they were done in the same instrument you put\h
them into this vacuum chamber somebody shoots a\h\h

283

00:28:38,940 --> 00:28:43,980

beam of you shoot a beam of ions at them those are\h
the primary ions they basically like a sandblaster\h\h

284

00:28:43,980 --> 00:28:49,740

lift off secondary ions and then they go into uh\h
something which measures the weight of them so\h\h

285

00:28:49,740 --> 00:28:57,000

what was the the long and short of that was that\h
one of the samples and it was mostly it was made\h\h

286

00:28:57,000 --> 00:29:02,160

of magnesium and a few other things the Magnesium\h
ratios of the Isotopes were normal right so\h\h

287

00:29:02,160 --> 00:29:09,420

there's magnesium 23 24 and 25 or 24 25 26 I don't\h
quite remember um but and they're supposed to be\h\h

288

00:29:09,420 --> 00:29:15,660

90 11 9 that's what you would find pretty much\h
anywhere on Earth those would be the percentages\h\h

289

00:29:16,260 --> 00:29:20,760

it was like okay that's normal not I mean it\h
doesn't mean it didn't come from a craft it just\h\h

290

00:29:20,760 --> 00:29:24,600

means it's normal something that you would find\h
here something you would find here the other one\h\h

291

00:29:24,600 --> 00:29:31,320

was like way off I mean just so far off Baseline\h
as it wasn't even like an error of measurement\h\h

292

00:29:31,320 --> 00:29:36,300

and the reason one of the one of the reasons I\h
can I feel comfortable saying that is we we did\h\h

293

00:29:36,300 --> 00:29:41,040

multiple runs on that same sample and it was all\h
done in the same instrument at the same time so it\h\h

294

00:29:41,040 --> 00:29:45,300

wasn't like I came back the next day and somebody\h
had you know Mis you know turned a dial the wrong\h\h

295

00:29:45,300 --> 00:29:53,280

way or anything and and so that got me thinking\h
I mean it doesn't prove it's extraterrestrial\h\h

296

00:29:54,720 --> 00:30:00,960

but it proves that somebody engineered the\h
ratios for a reason or there was an industrial\h\h

297

00:30:00,960 --> 00:30:07,380

process that created that ratio so that begs I\h
mean and at the time that this thing was found\h\h

298

00:30:07,380 --> 00:30:13,200

this was decades ago that would have been an\h
expensive proposition to make that so why would\h\h

299

00:30:13,200 --> 00:30:21,180

you blow it up over a beach you know in Brazil so\h
that's the first question is why you know how how\h\h

300

00:30:21,180 --> 00:30:26,460

expensive is it could you do it the second\h
question is why would you change the ratios\h\h

301

00:30:27,000 --> 00:30:33,480

because we don't use isotopes for frankly anything
other than blowing stuff up or radioactive tracers

302

00:30:33,480 --> 00:30:38,280

in bodies or as an anti-cancer drug so we
have a very limited understanding of what's

303

00:30:38,280 --> 00:30:44,820

the difference between iron 54 and iron 55. so one
of the differences is something that you alluded

304

00:30:44,820 --> 00:30:50,700

to earlier the quantum states of what goes on
inside of the nucleus uh and that there are

305

00:30:50,700 --> 00:30:56,040

very subtle but interesting differences that go
down that go on down to that level that actually

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00:30:56,040 --> 00:31:03,540

humans use we actually use in nuclear magnetic
resonance when you go for an NMR they're actually

307

00:31:03,540 --> 00:31:09,240

using isotopes that have a magnetic subtlety
that can be detected in a magnetic field that's

308

00:31:09,240 --> 00:31:17,760

different than the other isotopes of that same
element so on that track chemists have started

309

00:31:17,760 --> 00:31:25,020

to understand now that I can take I can take an
isotope of one molecule of one element and put

310

00:31:25,020 --> 00:31:29,940

it in a structure of a molecule and it actually
has a slightly different function than the other

311

00:31:29,940 --> 00:31:37,260

one it's it's subtle it's like the difference
between you know red and red orange but it is

312

00:31:37,260 --> 00:31:42,600

enough of a difference that it actually becomes
valuable even in say Pharmaceuticals and one

313

00:31:42,600 --> 00:31:52,440

of the interesting ones is so lithium so lithium
uh is uh used in Psychiatry for bipolar disorder

314

00:31:52,440 --> 00:31:58,380

amongst a few other things I know that because
my aunt actually had bipolar um and so there's

315

00:31:58,380 --> 00:32:02,820

lithium four and five or five and six I'm gonna
get in trouble for not knowing my elemental table

316

00:32:04,260 --> 00:32:09,060

um and so somebody did a study once where they I
don't know why they necessarily did it were they

317

00:32:09,060 --> 00:32:20,220

used one of the lithium Isotopes versus the other
on um on uh nursing rats with pups and the normal

318

00:32:20,220 --> 00:32:25,680

one nothing happened the normal lithium but when
they took lithium of one of the Isotopes versus

319

00:32:25,680 --> 00:32:33,060

the other one of the Isotopes the rats ignored
the pups oh really yeah and the other one it over

320

00:32:34,020 --> 00:32:39,600

weaned really the pups that's fascinating
because that means that the human body

321

00:32:40,260 --> 00:32:45,000

is sort of a sensor capable of detecting the
difference between those two isotopes and

322

00:32:45,000 --> 00:32:52,140

somehow affected the brain chemistry differently
okay so there's there's another example is uh is

323

00:32:52,140 --> 00:32:59,820

um in quantum computers and and creating Quantum
holes Quantum holes well you know I mean holes in

324

00:32:59,820 --> 00:33:07,320

in uh in material where you can do uh entanglement
okay right and so silicon is one of them it turns

325

00:33:07,320 --> 00:33:12,900

out that one of the Silicon isolates allows for
the quantum state to be maintained longer than

326

00:33:12,900 --> 00:33:18,240

another all right so there's some functionality we
just really haven't got to that we haven't gotten

327

00:33:18,240 --> 00:33:23,160

to that level of understanding of why you would
do it but you but again what I'm saying is it's

328

00:33:23,160 --> 00:33:28,500

inevitable yeah inevitably we will reach a level
of understanding we're doing something like this

329

00:33:28,500 --> 00:33:35,580

and using the subtleties of nature uh is going to
be a positive thing I mean I often put it this way

330

00:33:36,120 --> 00:33:42,720

humans currently paint the world in 85 elements
we could be painting and maybe somebody else is

331

00:33:42,720 --> 00:33:50,280

already painting the world in the 253 or so\h
stable isotopes yeah they've already opened\h\h

332

00:33:50,280 --> 00:33:54,060

that up yeah they're in technical or we're still\h
black and white so we can tell essentially with\h\h

333

00:33:54,060 --> 00:33:58,260

the technology we have now and that and we'll talk\h
a little bit more about it but you're creating new\h\h

334

00:33:58,260 --> 00:34:04,860

technology that will give a better window into\h
into that regime and maybe we can't necessarily\h\h

335

00:34:04,860 --> 00:34:10,860

say with certainly on every material that it's not\h
from here but they are presenting extremely unique\h\h

336

00:34:11,760 --> 00:34:17,400

um you know ratios and makeup that make it very\h
interesting if if nothing else yeah well let me\h\h

337

00:34:17,400 --> 00:34:26,520

just let's just ask the question about the ubatuba\h
event okay why would you do it and uh why would\h\h

338

00:34:26,520 --> 00:34:33,300

you is it is it part of some refuse uh that the\h
craft doesn't use is it the exhaust from The Craft\h\h

339

00:34:34,500 --> 00:34:37,740

um there's another set of cases that are really\h
interesting and there's actually multiple cases\h\h

340

00:34:37,740 --> 00:34:41,940

of this where a craft is seen and the one \h
actually published a peer-reviewed paper on\h\h

341

00:34:41,940 --> 00:34:48,060

this one uh it's actually the first ever
peer-reviewed paper in a major journal uh\h\h

342

00:34:48,060 --> 00:34:55,260

on so-called UFO materials and it was the uh
the so-called Council Bluffs case Circa 1976.\h\h

343

00:34:56,700 --> 00:35:05,820

um craft a scene over Council Bluffs Iowa oh Iowa
yeah and uh and uh the scene is basically seen in\h\h

344

00:35:05,820 --> 00:35:11,820

the distance from the city by multiple individuals
and then lights flashing and the kind of the usual\h\h

345

00:35:11,820 --> 00:35:20,820

uh and then something seems to drop from the
craft and so several cars Converge on the site\h\h

346

00:35:21,600 --> 00:35:30,720

including the police uh and so on the ground is a
pool of liquid metal like 35 or so pounds it the\h\h

347

00:35:30,720 --> 00:35:35,880

I have the original pictures that the that the
police took should this is all through Jacques\h\h

348

00:35:35,880 --> 00:35:42,240

Valley uh and so I analyze those materials not
to prove that it was anything and not to make\h\h

349

00:35:42,240 --> 00:35:48,960

a conclusion but to basically get the data out
there right to create the data now what do we\h\h

350

00:35:48,960 --> 00:35:52,740

find anything interesting we didn't find any
strange ratios but what was interesting about\h\h

351

00:35:52,740 --> 00:35:58,080

that and we could prove at least extrapolate that
it wasn't you know somebody was flying over in a

352

00:35:58,080 --> 00:36:02,340

helicopter and dropped you know a molten metal
because the cost to doing that would be too much

353

00:36:03,420 --> 00:36:07,440

um and a lot of other reasons why but what
was interesting about the material was

354

00:36:08,280 --> 00:36:14,100

depending on where you looked in the material
the elemental ratios were different it was iron

355

00:36:14,100 --> 00:36:21,600

nickel a few other things in there silicon
um okay it's it's it's not homogeneous

356

00:36:22,260 --> 00:36:28,380

it's kind of like you melt uh vanilla and
chocolate ice cream you only partly swirl

357

00:36:28,380 --> 00:36:37,260

it you didn't put it in the blender right so why
would that so what industrial process would create

358

00:36:37,260 --> 00:36:44,880

this and I've got a similar sample from Australia
there's another one in Fresno that if the guy who

359

00:36:44,880 --> 00:36:49,320

who offered it is mad at me for not coming and
picking it up it's just because I haven't had

360

00:36:49,320 --> 00:36:54,780

the time with the same story he found it in his
driveway they saw it and then they he found those

361

00:36:54,780 --> 00:37:00,000

metal in his driveway liquid a liquid liquid\h
pool yeah well he found he found the the the\h\h

362

00:37:01,080 --> 00:37:07,740

um he saw the the object and then the next day\h
they found this metal in in the asphalt of their\h\h

363

00:37:07,740 --> 00:37:13,560

of their driveway so one of the things that I\h
want to be able to do is collect a number of these\h\h

364

00:37:13,560 --> 00:37:20,340

events uh to see well what are the similarities\h
you know are the same elements there and and why\h\h

365

00:37:20,340 --> 00:37:26,820

is it that they're dropping these metals again is\h
it part of the exhaust is it is it something went\h\h

366

00:37:26,820 --> 00:37:31,320

unstable and needed to be needed to get rid\h
of it I don't know I have no idea what it is\h\h

367

00:37:32,100 --> 00:37:37,860

um but again creating that data and getting it out\h
there and then giving people this is important as\h\h

368

00:37:37,860 --> 00:37:46,620

part of what you were saying before giving people\h
the permission to study it and and creating an\h\h

369

00:37:46,620 --> 00:37:52,200

atmosphere where it's okay to talk about this\h
is what's going to bring It Forward I can't do\h\h

370

00:37:52,200 --> 00:37:57,000

everything I'm just going to say that it's being\h
brought I mean I I'm being I'm being offered\h\h

371

00:37:57,780 --> 00:38:05,400

dozens of opportunities very few of which I can
follow up on nor will I follow up on until I

372

00:38:05,400 --> 00:38:11,940

have a Consolidated pipeline of analysis that
will allow me to put all of them through in a

373

00:38:11,940 --> 00:38:16,380

standardized way so that I could eventually
publish a paper that says well here again is

374

00:38:16,380 --> 00:38:21,360

the data but here's now the comparison group of
other things that were like this and here are

375

00:38:21,360 --> 00:38:27,900

you know in science we call them controls here
are human materials analyzed in the same way I

376

00:38:27,900 --> 00:38:34,680

mean it's expensive uh you know I've personally
put you know at this point now probably about a

377

00:38:34,680 --> 00:38:42,120

hundred thousand dollars of my own money and time
uh to do this kind of analysis uh and at I use

378

00:38:42,120 --> 00:38:45,480

Stanford equipment if Stanford's perfectly
fine with that I'm not breaking any rules

379

00:38:46,260 --> 00:38:53,100

as long as I pay for it pay for the time um
because I want to get that data out there right

380

00:38:53,100 --> 00:39:00,120

and I and and once you've done that then you can
point other people so here's how you do it because

381

00:39:00,120 --> 00:39:07,020

it's the peer review process that lets you talk\h
to another scientist and say this has been vetted\h\h

382

00:39:07,560 --> 00:39:13,440

right you can't do it by Twitter you can't do\h
it in a press release you can't do a one-off\h\h

383

00:39:13,440 --> 00:39:21,240

study because it has no correlation to any prior\h
knowledge so how do we how do we interface with\h\h

384

00:39:21,240 --> 00:39:26,940

the academic institution and the scientists\h
like yourself that don't that don't have you\h\h

385

00:39:26,940 --> 00:39:30,960

know this this fits on the Cracks right\h
this doesn't fit seamlessly into you know\h\h

386

00:39:31,500 --> 00:39:38,520

um anyone's Camp right now in the academic world\h
um how do we how do we open the door for them how\h\h

387

00:39:38,520 --> 00:39:43,320

do we support that ecosystem well part of it is\h
is well it's money I mean I've said this before\h\h

388

00:39:44,340 --> 00:39:49,380

um that you know scientists will follow the money\h
I mean they can't they these the instruments are\h\h

389

00:39:49,380 --> 00:39:54,060

expensive to do the instruments exist you don't\h
need to buy all of the instruments to begin the\h\h

390

00:39:54,060 --> 00:40:01,140

study you they you know uh you can rent access\h
on them in I mean in Silicon Valley there are\h\h

391

00:40:01,140 --> 00:40:06,360

multiple companies that provide these kinds of
services to the chip industry because the chip

392

00:40:06,360 --> 00:40:09,540

industry wants to do exactly what I was just
talking about they want to understand what went

393

00:40:09,540 --> 00:40:14,280

right and what went wrong and the things that they
make so those facilities are all available you

394

00:40:14,280 --> 00:40:20,280

just rent time on them uh and so you you need that
kind of money so one of the things that I'm doing

395

00:40:20,280 --> 00:40:27,420

uh is uh rather than wait for the government to
give me the money I'm setting up uh organization

396

00:40:27,420 --> 00:40:33,180

that is bringing in charitable funds and hopefully
by next year we'll have the ability to talk much

397

00:40:33,180 --> 00:40:38,760

more about it but with those charitable funds
we'll be able to do at least two things will be

398

00:40:38,760 --> 00:40:43,980

able to write policy papers to the government as
to why they should support this kind of research

399

00:40:43,980 --> 00:40:48,480

because then what you're doing is you're giving
the people on on the inside if you've got sort of

400

00:40:48,480 --> 00:40:55,920

like a a a think tank on the outside who's writing
all of the reasons and giving them the crib notes

401

00:40:55,920 --> 00:41:01,620

that they need to make the arguments to their\h
upper cloud and to make the arguments to the to\h\h

402

00:41:01,620 --> 00:41:10,020

either the generals or the politicians um so you\h
you need to provide that so where do you get that\h\h

403

00:41:10,020 --> 00:41:17,160

you you Source the writing from academics and if\h
you pay an academic ten thousand dollars to write\h\h

404

00:41:17,160 --> 00:41:22,320

such a thing that they'll probably jump at it you\h
know especially you know I mean most academics\h\h

405

00:41:22,320 --> 00:41:27,900

aren't Rich most academics don't go out and start\h
companies so that's at one level but with again\h\h

406

00:41:27,900 --> 00:41:33,000

sufficient resources you get to do something else\h
now you get to give money to postdoctoral fellows\h\h

407

00:41:33,000 --> 00:41:39,780

or to Laboratories where you can say I want this\h
studied you know you you don't have to find that\h\h

408

00:41:39,780 --> 00:41:45,720

person you just need to put out the fact that\h
you have the money and then you hopefully get\h\h

409

00:41:45,720 --> 00:41:51,660

enough credible applications Grant applications\h
for it you have then a team of scientists vet\h\h

410

00:41:51,660 --> 00:41:56,700

the applications you give them the money you\h
let them go they publish a paper that further\h\h

411

00:41:56,700 --> 00:42:02,820

opens the aperture you do this in enough places\h
and suddenly it's a field now it's a credible\h\h

412

00:42:02,820 --> 00:42:08,880

field right you you don't start I don't think\h
at least now you don't start your own journal\h\h

413

00:42:09,660 --> 00:42:16,860

because in your own journal can then be ridiculed\h
by the mainstream journals it's isolated it's\h\h

414

00:42:16,860 --> 00:42:22,680

isolated you you write the papers like I wrote\h
this Council Bluffs paper I didn't make any\h\h

415

00:42:22,680 --> 00:42:27,240

conclusions I just said here's what happened\h
here's we happened and then we talked to the\h\h

416

00:42:27,240 --> 00:42:31,260

editor we said would you be interested in this\h
as well as long as you don't go all UFO on it\h\h

417

00:42:31,800 --> 00:42:35,520

yeah we'll look at it they send it out to\h
reviewers the viewers said this is really cool\h\h

418

00:42:37,200 --> 00:42:42,960

um we'll do it so so you have to find you know\h
you're not going to get into science or nature on\h\h

419

00:42:42,960 --> 00:42:50,460

day one right but you'll get it into the mid-level\h
journals that then creates a track record uh on\h\h

420

00:42:50,460 --> 00:42:56,760

that is then usable by other scientists because\h
then they can cite it because science is built on\h\h

421

00:42:56,760 --> 00:43:02,940

a foundation of knowledge that you can basically\h
cite prior knowledge and how your new finding\h\h

422

00:43:02,940 --> 00:43:07,860

relates to the prior thing and that's that whole\h
correlation map that I was talking about before\h\h

423

00:43:07,860 --> 00:43:12,780

if you create a piece of data out in the middle\h
of nowhere it might as well be in Alpha Centauri\h\h

424

00:43:12,780 --> 00:43:17,760

or in the Andromeda galaxy because it doesn't\h
have any relationship to the prior knowledge\h\h

425

00:43:18,300 --> 00:43:22,560

it sounds pretty achievable I mean this all\h
sounds like it's it's a pretty achievable\h\h

426

00:43:22,560 --> 00:43:28,260

process here to get Academia looking into this\h
it doesn't sound like there's any major it's not\h\h

427

00:43:28,260 --> 00:43:31,500

it's not hundreds of millions of dollars I mean\h
I'd love hundreds of millions of dollars but it's\h\h

428

00:43:31,500 --> 00:43:36,060

not hundreds of million dollars it's a few it's a\h
few Millions to get going and then a few tens of\h\h

429

00:43:36,060 --> 00:43:42,360

millions once the but then again that's that\h
virtuous cycle once you show credibility and\h\h

430

00:43:42,360 --> 00:43:49,320

once some opportunity is realized and I mean by\h
that kind of a a sort of a translational thing\h\h

431

00:43:50,640 --> 00:44:00,720

like in Silicon Valley the first idea out the
gate to try to get funded is very rarely the

432

00:44:00,720 --> 00:44:07,620

one that ever gets funded it's the follow-ons
on the copycats that then grow the field and so

433

00:44:07,620 --> 00:44:13,500

that really is what I'm what I'm aiming for and
I've said this publicly I said I don't need to

434

00:44:13,500 --> 00:44:18,840

be the one who does it I don't need to be the
hero I don't need all the glory I just want to

435

00:44:18,840 --> 00:44:26,100

create a space wherein others can come in and do
that because it's inevitable have you identified

436

00:44:26,100 --> 00:44:29,580

any of those people that might be willing
to have that conversation and can you share

437

00:44:30,120 --> 00:44:33,900

I mean I won't I haven't asked them
permission to talk about their stuff but

438

00:44:34,680 --> 00:44:39,840

um yeah there's there's quite a few and it's more
or is this more mainstream are there new names do

439

00:44:39,840 --> 00:44:44,460

we see this growing expanding or is it kind of
the same conversation with the same people with

440

00:44:44,460 --> 00:44:50,460

you know no I mean the same people I mean there's
lots of the same people but I've seen the kinds of

441

00:44:50,460 --> 00:44:54,480

data and approaches that they're doing and it's\n not necessarily how I would approach I'm not\n

442

00:44:54,480 --> 00:44:59,700

saying it's wrong I don't want to be some sort\n of elite you know uh University snob about it\n

443

00:45:00,720 --> 00:45:08,160

um I'm just saying that we you you you don't\n necessarily want the older folks doing it you want\n

444

00:45:08,160 --> 00:45:13,980

to trigger the minds of the younger folks doing\n it so for instance sitting in my inbox are offers\n

445

00:45:13,980 --> 00:45:18,180

from graduate students and post docs and all\n over the place everything went from Princeton\n

446

00:45:18,180 --> 00:45:25,080

Harvard MIT Etc they're saying hey how can I help\n because those are the minds that you want because\n

447

00:45:25,080 --> 00:45:30,360

they're the ones who make an eventual career out\n of it right I've already got a career this is my\n

448

00:45:31,020 --> 00:45:37,740

you know the cherry on top as far as I'm concerned\n approach to things so I mean it's it it's not\n

449

00:45:37,740 --> 00:45:43,080

going to happen tomorrow but I think it's it's\n basically creating the fertile ground that others\n

450

00:45:43,080 --> 00:45:48,180

can be able to step into that's what I hope to\n do with all of this I see create a place where\n

451

00:45:48,180 --> 00:45:52,560

you can support it in a kind of sustained
Manner and keep the conversation going no

452

00:45:53,940 --> 00:46:00,480

very good so I know you've been just recently been
working with a team of very respectful scientists

453

00:46:00,480 --> 00:46:06,600

uh it was announced today although this will
air in the future and it'll be about a month

454

00:46:06,600 --> 00:46:11,580

old or so but would you mind talking a little
bit about Copernicus right so Copernicus is

455

00:46:12,240 --> 00:46:17,880

um a space Development Corporation I don't
by the way just to be clear I don't speak

456

00:46:17,880 --> 00:46:26,400

for them I don't have permission to speak for
their corporate you know uh objectives Etc but

457

00:46:26,940 --> 00:46:33,720

um I am on the scientific Advisory Board of the
company and it's something started and founded

458

00:46:34,440 --> 00:46:41,160

um by Avi Loeb Frank lockian and a group of other
scientists very respectable astrophysicists and

459

00:46:41,160 --> 00:46:47,160

physicists from Harvard and interestingly a good
friend of mine George Church uh extraordinarily

460

00:46:47,160 --> 00:46:56,280

well-known uh uh genomics expert um and so what
is the purpose of Copernicus it's uh actually to

461

00:46:56,280 --> 00:47:04,560

upend the space exploration uh on Paradigm right\h
now we spend billions of dollars sending a robot\h\h

462

00:47:04,560 --> 00:47:10,320

and I love the stuff that's coming from the Viking\h
or wherever else spend billions of dollars and oh\h\h

463

00:47:10,320 --> 00:47:17,160

my God we hope it doesn't crash right you know and\h
a couple have the Russians seem to have no good\h\h

464

00:47:17,160 --> 00:47:25,920

luck going to Mars um for instance they've had a\h
number of their craft crash on the way and uh so\h\h

465

00:47:25,920 --> 00:47:32,940

okay what's the reverse well how about making much\h
smaller objects but making them at scale making\h\h

466

00:47:32,940 --> 00:47:39,600

tens of thousands of them and sending them\h
out around just our own solar system even\h\h

467

00:47:39,600 --> 00:47:47,160

uh and uh small enough so that they can collect\h
data let's say beam it back to a local uh\h\h

468

00:47:47,160 --> 00:47:52,320

um Transit point and then that Transit point then\h
has the power to beam it back to Earth now you\h\h

469

00:47:52,320 --> 00:47:59,400

have hundreds thousands of eyes scattered around\h
the solar system now avi's interest has been the\h\h

470

00:47:59,400 --> 00:48:04,560

uma uma comment on a comment asteroid or uh\h
object that came through the solar system\h\h

471

00:48:04,560 --> 00:48:11,580

that he had reason to believe might not have
been a natural phenomenon uh and so I think

472

00:48:11,580 --> 00:48:17,400

Aviana in a similar way is propelled or was
propelled by the same thing that propelled me

473

00:48:18,600 --> 00:48:23,160

he had an idea somebody told him it
was ridiculous and he said all right

474

00:48:24,960 --> 00:48:30,540

I'm gonna show you and so rather that I mean
obviously we can't go out to that object he's

475

00:48:30,540 --> 00:48:36,960

gonna he said well look if somebody else has been
here you know and they've if they have been here

476

00:48:36,960 --> 00:48:40,980

is they've been here probably for millions of
years or they passed through millions of years

477

00:48:40,980 --> 00:48:46,500

ago we can't expect that they're contemporaneous
with us necessarily they've probably left residue

478

00:48:47,100 --> 00:48:53,280

of that so that's one reason for going out and
looking in our local solar system you can't you

479

00:48:53,280 --> 00:48:58,620

can't go out one at a time and just look here
and look there you want to basically try to

480

00:48:58,620 --> 00:49:03,720

do everything all at once but there's a there's a
secondary mission of this which is the search for

481

00:49:03,720 --> 00:49:09,900

life right that if we're going to do this we might
be able to send out again hundreds or thousands of

482

00:49:09,900 --> 00:49:16,020

these things to go explore the atmosphere of
Venus explore Europa you know drop dozens of

483

00:49:16,020 --> 00:49:22,920

these things uh on the ice on Europa and then see
if you can look with a just a standard microscope

484

00:49:22,920 --> 00:49:30,360

nothing super fancy but you know there's there's
yet another objective here and that is to make

485

00:49:30,360 --> 00:49:36,960

things that can build themselves okay right things
that can use local materials make more copies of

486

00:49:36,960 --> 00:49:45,720

themselves and uh then or or at the very least
set up a forward camp where other things can

487

00:49:45,720 --> 00:49:50,280

come in and do the next level of building I think
Professor Hansen would like to have over with you

488

00:49:50,280 --> 00:49:56,460

about Von Newman probes yeah our ability to get
grab you within the the Universe um and I think

489

00:49:56,460 --> 00:50:01,620

that's you know that's it I think it's bigger
than maybe I think you guys are necessarily

490

00:50:01,620 --> 00:50:07,200

communicating at this point I mean this is really
a pathway for us to explore you know potentially

491

00:50:07,200 --> 00:50:13,380

the whole County over a number of years a decade\h
or not decades centuries yes me millions of years\h\h

492

00:50:13,380 --> 00:50:18,900

but um but in the in the in the in the grand\h
scheme of of the universe it's like a decade it's\h\h

493

00:50:18,900 --> 00:50:23,940

very quick amount of time here it's it's the start\h
of a start of the end of a colonization process\h\h

494

00:50:23,940 --> 00:50:29,760

essentially theoretically right so you know I\h
was looking at the people that were on it and his\h\h

495

00:50:29,760 --> 00:50:35,580

credible uh listen names on there uh there seem to\h
be some people with some biological uh specialty\h\h

496

00:50:35,580 --> 00:50:42,000

so could you maybe describe or talk about the\h
type of technology that you would utilize here\h\h

497

00:50:42,000 --> 00:50:46,740

maybe it would be a slightly different than your\h
traditional spacecraft right well I mean the the\h\h

498

00:50:46,740 --> 00:50:51,840

biological component would potentially be and\h
this would be more of the expertise of of George\h\h

499

00:50:51,840 --> 00:50:57,420

church and again I'm not speaking for George I'm\h
just you know I'm imagining some of the things I\h\h

500

00:50:57,420 --> 00:51:03,780

know that could be that could be done here um is\h
that you know you can make or even use you need\h\h

501

00:51:03,780 --> 00:51:09,600

to make the life you can George is a specialist in\n\nsynthetic life or what's called synthetic biology\n\n

502

00:51:11,340 --> 00:51:20,520

um you can use current bacteria even to help you\n\nmine asteroids right you'd have to of course set\n\n

503

00:51:20,520 --> 00:51:26,700

create a local ecosystem you'd have to get the\n\ntemperatures right Etc but imagine if you could\n\n

504

00:51:26,700 --> 00:51:35,400

begin to mine out the materials not by having\n\na machine but by providing enough water and uh\n\n

505

00:51:35,400 --> 00:51:44,040

bacteria they use the local substrate to basically\n\nmake stuff break it down to its component\n\n

506

00:51:44,040 --> 00:51:51,540

parts and as feedstock to build more copies of\n\nthemselves just a big sludge almost that process\n\n

507

00:51:51,540 --> 00:51:55,620

yeah I mean this goes into the whole gray goo\n\narea and all of that I don't think we're at the\n\n

508

00:51:55,620 --> 00:52:02,220

Gray Goose stage we're not at the uh uh we're not\n\nat the nanobot stage uh or anywhere close to that\n\n

509

00:52:03,600 --> 00:52:10,680

um but so I think that so it it'll be a mixture\n\nif we can I mean look bacteria have been doing\n\n

510

00:52:10,680 --> 00:52:20,220

this for literally billions of years so why don't\n\nwe use the best miners in our solar system for\n\n

511

00:52:20,220 --> 00:52:24,600

this the best miners on our solar systems are
not Gophers they're actually bacteria really

512

00:52:24,600 --> 00:52:31,020

right I mean they do this stuff incredibly they do
chemical Feats that are chemists are still trying

513

00:52:31,020 --> 00:52:36,240

to understand and replicate so that that's you
know really one of the reasons why a person like

514

00:52:36,240 --> 00:52:41,580

George is brought on board but I mean it's sort of
an interesting I didn't bring George on it's sort

515

00:52:41,580 --> 00:52:46,500

of an interesting circling back to some something
that happened with me and and George probably

516

00:52:46,500 --> 00:52:54,240

about five or six years ago he had a conference
on what he called the genetics of space okay and

517

00:52:54,240 --> 00:53:00,780

and he brought in basically a lot of relatively
conventional um but forward-thinking scientists

518

00:53:00,780 --> 00:53:07,680

including one of the um the astronauts who had his
brother go up at the same time we had a planetary

519

00:53:07,680 --> 00:53:13,140

science in there and I'd had a conversation with
him a few months before the conference about my

520

00:53:13,140 --> 00:53:20,820

UFO stuff he said Gary what's going on and I told
him some of the stories uh about um well about the

521

00:53:20,820 --> 00:53:26,520

patients the the patients who had been harmed\h
uh the whole Havana syndrome and the some of\h\h

522

00:53:26,520 --> 00:53:32,100

the other pilots who were non-havana he said why\h
don't you come and talk about your analysis at my\h\h

523

00:53:32,100 --> 00:53:38,520

seminar and I thought whoa whoa this is going\h
to be a talk at Harvard Medical School uh on a\h\h

524

00:53:38,520 --> 00:53:44,580

subject area that I haven't given a talk on ever\h
before um I said are you sure I said I'll do it\h\h

525

00:53:45,420 --> 00:53:53,520

and I did and I gave the talk and there was\h
this sort of stunned Silence from the audience\h\h

526

00:53:54,180 --> 00:54:03,660

and then the question started uh and they were\h
good questions yeah um and so I and so you know\h\h

527

00:54:03,660 --> 00:54:11,640

who offered at the time then who who said Gary if\h
you need help on these materials George yeah so I\h\h

528

00:54:11,640 --> 00:54:18,240

plant so I'm not saying that I planted a seed then\h
he might have already been considering but I mean\h\h

529

00:54:18,240 --> 00:54:27,000

and George is a towering figure in the field uh\h
so you you have a person like that now sitting on\h\h

530

00:54:27,000 --> 00:54:33,660

an Advisory Board of a space exploration that's at\h
one level looking at translational but at the same\h\h

531

00:54:33,660 --> 00:54:39,900

level we're doing the kind of basic science\h
to collect the data and as a side benefit if\h\h

532

00:54:40,620 --> 00:54:44,880

somebody else shows up while we're doing this or\h
we see evidence of somebody else has been there\h\h

533

00:54:45,540 --> 00:54:52,440

we're collecting the data so it sort of has\h
a has a has three simultaneous and plus it's\h\h

534

00:54:52,440 --> 00:54:56,340

cheaper and we're not going to be building\h
our own our own I mean we said this in the\h\h

535

00:54:56,340 --> 00:55:01,980

in the they said it in the press release we're\h
not building our own launch capabilities we're\h\h

536

00:55:01,980 --> 00:55:05,880

using other the other launch capabilities\h
that other people are generating and just\h\h

537

00:55:05,880 --> 00:55:11,040

hitching pain to Hitch the right certainly\h
yeah I think that's how it'll go what about\h\h

538

00:55:11,040 --> 00:55:15,360

um so that's two do you feel that uh the other\h
members of the group have that kind of same\h\h

539

00:55:15,360 --> 00:55:19,920

general feeling towards the UAP topic or has\h
that not been approached yet it hasn't been \h\h

540

00:55:19,920 --> 00:55:25,800

mean I haven't we haven't had the the the the\h
the um scientific Advisory board but you know\h\h

541

00:55:25,800 --> 00:55:30,360

Frank lockian is one of the you basically\h
provided uh some of the funding for this\h\h

542

00:55:31,560 --> 00:55:38,940

um you know I don't think anybody who knows\h
Avi is unaware of his interest in this area\h\h

543

00:55:40,500 --> 00:55:48,600

um and I think even navi's interest or at least\h
explicit uh being open-minded about current uaps\h\h

544

00:55:48,600 --> 00:55:53,940

as opposed to you know centuries-old things that\h
happen to wander through the the solar system is\h\h

545

00:55:53,940 --> 00:55:59,580

expanding they're aware of this and they're aware\h
of the controversy around uma uma they're all in\h\h

546

00:55:59,580 --> 00:56:04,860

I mean these are like famous astrophysicists and\h
physicists at Harvard I'm almost I'm almost scared\h\h

547

00:56:04,860 --> 00:56:13,560

to show up because it's it's not my not my area\h
but remarkably you know uh Stephen Wolfram is on\h\h

548

00:56:13,560 --> 00:56:21,660

the board mathematical Mathematica right and\h
interestingly um wolfram's uh I'm pretty sure\h\h

549

00:56:21,660 --> 00:56:29,760

this is right that wolfram's uh Mathematica was\h
used to create the language in the movie arrival\h\h

550

00:56:29,760 --> 00:56:35,700

oh really yeah that was pretty cool yeah they do\h
I think they generated the the structures with\h\h

551

00:56:35,700 --> 00:56:40,620

um some algorithms from Mathematica I think\h
so I hope that's right that's very cool\h\h

552

00:56:41,400 --> 00:56:48,300

so you know we talk about getting data we talk\h
about bringing scientists on is there like a\h\h

553

00:56:48,300 --> 00:56:54,180

path to do the thing that you said we can't do now\h
which is to start drawing conclusions in any way\h\h

554

00:56:54,840 --> 00:57:00,240

I mean you get to draw conclusions when you\h
have something that wasn't made here before\h\h

555

00:57:00,240 --> 00:57:07,020

you know I mean that's when I'll feel comfortable\h
I mean I I will go to the major journal if I have\h\h

556

00:57:07,020 --> 00:57:11,520

something where I have the atomic structure\h
that is not anything that can be accomplished\h\h

557

00:57:11,520 --> 00:57:19,980

here and it's clearly an engineered product\h
uh and it has a baseline of provenance to it\h\h

558

00:57:19,980 --> 00:57:26,220

uh I will find a way to write a paper around\h
it I I I won't necessarily need to say that\h\h

559

00:57:26,220 --> 00:57:33,960

it that I know who made it but I can write the\h
paper in a way that says humans didn't make it\h\h

560

00:57:34,920 --> 00:57:41,280

right and so there's I mean I've had I have like\h
over I don't know 320 papers published uh in my\h\h

561

00:57:41,280 --> 00:57:49,740

career and there's a finessing to how you use
the language to write something that you can

562

00:57:49,740 --> 00:57:55,320

walk right up to the line of saying something
without saying it you know and and and this is

563

00:57:55,320 --> 00:57:58,920

actually one of the things that goes on a lot and
the problem I have sometimes communicating ideas

564

00:57:58,920 --> 00:58:05,040

to the public you know I'll use the word suggest
or maybe or whatever and then and then the next

565

00:58:05,040 --> 00:58:11,760

thing that comes out Gary said this is true yeah
no I didn't the i i caveated the hell out of it

566

00:58:12,960 --> 00:58:19,080

um so but I can talk to another scientist and
it's almost like body language I I talk to

567

00:58:19,080 --> 00:58:22,500

other scientists and use that those words and
they understand what I'm saying and how far

568

00:58:22,500 --> 00:58:28,080

I'm going and they understand that I'm implying
this is probably true and or that it is enough

569

00:58:28,080 --> 00:58:33,900

of a belief structure that I can now do the next
experiment based on that partial understanding

570

00:58:34,620 --> 00:58:39,960

so that's how a paper will be written around this
that's what I did with the Council Bluffs paper

571

00:58:41,220 --> 00:58:47,340

um and and it's it's Wordsmith to hell it really\h
these things are the better papers they have to\h\h

572

00:58:47,340 --> 00:58:53,700

otherwise the reviewer will call you out should we\h
believe Pilots when they see something in the sky\h\h

573

00:58:54,720 --> 00:59:00,600

I mean why not I mean uh you know that it\h
doesn't paint them as an experimenter they're\h\h

574

00:59:00,600 --> 00:59:06,060

basically providing a story and in in that\h
sense I I would think of this in a clinical\h\h

575

00:59:06,060 --> 00:59:14,700

sense that story is an anecdote right now and\h
an anecdote in public parlance often means\h\h

576

00:59:14,700 --> 00:59:21,480

not just even unverified it almost means you\h
know people use it as a way to dismiss something\h\h

577

00:59:23,220 --> 00:59:31,440

um whereas in scientific parlance the language of\h
science is an anecdote a clinical anecdote is the\h\h

578

00:59:31,440 --> 00:59:38,640

first let's say observation of some unusual\h
uh clinical syndrome or a malady so instead\h\h

579

00:59:38,640 --> 00:59:43,320

of like that so what happens in science and in a\h
sense what's been happening with the pilots are\h\h

580

00:59:43,320 --> 00:59:48,540

they're seeing something which appears to be a low\h
probability event or may not even be potentially\h\h

581

00:59:48,540 --> 00:59:51,780

a real event but it's it's an anecdote it's a
story about something that doesn't necessarily

582

00:59:51,780 --> 00:59:56,520

have the data to support it but that would be a
basis for which to gather more data so that you

583

00:59:56,520 --> 01:00:02,940

can verify right well I think the other way so
you know we talked earlier about how anecdotes

584

01:00:02,940 --> 01:00:09,180

are are let's say one-off stories whereas
the scientists need something verifiable

585

01:00:09,180 --> 01:00:16,500

how many anecdotes do you need until the pattern
is obvious yeah right so what frankly hasn't been

586

01:00:16,500 --> 01:00:23,940

done I've been thinking about recently is what
kind of statistical analysis could you do on the

587

01:00:23,940 --> 01:00:31,620

anecdotes uh in a way that basically turned them
into a science and how many of such stories what

588

01:00:31,620 --> 01:00:35,820

are the similarities to the stories what are the
commonalities what's the patterns now it isn't

589

01:00:35,820 --> 01:00:41,940

as if ufologists haven't been doing this before
previously but they've been not published in the

590

01:00:41,940 --> 01:00:48,360

right kinds of journals I see they haven't been
given the credibility that is necessary and so

591

01:00:48,360 --> 01:00:54,840

I think now and especially with Pilots right
and um whether it's military or commercial I\h\h

592

01:00:54,840 --> 01:01:00,120

mean the the military the one that you obviously
are are in involved with or we're involved with\h\h

593

01:01:00,120 --> 01:01:06,000

is it lands an error of credibility because
here we have people who are entrusted with\h\h

594

01:01:06,000 --> 01:01:17,160

money reputation security weapon systems expensive
pieces of equipment um so uh so there's a there's\h\h

595

01:01:17,160 --> 01:01:23,580

a level of credibility there and then as you and
I have talked about as well with the commercial\h\h

596

01:01:23,580 --> 01:01:31,800

pilots they have responsibility for the plane the
contents the individuals the lives Etc and so um\h\h

597

01:01:31,800 --> 01:01:36,900

they're they're not just and I'm not dismissing
the truckers who keep our nation running it's not\h\h

598

01:01:36,900 --> 01:01:43,080

a trucker uh on you know on Highway 66 uh in the
middle of the night who saw something in the sky\h\h

599

01:01:43,080 --> 01:01:47,340

truckers don't have Radars they don't have Radars
they don't have all the yes that's a good point\h\h

600

01:01:48,120 --> 01:01:53,820

um they don't have all the secondary verification
systems that are coming along with the stories of\h\h

601

01:01:53,820 --> 01:02:03,000

the pilots commercial or military so at what point\h
do you ignore the evidence and uh or stop ignoring\h\h

602

01:02:03,000 --> 01:02:08,280

the evidence and say okay let's look into it\h
and I think you know for instance the stuff\h\h

603

01:02:08,280 --> 01:02:13,020

that you're doing with aiaa is a perfect example\h
of that and I'm going to spell that out because\h\h

604

01:02:13,020 --> 01:02:16,980

a lot of people don't know what that is but the\h
American Institute of Aeronautics and astronautics\h\h

605

01:02:16,980 --> 01:02:21,720

so I mean the reason why I think that\h
that's important is because here you have a\h\h

606

01:02:21,720 --> 01:02:28,560

a professional group of people who are engineers\h
and and scientifically inclined I mean you might\h\h

607

01:02:28,560 --> 01:02:33,900

not think of them as your everyday scientist\h
and yet they still have had the same kind of\h\h

608

01:02:33,900 --> 01:02:38,520

training that you know frankly you could\h
give them a PhD for if you wanted to do so\h\h

609

01:02:38,520 --> 01:02:44,520

right so uh here you have the the kinds of\h
training uh and expectations and and guess what\h\h

610

01:02:44,520 --> 01:02:52,140

a lot of them see things and those who haven't\h
seen things like I have with other scientists they\h\h

611

01:02:52,140 --> 01:02:58,740

trust the people who are telling them what they've\h
seen uh and so and that seems to be a change right\h\h

612

01:02:58,740 --> 01:03:03,780

that's a huge change yeah I agree why do you think\h
that happened well I mean I think because it's\h\h

613

01:03:03,780 --> 01:03:08,580

becoming more open frankly the things that you've\h
been doing and setting it up I mean you obviously\h\h

614

01:03:08,580 --> 01:03:14,160

have amazing uh abilities to to convince people\h
to do things without me to fly down here today\h\h

615

01:03:15,720 --> 01:03:23,400

um so uh so I think that what's changing is that\h
again is this it's this uh there's a permission\h\h

616

01:03:23,400 --> 01:03:29,280

structure being created and that permission\h
structure is allowing people they might not\h\h

617

01:03:29,280 --> 01:03:35,760

they don't need to say I believe in it they need\h
to they all they are now able to do is say okay\h\h

618

01:03:35,760 --> 01:03:41,700

this is interesting and G uh somebody's raising\h
the point that these things are being seen and\h\h

619

01:03:41,700 --> 01:03:49,320

maybe that they're a Flight Risk they don't have\h
to you know go in front of the of the planes to\h\h

620

01:03:49,320 --> 01:03:55,620

be a Flight Risk they only need to distract the\h
pilot sufficiently so that they make a mistake\h\h

621

01:03:55,620 --> 01:04:01,980

and so if you're flying and you know this as well better than I do if you're flying and you're

622

01:04:01,980 --> 01:04:07,260

seeing something and you're talking to the radar operator down at the at the um at the airport and

623

01:04:07,260 --> 01:04:10,800

they're telling you you're not seeing something you then begin to question your own judgment

624

01:04:10,800 --> 01:04:15,120

and if you're questioning your judgment are you going to land a plane right are you going to make

625

01:04:15,120 --> 01:04:19,080

the right decisions in the right period of time probably not so at very least that's a kind of

626

01:04:19,080 --> 01:04:27,660

commercial uh Aviation risk now if we can explain those things as non-alien non-extraterrestrial

627

01:04:27,660 --> 01:04:36,540

and some sort of natural phenomena great is then we can avert the risk and so to me uh being able

628

01:04:36,540 --> 01:04:42,000

to explain something even if it ends up being not what you want it to be let's say or it isn't the

629

01:04:42,000 --> 01:04:48,840

most exotic of uh of answers uh basically lets people get on with their lives and do things

630

01:04:48,840 --> 01:04:54,900

properly now I I don't know what the pilots have seen but obviously they're concerned about it

631

01:04:55,920 --> 01:05:01,320

um and I think the you know creating uh
as has been done now uh this group of

632

01:05:01,320 --> 01:05:08,520

individuals to talk about it again the circle
widens absolutely um so one of the things that

633

01:05:08,520 --> 01:05:13,260

we've been doing within the American Institute
Aeronautics astronautics and even deeper the

634

01:05:13,260 --> 01:05:18,660

integration the UAP integration Outreach
committee the ioc um we're working on a

635

01:05:18,660 --> 01:05:23,340

number of policy recommendations uh procedure
recommendations reporting recommendations

636

01:05:24,180 --> 01:05:31,500

um for NASA for their um I think it's newly named
the independent study team so the UAP IST I think

637

01:05:31,500 --> 01:05:36,960

is what they're called now so we're looking to
provide those recommendations for them and one of

638

01:05:36,960 --> 01:05:45,120

the things that you've talked about is not drawing
conclusions but actually trusting the data so are

639

01:05:45,120 --> 01:05:49,500

we asking our Pilots to submit data that we don't
even trust I mean what would be done with that

640

01:05:49,500 --> 01:05:54,000

data what could we do with it is anyone even
going to be interested in looking at it oh I'm

641

01:05:54,000 --> 01:05:59,040

sure people will be interested in looking at it I\h
mean I think there's you know there's uh there's\h\h

642

01:05:59,040 --> 01:06:05,100

more than enough individuals out there uh that can\h
process the kinds of data that would be produced\h\h

643

01:06:05,100 --> 01:06:09,480

as long as the data is produced in a verifiable\h
way that you know is let's say publicly available\h\h

644

01:06:10,800 --> 01:06:16,620

um you know it's you're looking for Trends\h
you're looking for you know uh um principal\h\h

645

01:06:16,620 --> 01:06:23,220

component axes for what might be involved but\h
I mean look at the company Enigma right that's\h\h

646

01:06:23,220 --> 01:06:29,400

been set up on the East Coast uh they're doing\h
at least in part this they're collecting the\h\h

647

01:06:29,400 --> 01:06:35,580

data and putting it into standardized data tables\h
and then they're doing an analog they're doing\h\h

648

01:06:35,580 --> 01:06:40,140

analyzes and some of that data they're going to\h
be letting out once it's vetted because you know\h\h

649

01:06:40,140 --> 01:06:45,060

this is something that jock of La often spent a\h
lot of time and he always hammers into me is that\h\h

650

01:06:45,060 --> 01:06:50,100

he says he gets a lot of data he has lots of I\h
mean he has I remember sitting in his office once\h\h

651

01:06:50,100 --> 01:06:57,000

and he had two monitors lined up next to each other it was basically a big Excel spreadsheet

652

01:06:57,000 --> 01:07:06,360

and he had hundreds of rows each of them an event he had a couple of hundred Columns of things

653

01:07:06,360 --> 01:07:11,880

that he was peopling the data with different parameters from different parameters

654

01:07:11,880 --> 01:07:16,260

and then vetting them and just throwing out the stuff that doesn't have sufficient information

655

01:07:17,040 --> 01:07:23,280

right because you're he calls it scrubbing the data uh because in science you want to compare

656

01:07:23,280 --> 01:07:28,740

like with like or if you have something that is part of a comparator where you're like I would

657

01:07:28,740 --> 01:07:33,720

say I want to compare this to this you want enough of this and you want enough of those so that you

658

01:07:33,720 --> 01:07:37,980

can basically say well this is a repeating pattern and these are the differences that are observable

659

01:07:39,000 --> 01:07:43,500

um so you know he's been doing that and he has a fantastic data set

660

01:07:44,700 --> 01:07:48,840

um but others are now doing it as well I mean I mean others are setting up and they have

661

01:07:48,840 --> 01:07:55,020

collected this kind of data and so I think that's
that's exciting because that data will go out

662

01:07:55,020 --> 01:08:00,840

into scientific Publications I would you know
one of the things I think that the aiaa can do

663

01:08:00,840 --> 01:08:06,000

with this I mean there's plenty of people who
know math there is do these kinds of analyzes

664

01:08:06,000 --> 01:08:12,960

publish it in an Aeronautics journal and run
with it right and then again the the the further

665

01:08:12,960 --> 01:08:18,420

away you stay from a conclusion the longer
you will keep the attention of the audience

666

01:08:19,440 --> 01:08:24,480

and that's really important because you know all
it takes if you and again this is something that

667

01:08:24,480 --> 01:08:28,980

Jacques taught me and I should have known this
being a scientist for as many supposedly years

668

01:08:28,980 --> 01:08:36,600

as I was you know he said look Gary if if you make
a conclusion of about what you think this is and

669

01:08:36,600 --> 01:08:43,200

I can prove you wrong you've you're at the very
least you're rep your your reputation is tarnished

670

01:08:43,200 --> 01:08:48,600

especially if you come out with a big claim and
he did that on the very first day that I met him

671

01:08:49,380 --> 01:08:56,580

I had an idea about what it is uh and I you\h
know I thought I'm so smart and I said it and\h\h

672

01:08:56,580 --> 01:09:03,360

he just like went and I realized okay I need\h
to stick around this guy he can teach me stuff\h\h

673

01:09:04,140 --> 01:09:12,780

right and so that I think is the kind of positive\h
attitude that we need to take uh with the the data\h\h

674

01:09:12,780 --> 01:09:19,080

is let's stay away from a firm conclusion uh and\h
even if we need to go well past the point where\h\h

675

01:09:19,080 --> 01:09:24,780

we know what the conclusion should be because if\h
you again if you if you start talking about the\h\h

676

01:09:24,780 --> 01:09:30,900

next step and that should be had at some point\h
and not in this discussion today the next step\h\h

677

01:09:30,900 --> 01:09:37,560

is okay well let's say let's speculate that\h
there is something here I mean there's a huge\h\h

678

01:09:37,560 --> 01:09:42,120

set of conversations you could have about what\h
is the intent of what it is that's here and \h\h

679

01:09:42,120 --> 01:09:46,020

don't even get into it because you can go down\h
a thousand different rabbit holes and just go\h\h

680

01:09:46,020 --> 01:09:51,900

if anybody wants to know what the intent is go\h
look at Reddit uh there's lots of ideas there\h\h

681

01:09:53,160 --> 01:10:04,800

um but so but that question is right behind the\h
conclusion that will be at some point made if it's\h\h

682

01:10:04,800 --> 01:10:12,780

not made or let's put it this differently so again\h
one of my mentors uh when I was a grad student uh\h\h

683

01:10:12,780 --> 01:10:20,400

lee lee herzenberg Len and Lee herzenberg They uh\h
made they actually created the monoclonal antibody\h\h

684

01:10:20,400 --> 01:10:27,540

technology uh for humanized antibodies billions of\h
dollars um brought in you know and to Stanford got\h\h

685

01:10:27,540 --> 01:10:33,480

extraordinary amounts and so I was talking with\h
Lee the wife one day and she said I said I wanted\h\h

686

01:10:33,480 --> 01:10:38,040

to do this this is Gary no that's not the way to\h
do this you're asking a question whose answer is\h\h

687

01:10:38,880 --> 01:10:43,920

yes or no that's the Las Vegas question if the\h
answer is yes you're happy if the answer is no\h\h

688

01:10:43,920 --> 01:10:48,480

you wasted whatever amount of time or resources\h
went into that sometimes you just want to flip\h\h

689

01:10:48,480 --> 01:10:53,700

the answer the question around in a way and ask\h
the Zen question where the answer is interesting\h\h

690

01:10:53,700 --> 01:11:02,340

no matter what and so luckily we're actually\h
at the point of the Zen question are we alone\h\h

691

01:11:03,360 --> 01:11:09,600

is this evidence of extraterrestrial activity\h
or something that's maybe already been here\h\h

692

01:11:09,600 --> 01:11:13,800

or was here forever and before us which opens\h
the question of do we really own this planet\h\h

693

01:11:15,300 --> 01:11:23,640

um so is it something yes that's a game\h
changer at many levels that you know of society\h\h

694

01:11:24,360 --> 01:11:29,160

the other answer is just as interesting it might\h
be depressing the other answer is we are alone\h\h

695

01:11:29,160 --> 01:11:35,820

at least here and nothing has has been here that's\h
interesting but it still begs the question what is\h\h

696

01:11:35,820 --> 01:11:41,400

it that everybody's seeing yeah right so you still\h
have to explain it so no matter what the answer is\h\h

697

01:11:41,400 --> 01:11:46,140

here the answer is interesting so you know one of\h
the things that I try to teach my students in my\h\h

698

01:11:46,140 --> 01:11:52,500

lab is to always ask the Zen question because when\h
every time you do an experiment it's another it's\h\h

699

01:11:52,500 --> 01:11:59,160

another figure in the paper you never go down\h
a blind alley and so and and that's the other\h\h

700

01:11:59,160 --> 01:12:04,140

reason why you know I mean not all questions can\h
be that way but the other reason why for instance\h\h

701

01:12:04,140 --> 01:12:08,580

I always got involved with instrumentation and the creation of new instruments that I see as

702

01:12:08,580 --> 01:12:14,040

inevitable because instruments are just technical capabilities you can always make it happen it just

703

01:12:14,040 --> 01:12:19,080

depends on how hard you hammer at it but if you ask the question you know will this drug

704

01:12:19,080 --> 01:12:24,420

cure cancer and then you might make a mistake and many pharmaceutical companies make that

705

01:12:24,420 --> 01:12:31,260

mistake literally every year and they have because it's the only way to do it right now so um I so

706

01:12:31,260 --> 01:12:38,340

think that we're at that kind of inflection point in our thinking about this we have the tools as

707

01:12:38,340 --> 01:12:43,980

we were talking about earlier to answer some of these questions or the building of some of the

708

01:12:43,980 --> 01:12:49,800

tools that are required to be used are within our grasp sometimes it's not even building the tools

709

01:12:49,800 --> 01:12:53,280

sometimes it's just actually putting together the pieces that already exist and are being used for

710

01:12:53,280 --> 01:12:59,640

other things and so we have all of that so as long as we're not hurting anybody and as long

711

01:12:59,640 --> 01:13:04,560

as we're not diverting resources the argument of diversion of resources is frankly a a

712

01:13:07,080 --> 01:13:10,980

white elephant I don't know what the white charm is but it's it's a diversion

713

01:13:12,060 --> 01:13:16,500

um and so we have it and if people are willing to do it and the answers

714

01:13:16,500 --> 01:13:22,680

are interesting no matter what and why do we do it and frankly the the the the

715

01:13:22,680 --> 01:13:28,980

yes answer to it is actually a Las Vegas outcome no you know and so I I you know

716

01:13:29,580 --> 01:13:36,120

I'm interested in doing it now I interestingly I got asked the question the other day um do I

717

01:13:36,120 --> 01:13:42,720

think that disclosure or sufficient knowledge to make a conclusion will come in my lifetime

718

01:13:44,220 --> 01:13:51,660

my answer was I don't care my answer was we need to create the foundation and the Bedrock for the

719

01:13:51,660 --> 01:13:57,540

other so the answer will come even if we know that there is something else here it clearly hasn't

720

01:13:57,540 --> 01:14:03,540

shown up and landed on the White House lawn and it had plenty it's had plenty of opportunity to do

721

01:14:03,540 --> 01:14:09,300

so and to the extent that anything of what it is\h
that we observe is real is them just saying well\h\h

722

01:14:09,300 --> 01:14:17,640

we're here uh you know it's it's probably not\h
going to change just because Congress says you\h\h

723

01:14:17,640 --> 01:14:22,920

know they're here they're not going to suddenly\h
go voila and show up at family dinner or you know\h\h

724

01:14:22,920 --> 01:14:26,460

we're going to still have a lot of unanswered\h
questions we're going to have to stand up you\h\h

725

01:14:26,460 --> 01:14:32,580

know the capability to understand this societally\h
yeah uh across different spectrums and once we do\h\h

726

01:14:32,580 --> 01:14:37,440

that you know I think we'll probably move a little\h
bit away from the technology conversation perhaps\h\h

727

01:14:37,440 --> 01:14:42,660

and be able to start integrating it into what I'll\h
Loosely call the humanities or you know uh there's\h\h

728

01:14:42,660 --> 01:14:47,280

you know how are we going to represent ourselves\h
how are we going to interact how are we even gonna\h\h

729

01:14:47,280 --> 01:14:52,200

how is that Gonna Change how we interact with each\h
other and how we you know think about our place in\h\h

730

01:14:52,200 --> 01:14:56,700

the universe I mean these are all questions that\h
are rhetorical to me but we need to actually start\h\h

731

01:14:56,700 --> 01:15:01,440

thinking about them right they've been somewhat
religious questions for some period of time but

732

01:15:01,440 --> 01:15:07,080

the rubber is starting to heat to hit the road
in some sense do you feel that way well I mean

733

01:15:07,080 --> 01:15:13,500

I I yes I think the rubber is hitting the road I
mean it's it's a it's a matter of you know I think

734

01:15:13,500 --> 01:15:19,980

a change in Consciousness or a change in observing
what it is that's around us when you observe what

735

01:15:19,980 --> 01:15:25,020

was around you did you feel any type of change in
your or at least how you interacted with the world

736

01:15:25,020 --> 01:15:32,160

you mean when I observed the things in my bedroom
or over my head I mean it was always there in the

737

01:15:32,160 --> 01:15:37,080

back of my mind and maybe it was the reason why
I was interested in science fiction and I and I

738

01:15:37,080 --> 01:15:41,280

when I would look at the sky I almost kind of
always knew I said well I know they're there

739

01:15:41,880 --> 01:15:49,680

but I didn't explicitly set out to study it
because I was so busy on my personal path

740

01:15:49,680 --> 01:15:55,320

of you know doing my science getting assistant
professorship getting grants yeah you know why

741

01:15:55,320 --> 01:15:59,460

why is that right I mean that's what everyone\h
does and but you I mean no kidding had a very\h\h

742

01:15:59,460 --> 01:16:04,140

personal experience and even the experiences I\h
had it really took a while for me to actually\h\h

743

01:16:04,140 --> 01:16:09,420

move forward and try to do something about it in\h
some sense do you think that's a normal reaction\h\h

744

01:16:09,420 --> 01:16:14,640

to this or do you think that's something that is\h
in our culture that you know steers us away from\h\h

745

01:16:14,640 --> 01:16:21,360

that well I think I mean for instance if why is\h
not everybody interested in what I think is one of\h\h

746

01:16:21,360 --> 01:16:24,780

the most interesting things ever and you have this\h
conversation with me because it doesn't put the\h\h

747

01:16:24,780 --> 01:16:29,100

bread on their table it doesn't change their lives\h
and if it does and frankly I think that with what\h\h

748

01:16:29,100 --> 01:16:33,960

would happen there was some sort of disclosure\h
of something people would be you know would be in\h\h

749

01:16:33,960 --> 01:16:38,100

the news for a few months and then we go back to\h
the business of bashing each other over the heads\h\h

750

01:16:38,100 --> 01:16:43,680

with whatever is closest um you know I don't think\h
it's gonna it's going to create a Kumbaya moment\h\h

751

01:16:44,340 --> 01:16:52,440

personally you know somebody else can say
otherwise but it will change the discussion about

752

01:16:52,440 --> 01:17:00,600

well why are we spending so much money on military
hardware right if because we're all worried about

753

01:17:01,320 --> 01:17:07,560

basically in the implosion of the planet
you know at least ecologically and otherwise

754

01:17:09,000 --> 01:17:14,880

um you look at whatever this might be and you
realize it made it past the inflection point

755

01:17:15,780 --> 01:17:23,400

it is proof that you can make it yeah past
that inflection point and so that might change

756

01:17:23,400 --> 01:17:28,020

thinking a little bit I mean I'm not going to
get even into what the religious implications

757

01:17:28,020 --> 01:17:33,660

are you know probably the first thing that some
religions will say is well who is their God do

758

01:17:33,660 --> 01:17:38,220

they have the same God interestingly the Catholic
church has actually already come out and say we're

759

01:17:38,220 --> 01:17:45,060

perfectly fine with uh aliens and maybe they have
their own and actually the the um some of the

760

01:17:45,060 --> 01:17:50,340

Vatican uh intellectuals have said well maybe they
have their own personal Jesus isn't that a song

761

01:17:51,420 --> 01:17:59,940

um you know so uh I mean yeah that's interesting\h
yeah right so for instance with the Vatican\h\h

762

01:17:59,940 --> 01:18:05,160

there are they've already publicly said we're\h
perfectly fine if there are aliens it doesn't\h\h

763

01:18:05,160 --> 01:18:10,440

mean that they don't have souls so you know\h
one of the major religions on the planet has\h\h

764

01:18:10,440 --> 01:18:17,280

been you know very forward about this one of\h
the other major religions um in the Muslims\h\h

765

01:18:17,280 --> 01:18:23,280

in the Quran the Quran explicitly talks about\h
the Jinn and these uh things that are between\h\h

766

01:18:23,280 --> 01:18:29,160

the angels and humans that actually live with us\h
and explicitly and it's interesting so for people\h\h

767

01:18:29,160 --> 01:18:36,000

out there who have friends of Muslim faith ask\h
them about the Gin And even scientists friends\h\h

768

01:18:36,000 --> 01:18:42,180

of mine uh I talk about oh yeah we all believe\h
in the gin oh really yeah no I mean it's it's\h\h

769

01:18:42,180 --> 01:18:46,740

fascinating you know and then you know you don't\h
have to go far over into Buddhism and all the rest\h\h

770

01:18:46,740 --> 01:18:51,960

they already explicitly believe in this kind of\h
stuff and the and um many of the Indian religions\h\h

771

01:18:51,960 --> 01:18:58,800
are perfectly fine with all of these things that
are are might or might not be here so you know as

772

01:19:00,420 --> 01:19:07,380
but look at it from the point of view of let's
say a relatively primitive human tribe or

773

01:19:07,380 --> 01:19:12,600
whatever seeing these things of course they're
going to ascribe supernatural abilities to them

774

01:19:13,800 --> 01:19:17,820
um and so maybe again the things that
we have peopled our religions with

775

01:19:18,420 --> 01:19:26,340
uh in the form of spirits or gods or what have you
are really just these things showing themselves

776

01:19:26,340 --> 01:19:30,840
as they appear to be now you know and that's
actually there's an interesting woman I think

777

01:19:30,840 --> 01:19:37,440
you probably know are Diana pasulka and uh you
know her book American Cosmic explicitly goes

778

01:19:37,440 --> 01:19:44,640
into this about how her let's say conversion into
being interested in this was her looking at the

779

01:19:45,240 --> 01:19:50,340
um what she called the ecstasies of the Saints
so she was studying the ecstasies of the Saints

780

01:19:50,340 --> 01:19:57,300
meaning the times in which they became enraptured
by some citing or observation that they had where

781

01:19:57,300 --> 01:20:02,280
they would be literally in almost like a trance\h
and as she would and she literally she had access\h\h

782
01:20:02,280 --> 01:20:07,500
to the Vatican Library which not many people get\h
asked to go down into the into the catacombs of\h\h

783
01:20:07,500 --> 01:20:13,140
the library and she said one of the things that\h
really interested me was that these these the\h\h

784
01:20:13,140 --> 01:20:20,100
the showings of the Angels or the showings of God\h
always showed up as orbs of light or things like\h\h

785
01:20:20,100 --> 01:20:28,860
that and she began to realize well this is today\h
we see this as we see these as we call them UFOs\h\h

786
01:20:30,480 --> 01:20:33,600
um and it was something of course that\h
Jacques valet had noted as well so that\h\h

787
01:20:33,600 --> 01:20:38,400
she became aware of Jacqueline's work etc but\h
I think what's nice about what Diana does is\h\h

788
01:20:38,400 --> 01:20:47,820
she writes about it from a uh a very academic\h
non-judgmental view of look here's the data\h\h

789
01:20:49,440 --> 01:20:54,720
um now religions have made conclusions about\h
the data and have become set in their ways\h\h

790
01:20:54,720 --> 01:20:59,760
and that is frankly what sets up this potential\h
conflict amongst the religions because they've all\h\h

791

01:20:59,760 --> 01:21:05,340

come to a conclusion they're trying to prove the
other one wrong and that's you know something we

792

01:21:05,340 --> 01:21:10,140

want to avoid for the UAP topic right now right
obviously yeah right let me let's let's switch

793

01:21:10,140 --> 01:21:15,660

gears a little bit I wanted to ask you um if you
had any thoughts you'd like to share about the

794

01:21:15,660 --> 01:21:23,100

efforts that NASA's undertaken with their UAP
investigation I believe it is study team yeah

795

01:21:23,100 --> 01:21:33,120

UAP is so um you know I've been blowing hot and
cold about it uh first you know excited because

796

01:21:34,560 --> 01:21:38,640

they actually have a team right and they've
explicitly said that this is something they

797

01:21:38,640 --> 01:21:44,160

should be interested in probably Bill Nelson has
been more open about the uh the idea but he's been

798

01:21:44,160 --> 01:21:50,640

supported by uh CIA and intelligence heads from
prior years saying that look there's something

799

01:21:50,640 --> 01:21:57,360

here and and this we can't ignore it um then I
was depressed uh that the amount of money that

800

01:21:57,360 --> 01:22:02,460

went into it was only a hundred thousand dollars
um but then I got excited again because somebody

801

01:22:02,460 --> 01:22:07,800

said well no this is just this is not to come to
a conclusion this is just to ask whether there's

802

01:22:07,800 --> 01:22:16,980

a there there I got depressed when some of the
people on the team came out even before they had

803

01:22:17,760 --> 01:22:25,020

joined the the thing had been instantiated and
publicly said well it's not uaps it's not aliens

804

01:22:25,020 --> 01:22:30,540

so I'm just going to go on this and there and
so I I was wondering okay well why are they

805

01:22:30,540 --> 01:22:35,580

saying that what are are they psychologically
protecting themselves against the attack that

806

01:22:35,580 --> 01:22:42,060

they will get from their colleagues because they
even considered being on a committee like this so

807

01:22:42,060 --> 01:22:46,920

they're basically armoring themselves against what
they know to be the attacks that are coming and

808

01:22:46,920 --> 01:22:52,020

I've publicly said these people frankly unless
they recant that view of things should be just

809

01:22:52,020 --> 01:22:59,220

taken off the committee I mean I I wouldn't want
a reviewer who's before they've seen my paper this

810

01:22:59,220 --> 01:23:03,420

you know be a person that says well I don't even
believe what he's what he's doing why do you think

811

01:23:03,420 --> 01:23:08,760

a scientist I mean and they know better right\h
because they're not scientists you don't think\h\h

812

01:23:08,760 --> 01:23:13,440

no no they're breaking the rules I mean they're\h
breaking the principle that got them their PHD\h\h

813

01:23:13,440 --> 01:23:19,080

I mean that's just I'm sorry if I'm hurting\h
somebody's feelings but you know that's the\h\h

814

01:23:19,080 --> 01:23:24,660

way it is and you know that's what has propelled\h
me you kind of were asking this before what got\h\h

815

01:23:24,660 --> 01:23:31,140

you going it's when somebody told me I was wrong\h
when I know I'm right yeah oh I know the feeling\h\h

816

01:23:32,940 --> 01:23:39,120

what about dod's effort within the all domain\h
anomaly resolution office have you had any insight\h\h

817

01:23:39,120 --> 01:23:45,360

into the efforts that they're going on I mean I\h
I mean frankly it's a bit of a cipher right now\h\h

818

01:23:45,360 --> 01:23:55,920

I mean you know I'm I'm hopeful uh that uh Sean\h
uh Kirkpatrick will be uh an honest broker in\h\h

819

01:23:55,920 --> 01:24:02,160

all of this uh I just don't know enough about\h
him and I of the people who I spoken with who\h\h

820

01:24:02,160 --> 01:24:09,120

do know about him they also are a little bit\h
ambivalent uh as to what his role is or going\h\h

821

01:24:09,120 --> 01:24:13,920

to be and is he going to color the outcomes\h
in any interesting way or an uninteresting\h\h

822

01:24:13,920 --> 01:24:21,540

way or a biased way I don't know we'll see um\h
you know one of the things that I know about\h\h

823

01:24:22,560 --> 01:24:27,660

um let's say academic Administration or decisions\h
that are made in corporations is it's always\h\h

824

01:24:27,660 --> 01:24:36,780

better to prevent the decision from being made\h
then try to reverse the decision so um frankly\h\h

825

01:24:36,780 --> 01:24:42,420

one of the things that I think the public at\h
large should be doing is is gaming the refs\h\h

826

01:24:42,960 --> 01:24:49,200

you know we need to basically be out there ahead\h
of time saying we're watching you uh and we're\h\h

827

01:24:49,200 --> 01:24:53,160

ready for what's coming it kind of circles back a\h
little bit to the discussion we were having about\h\h

828

01:24:53,160 --> 01:25:00,480

about Barnes and the other uh the you know the\h
Wall Street Journal article you know I mean I on\h\h

829

01:25:00,480 --> 01:25:08,520

Twitter I basically slammed the um Julian Barnes\h
for what he had written uh as being clearly biased\h\h

830

01:25:08,520 --> 01:25:13,200

and uh and then I also I can't remember the second\h
one the only person in the world that seemed to\h\h

831

01:25:13,200 --> 01:25:20,460

know what's in that report uh and yeah and yet\h
yeah he's wrong but um and then somebody else\h\h

832

01:25:20,460 --> 01:25:26,340

uh and then I was attacked by other people from\h
military.com saying how dare you do this I said\h\h

833

01:25:26,340 --> 01:25:33,540

I'm not I this is Twitter how dare I do anything\h
I mean I'm just chilling is like a private it's\h\h

834

01:25:33,540 --> 01:25:37,680

a private organization I know by the military a\h
lot of people don't realize that I know and so\h\h

835

01:25:38,220 --> 01:25:46,320

um you know I I think that again I I guess I've\h
gathered enough of a reputation that when I said\h\h

836

01:25:46,320 --> 01:25:51,240

something like that it brought in a slew of other\h
people he never answered and I don't think he\h\h

837

01:25:51,240 --> 01:25:57,000

ever will because if I were him I'd be embarrassed\h
that's what you have to do you have to shame these\h\h

838

01:25:57,000 --> 01:26:02,580

people I'm sorry to say because they've been using\h
shame against people who had honest experiences\h\h

839

01:26:02,580 --> 01:26:07,440

and telling them that it didn't happen I mean\h
the psychological burden on people like that is\h\h

840

01:26:07,440 --> 01:26:12,060

tremendous that you know that you saw something\h
and you didn't and they tell you that you didn't\h\h

841

01:26:13,320 --> 01:26:18,240

um and so I mean there's a whole problem set of
problems there that need to be dealt with you know

842

01:26:18,240 --> 01:26:24,420

we need support groups and to be run by not by
just your average therapist you need somebody with

843

01:26:24,420 --> 01:26:28,860

psychological and Psychiatry training to run these
things and luckily those things are now being set

844

01:26:28,860 --> 01:26:38,220

up uh to to help people process it you know either
they saw something anomalous or they have a mental

845

01:26:38,220 --> 01:26:44,880

health problem so we shouldn't ignore them but
these people are otherwise sane if by all measures

846

01:26:44,880 --> 01:26:49,380

so we have to have a way of dealing with it and we
can't just keep telling people that they're wrong

847

01:26:50,760 --> 01:26:56,220

um and so that that to me is what bothers me
about the let's say the military stance on this

848

01:26:56,220 --> 01:27:01,080

is that if there's something so dangerous
there that we shouldn't know about it

849

01:27:01,860 --> 01:27:08,220

then maybe you sh maybe the danger is not that
we don't know about it the danger is that you're

850

01:27:08,220 --> 01:27:13,380

actually telling people that they're wrong
what's more damaging to society telling people

851

01:27:13,380 --> 01:27:20,220

that they've seen something otherwise productive\h
members of society and making them you know uh\h\h

852

01:27:20,220 --> 01:27:26,280

unsure about it or hiding some Grand secret\h
so the open question is if there is a secret\h\h

853

01:27:27,300 --> 01:27:34,260

is it because the people who have the secret to\h
using it or because there truly is a reason we\h\h

854

01:27:34,260 --> 01:27:39,540

don't want anybody to know about it I mean I would\h
be just as fine if somebody came out and said\h\h

855

01:27:40,260 --> 01:27:48,360

they're here the truth of it is so bad we just\h
can't talk about it of course they're not going\h\h

856

01:27:48,360 --> 01:27:52,440

to do that because then of course that'll open\h
lots of other things but but I mean that to me\h\h

857

01:27:52,440 --> 01:28:00,120

would be like okay I kind of trust you it's a\h
it's a good first step it's a good first step

858

01:28:02,460 --> 01:28:11,580

Gary 62. 62. um you're in a same-sex marriage\h
do you think that you know your experiences as\h\h

859

01:28:11,580 --> 01:28:17,100

a young adult as someone part of that Community\h
being told that you were constantly wrong kind\h\h

860

01:28:17,100 --> 01:28:24,480

of helped shape absolutely on this topic yeah\h
I mean uh yes is the short answer I've often\h\h

861

01:28:24,480 --> 01:28:31,680

looked back and said to myself or I mean so\h
for instance there was a time when I was in\h\h

862

01:28:31,680 --> 01:28:40,020

I was assistant professor at Stanford and I\h
wanted to uh bring my then boyfriend partner\h\h

863

01:28:40,020 --> 01:28:49,020

to a faculty Retreat the chairman of the\h
department called me in and said well you\h\h

864

01:28:49,020 --> 01:28:55,380

can't do that some of the other faculty are um\h
are bothered by it and and shouldn't do that\h\h

865

01:28:56,880 --> 01:29:01,500

and my response my honest response\h
to him was what century are you from\h\h

866

01:29:03,180 --> 01:29:08,580

um and I just said that that's not going to\h
happen I immediately wrote a letter to the Deans\h\h

867

01:29:09,120 --> 01:29:16,920

and one year later the man was he took early\h
retirement uh and it's just like I don't know\h\h

868

01:29:16,920 --> 01:29:22,860

maybe it's just but I've always used that kind\h
of determination when I know that I'm right and\h\h

869

01:29:22,860 --> 01:29:30,360

I'm not hurting anybody and so that same energy\h
kind of propels me here it's like you know look\h\h

870

01:29:31,620 --> 01:29:37,080

I don't know what it is but I know there's\h
something or it needs to be explained I mean\h\h

871

01:29:37,080 --> 01:29:40,560

John Mack went through this yeah as\h
well you know I know it's something\h\h

872

01:29:41,280 --> 01:29:47,100

don't need you to tell me what to do I don't\h
need you to shame me into doing something\h\h

873

01:29:47,100 --> 01:29:51,360

and that's what this guy was trying to do he\h
was trying to shame me I'm like I just I just\h\h

874

01:29:51,360 --> 01:29:57,960

couldn't get it it was nothing wrong with you\h
this was 1994 Stanford I mean what's going on\h\h

875

01:29:59,160 --> 01:30:04,920

um and actually they tried some of them tried to\h
use it against me in my tenure uh and so uh they\h\h

876

01:30:04,920 --> 01:30:12,120

were threatened with a lawsuit and I won very\h
good well thanks for standing up for me but \h\h

877

01:30:12,120 --> 01:30:16,680

mean I think that that's you know that's the\h
kind of energy that other people need to use\h\h

878

01:30:17,940 --> 01:30:23,280

um you know it's it's you realize that again\h
I don't need to get a big psychology thing\h\h

879

01:30:23,280 --> 01:30:27,300

that shame is used by Society to\h
control you it's a Control Function\h\h

880

01:30:28,800 --> 01:30:34,440

um and it's a great way Church uses it religions\h
use it you should be ashamed to do this one of\h\h

881

01:30:34,440 --> 01:30:37,980

the first things you hear when you're growing up\h
you should be ashamed through that it's useful\h\h

882

01:30:37,980 --> 01:30:45,360

in certain circumstances but when it becomes a\h
societal control uh problem then that's when I\h\h

883

01:30:45,360 --> 01:30:50,400

think people need to either get together and say\h
no I'm not going to listen to this anymore and\h\h

884

01:30:50,400 --> 01:30:55,020

then reverse the shame it's like you should be\h
ashamed of trying to do this not being a better\h\h

885

01:30:55,020 --> 01:30:58,380

scientist but being a better scientist and you\h
should be ashamed for not following the rules\h\h

886

01:30:58,380 --> 01:31:05,940

that you signed up for when you got your PhD\h
yeah um and so my first argument with a major\h\h

887

01:31:05,940 --> 01:31:11,460

scientist was exactly that and he backed down\h
I don't think he agreed with me but he he real\h\h

888

01:31:11,460 --> 01:31:16,500

that's what I always liked about frankly science\h
versus history I'm not saying anything wrong with\h\h

889

01:31:16,500 --> 01:31:22,500

history or whatever the social sciences is I\h
I noticed in college that the people who did\h\h

890

01:31:23,220 --> 01:31:31,560

well in those areas were the ones whose opinions\h
were strangely in sync with the professors um\h\h

891

01:31:31,560 --> 01:31:36,540

whereas if I disagreed in science with something\h
I'd go to the Blackboard and prove it and so\h\h

892

01:31:36,540 --> 01:31:43,320

that's where I want this discussion to be I want\h
the discussion to be provable on the Blackboard uh\h\h

893

01:31:43,320 --> 01:31:51,600

so I can go done that's it uh and so I'm not there\h
yet I don't have that but I know it's within reach\h\h

894

01:31:52,740 --> 01:31:57,900

awesome what about just for the regular person\h
that wants to be involved with this you know he\h\h

895

01:31:57,900 --> 01:32:02,520

talked about how they could potentially you know\h
communicate with their representatives that this\h\h

896

01:32:02,520 --> 01:32:06,780

is something they support but how do you see just\h
the regular person being part of this conversation\h\h

897

01:32:08,160 --> 01:32:12,540

well first if they could be if they could be\h
well I you know I think there needs to be a\h\h

898

01:32:12,540 --> 01:32:18,660

little bit of self-organization but at one level\h
you you can't expect everything to be Grassroots\h\h

899

01:32:18,660 --> 01:32:22,800

I mean Grassroots has been done through\h
mufon and others and they're that's great\h\h

900

01:32:23,700 --> 01:32:29,280

um but they don't necessarily adhere to some\h
of the scientific principles and don't get me\h\h

901

01:32:29,280 --> 01:32:35,040

mad at me people that move on but you know\h
there's there are other kinds of criteria\h\h

902

01:32:36,000 --> 01:32:42,240

um so one of the things again the creation\h
of some sort of organization that I'm I'm\h\h

903

01:32:42,240 --> 01:32:48,540

trying to do uh that then explicitly\h
funds this within the academic realm\h\h

904

01:32:48,540 --> 01:32:56,760

I mean basically I want to set up sleeper cells\h
inside of academics that you know people I mean\h\h

905

01:32:58,560 --> 01:33:03,240

universities will accept money you know I mean\h
I'm sorry that's just you know it's it's it's\h\h

906

01:33:03,240 --> 01:33:10,380

what drives you know a lot of that so if somebody\h
showed up with 10 million dollars uh and said I\h\h

907

01:33:10,380 --> 01:33:15,540

want us or or a larger amount so I want to set\h
up a department of this or I want to set up a\h\h

908

01:33:15,540 --> 01:33:21,120

program for this and I'll give you a hundred\h
million dollars oh you bad that there'll be\h\h

909

01:33:21,120 --> 01:33:25,620

any of a number of places that would step forward\h
do you hear that who wants to fund the first UAP\h\h

910

01:33:25,620 --> 01:33:32,880

Research Center major institution yeah so um you\h
know and then that's what energizes people yeah\h\h

911

01:33:32,880 --> 01:33:39,660

I mean the state of New Jersey surprisingly out of the blue last summer I think it was came out

912

01:33:39,660 --> 01:33:46,740

and said we have a research Fellowship that we're going to give for UAP studies amazing and that's

913

01:33:46,740 --> 01:33:51,000

where I think a lot of the the the progress will be made in the areas with the younger generation

914

01:33:51,900 --> 01:33:57,060

um I've been with the the American Ninja Aeronautics uh Aeronautics astronautics they had

915

01:33:57,060 --> 01:34:05,160

double a um one of our uh subcommittee leads is a professor at the University of Illinois and the

916

01:34:05,160 --> 01:34:09,720

interest not only from the students but the other faculty now that he's been engaging on this topic

917

01:34:10,260 --> 01:34:15,420

um vocally he'll say um they're all signing up you know I mean I keep seeing Illinois

918

01:34:15,420 --> 01:34:20,880

email addresses coming into our recruitment catcher there so it's I think it really is just

919

01:34:20,880 --> 01:34:23,820

about getting that seat in and letting people know that it's okay to actually

920

01:34:24,900 --> 01:34:32,820

to do this are you around with UAP tomorrow night I'm doing a zoom class for somebody in

921

01:34:32,820 --> 01:34:39,240

anthropology uh in the Midwest and for their
students you know I just spent an hour or

922

01:34:39,240 --> 01:34:43,740

two talking through the students to all of these
ideas and they've actually they've actually been

923

01:34:43,740 --> 01:34:51,120

studying the gimbal event the other events uh the
Professor there has and now they want somebody to

924

01:34:51,120 --> 01:34:57,480

come in and answer some of the questions that's
pretty cool so you know I mean uh when we set up

925

01:34:57,480 --> 01:35:03,360

this organization that I want to set up I'm going
to have a conference at Stanford and I'll invite

926

01:35:03,360 --> 01:35:07,800

the necessary people and to the extent that I'm
allowed Stanford's very careful with its name

927

01:35:08,760 --> 01:35:13,380

um the thing will be done at Stanford it
won't necessarily Stanford never approves

928

01:35:14,100 --> 01:35:20,640

a Conference held on its grounds necessarily um
but I will do it and I will bring them to the

929

01:35:20,640 --> 01:35:28,620

to a place where at least it will add a little bit
more legitimacy to the matter when can we see that

930

01:35:28,620 --> 01:35:34,500

I'm we're actually we're trying to get it set up
for this summer we'll see this summer we'll see

931

01:35:35,400 --> 01:35:43,920

very cool but the important part is you can bet\h
that that audience Hall will be full to capacity\h\h

932

01:35:43,920 --> 01:35:49,560

yeah I'm going to have it in the engineering quad\h
uh I'm going to bring in Engineers I'm gonna it\h\h

933

01:35:49,560 --> 01:35:57,360

won't be it won't be like a bunch of people that\h
have you know UFO conference and That's What I\h\h

934

01:35:57,360 --> 01:36:01,980

Call Insider inside the industry you know it's\h
one thing to take people that have a very strong\h\h

935

01:36:01,980 --> 01:36:08,220

opinion on UAP and bring them into a agnostic\h
Community to convince them of one thing and it's\h\h

936

01:36:08,220 --> 01:36:14,400

a little different to convince someone that is\h
inside there inside the mainstream academic area\h\h

937

01:36:14,400 --> 01:36:19,860

and say hey just look at the data you know one and\h
then let them do that that communication yeah I\h\h

938

01:36:19,860 --> 01:36:27,000

think really what you're saying there is you don't\h
want to proselytize you want to come in with uh\h\h

939

01:36:27,000 --> 01:36:34,020

basically a discussion and talk about things that\h
are sufficiently interested that interesting that\h\h

940

01:36:34,020 --> 01:36:39,180

anybody could have a discussion about I mean\h
you almost want it to be sort of a kitchen\h\h

941

01:36:39,180 --> 01:36:48,360

table kind of discussion but you know we want to
bring in for such a conference uh philosophers a

942

01:36:48,360 --> 01:36:53,460

few couple of religion people but I I wanted
to personally I wanted to be more Tech heavy

943

01:36:54,660 --> 01:36:59,280

um because I want people to see the opportunities
I mean there's you're not going to have one

944

01:36:59,280 --> 01:37:04,620

conference like this you can have multiple
ones but having them at a unit on a University

945

01:37:04,620 --> 01:37:11,100

campus will be fantastic avilo ran such a thing at
Harvard yeah really probably the first of its kind

946

01:37:12,540 --> 01:37:19,260

um so this is just the next step uh and so you
know I think it is again the giving and creating

947

01:37:19,260 --> 01:37:26,580

a permission structure uh where and so I think
the idea is that you know uh just like the AIA

948

01:37:26,580 --> 01:37:32,100

organization that you're setting up other outside
organizations can be the catalyst for creating

949

01:37:32,100 --> 01:37:39,240

many mores you know the Von Neumann probe approach
uh to enabling other people to to get involved

950

01:37:39,240 --> 01:37:44,580

because it won't even I mean by doing that it
won't even necessarily be me as I said before that

951

01:37:44,580 --> 01:37:51,060

ends up with the glory it always what you find on\h
in science you know the people who win the Nobel\h\h

952

01:37:51,060 --> 01:37:56,220

prizes aren't all at Harvard Stanford and MIT\h
they're at these places where you wouldn't expect\h\h

953

01:37:56,220 --> 01:38:02,040

it but they followed their nose with a level of\h
determination that they're like ah and then the\h\h

954

01:38:02,040 --> 01:38:08,520

rest of the community realizes and then they get\h
hired at Stanford and Harvard um you know but they\h\h

955

01:38:08,520 --> 01:38:14,880

they they proved it elsewhere but it's it's it's\h
planting those seeds and doing the basic research\h\h

956

01:38:14,880 --> 01:38:22,140

is what creates the discoveries that then somebody\h
realizes can be enabled and translated very cool

957

01:38:24,780 --> 01:38:29,700

switching it up a little bit here would you\h
consider machine learning or the direction is\h\h

958

01:38:29,700 --> 01:38:37,860

going as a potential non-human intelligence I mean\h
well I mean we're talking about the stuff that's\h\h

959

01:38:37,860 --> 01:38:42,600

going on at Google AI and all the others it's just\h
where it's going as well absolutely oh yeah no I\h\h

960

01:38:42,600 --> 01:38:50,340

mean I I mean the I mean just as the example that\h
Google AI bot uh that the engineer came out and\h\h

961

01:38:50,340 --> 01:38:55,140

said was sentient I'm not sure it was sentient\h
but you know I would rather have a conversation\h\h

962

01:38:55,140 --> 01:38:59,880

with it than probably many of the people that I\h
do know because I can talk about anything so and\h\h

963

01:38:59,880 --> 01:39:04,560

that's just the beginning would that speak then\h
to another category yes of intelligence and thus\h\h

964

01:39:04,560 --> 01:39:09,960

there being a broader spectrum of intelligence\h
you know out there that you know because right\h\h

965

01:39:09,960 --> 01:39:14,340

now we're our only data point essentially we\h
understand intelligence says this and then you\h\h

966

01:39:14,340 --> 01:39:22,380

know perhaps to a lesser extent in other animals\h
but um if if we have then created something that\h\h

967

01:39:22,380 --> 01:39:27,360

we would classify as an intelligence that isn't\h
us although it might utilize or leverage our\h\h

968

01:39:27,360 --> 01:39:31,200

intelligence some manner we have to assume there's\h
a wider class of intelligence out there right\h\h

969

01:39:31,200 --> 01:39:37,320

would that be fair absolutely you know I mean and\h
even if you step away from all of these Notions\h\h

970

01:39:37,320 --> 01:39:46,020

of faster than light travel and wormholes Etc um\h
it will not be us or our immediate uh children\h\h

971

01:39:46,020 --> 01:39:52,740

or descendants that will be the first that we'll
send to Alpha Centauri even by conventional

972

01:39:52,740 --> 01:39:59,280

means even by a light sail or even by a ram
jet approaches to going at least

973

01:40:00,180 --> 01:40:06,480

some significant degree of the speed of light
it'll be an advanced computer and what better

974

01:40:06,480 --> 01:40:14,220

Advanced Computer to send than an AI and you'd
probably end up sending you know the chat

975

01:40:14,220 --> 01:40:19,320

bot GPT thing that everybody sees in the news
today or some much more advanced version of it

976

01:40:20,340 --> 01:40:26,160

um and maybe that's what we're seeing today here
that's already pre-programmed by somebody else

977

01:40:26,160 --> 01:40:31,560

that when you get there uh you know you'll just
kind of observe and watch and send the data back

978

01:40:32,280 --> 01:40:39,540

so I'm yes I'm convinced that you know for
instance the Copernicus group that I'm a

979

01:40:39,540 --> 01:40:44,400

part of you can bet that one of the first
things that we're going to put if we can

980

01:40:44,400 --> 01:40:49,320

on and this is just my personal opinion again I
don't speak for Copernicus I got to be careful

981

01:40:50,580 --> 01:40:55,380

um you know if we can we'd put a pretty
Advanced Computer on there if anything

982

01:40:55,380 --> 01:41:01,740

if it ends up being some version of the of the
chat bot GPT uh better than you know an iPhone

983

01:41:03,180 --> 01:41:08,460

um would you consider yourself in some sense
maybe like a protege of Jacques or maybe round

984

01:41:08,460 --> 01:41:13,740

two oh yeah I mean no I well I can't remember
the name of the person that he considers himself

985

01:41:13,740 --> 01:41:18,660

a protege of uh but there was a Andre and
I forget his last name I'm sorry Jacques

986

01:41:19,440 --> 01:41:24,900

um that he considers himself having been
taught by this individual I 100 consider him

987

01:41:24,900 --> 01:41:31,860

a mentor I mean I've had you know four or five
mentors in my life uh and all in in academics

988

01:41:33,000 --> 01:41:39,420

um this guy Ali Saleh when I was at Cornell Lennon
Lee Herzenberg uh David Baltimore Nobel Prize

989

01:41:39,420 --> 01:41:46,680

winner at MIT when I worked with him and then a
few around Stanford uh but not to the level of

990

01:41:46,680 --> 01:41:51,720

Jacques because they've always been smarter than
me or at least knew more than me you know and so

991

01:41:51,720 --> 01:41:59,700

I think that that's that's part of what I'm hoping to do for the people in the general Community is

992

01:42:00,360 --> 01:42:03,960

you know for better or worse I'm a confident person people have always said Gary you just

993

01:42:03,960 --> 01:42:09,420

seem so confident actually I'm I'm trembling inside most of the time but I think having

994

01:42:09,420 --> 01:42:13,380

that confidence lets you do things and it opens doors that you didn't know were there

995

01:42:13,980 --> 01:42:20,880

so if you are telling a good proportion of your population that the stuff you're experiencing is

996

01:42:20,880 --> 01:42:25,800

wrong you're making them insecure and so they're not going to go forward right they won't open

997

01:42:25,800 --> 01:42:34,740

doors or try to even batter down The Doors so um you know but I think having confidence is twofold

998

01:42:34,740 --> 01:42:38,880

of means also you have to be confident enough in your intellect to know what you don't know

999

01:42:39,600 --> 01:42:45,960

and to appreciate somebody else who knows more I mean there's a there's a woman genomicist

1000

01:42:45,960 --> 01:42:53,220

won't name her name but she's very very famous uh and people say oh yeah you're in the no she's

1001

01:42:53,220 --> 01:42:59,040

so much smarter than me I love being around\h
her and but we still bounce ideas off each\h\h

1002

01:42:59,040 --> 01:43:06,540

other and so I think being secure about who\h
and what you are and I'm secure that I'm gay\h\h

1003

01:43:07,920 --> 01:43:12,720

um it's like okay now I can do stuff I mean I\h
still go back to that earlier point I remember\h\h

1004

01:43:12,720 --> 01:43:18,540

the point in time when I realized I was I sat on\h
the edge of my bed and said oh okay that was it\h\h

1005

01:43:18,540 --> 01:43:25,260

there was no like ah you know and so maybe it just\h
takes that whatever combination of characteristics\h\h

1006

01:43:25,260 --> 01:43:32,280

that I got from my parents and Circumstance Etc\h
um you know not everybody can replicate that\h\h

1007

01:43:32,280 --> 01:43:40,560

but I can help or we I think not just I we can\h
help create a level of security and as we said a\h\h

1008

01:43:40,560 --> 01:43:47,940

permission structure for people so that they they\h
can be sure of themselves and then go forward with\h\h

1009

01:43:47,940 --> 01:43:52,380

asking their own questions I mean to me that's so\h
important I I one of the things I always realized\h\h

1010

01:43:52,380 --> 01:43:57,420

about the work that I do with teaching my graduate\h
students I don't teach classes teach graduate\h\h

1011

01:43:57,420 --> 01:44:05,940

students how to think is I hate wasted opportunity
and that really bothers me when that happens and

1012

01:44:05,940 --> 01:44:14,280

so I look at this whole UAP thing as potentially
a wasted opportunity and so it just it just drives

1013

01:44:14,280 --> 01:44:19,200

me nuts that we're not doing something about it
but well frankly we are and so the best thing you

1014

01:44:19,200 --> 01:44:24,420

knew when you see something that upsets you is
you go out and do something about it and I for

1015

01:44:24,420 --> 01:44:30,660

better or worse I have the ability to do so and so
I'm going to do it me too uh someone has to do it

1016

01:44:31,860 --> 01:44:35,760

um this is what I wanted to do I say like just
we can look at a character like it's okay to be

1017

01:44:35,760 --> 01:44:41,760

interested in UFOs or UAP you have our permissions
you know what I mean like it's just honestly like

1018

01:44:41,760 --> 01:44:46,680

maybe we can just do that to end or something you
know what I mean um because it is it is silly you

1019

01:44:46,680 --> 01:44:51,780

know just be like hey it's okay I'm interested in
UAP not a big deal people believe in all kinds of

1020

01:44:51,780 --> 01:44:59,880

things and so why not I mean they could be doing
something you know uh illicit with their lives uh

1021

01:44:59,880 --> 01:45:06,780

and so why not why not this you know even if it's\h
just a hobby yeah right I mean uh you know hobbies\h\h

1022

01:45:06,780 --> 01:45:13,560

are things that you do that you enjoy and if you\h
enjoy asking the question are there non-human\h\h

1023

01:45:13,560 --> 01:45:18,960

intelligences here then that's interesting\h
I mean frankly even without talking about\h\h

1024

01:45:18,960 --> 01:45:23,700

ETS and all the other thing there are non-human\h
intelligences I mean have you ever watched some\h\h

1025

01:45:23,700 --> 01:45:28,440

of the you know some of the animal uh interactions\h
and the things that they do I mean I look at my\h\h

1026

01:45:28,440 --> 01:45:33,060

dogs and I see a Consciousness in front of\h
me they're not at our level but you see some\h\h

1027

01:45:33,060 --> 01:45:38,820

other things where animals solve problems that are\h
almost miraculous and you know that they're on the\h\h

1028

01:45:38,820 --> 01:45:47,580

edge yeah of ability there's just this recent um\h
uh archaeological find uh homo nobelius or I can't\h\h

1029

01:45:47,580 --> 01:45:53,280

remember I can't remember but it was recent in\h
South Africa of something that lived something\h\h

1030

01:45:53,280 --> 01:45:58,260

like 200 000 years before us and there's evidence\h
not yet conclusive but the evidence is that it was\h\h

1031

01:45:58,260 --> 01:46:04,920

using fire oh wow so another Jesus of another
genus of humans 200 000 years I mean we've only

1032

01:46:04,920 --> 01:46:14,040

been around for about maybe 50 50 000. so somebody
else was here maybe maybe and you know uh I mean

1033

01:46:14,040 --> 01:46:18,780

that tells you something that tells you that tells
you actually something quite interesting that

1034

01:46:18,780 --> 01:46:24,840

intelligence can arise multiple times right it
tells you that the opportunity now why they might

1035

01:46:24,840 --> 01:46:28,740

have died out an open question maybe because
we came along and killed them off who knows

1036

01:46:29,940 --> 01:46:35,460

um when you know that something can happen you
know the there's a thing called Bayesian inference

1037

01:46:35,460 --> 01:46:39,720

you probably know that the the idea of Prior
if it can happen once that means it can happen

1038

01:46:40,560 --> 01:46:46,380

and so therefore it can happen again and you
know you I think we haven't really integrated

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01:46:46,380 --> 01:46:50,880

that into our understanding of our Pro our
the chances of us being here you know right

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01:46:50,880 --> 01:46:55,260

and for me essentially and all that right yeah
definitely integrated that I mean I remember

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01:46:56,280 --> 01:47:01,380

um when I was probably I was young it was the
first house that we lived in um and there was

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01:47:01,380 --> 01:47:06,360

a Scientific American and for whatever reason I
opened the page and it was about about the local

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01:47:06,360 --> 01:47:12,720

universe and it was a they had a picture of the
of the cosmos as we understood them at the moment

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01:47:13,620 --> 01:47:18,360

um and I think it was just basically a an
edge on view of the of the Milky Way galaxy

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01:47:19,140 --> 01:47:24,120

and I think I was I don't know how eight
or nine um I remember looking at it and

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01:47:24,120 --> 01:47:29,640

thinking what kinds of I don't know why
I thought this but what kinds of Empires

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01:47:30,240 --> 01:47:36,300

and stories have happened across time across all
of that space I mean so I was already imagining

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01:47:37,080 --> 01:47:44,160

things that might live out there um and so
if even that sense of wonder and possibility

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01:47:44,160 --> 01:47:51,300

of the how small we are relative to all of that
can be imbued into students or others out there

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01:47:52,440 --> 01:47:58,440

that sense of wonder will drive them to help
answer the question that we're trying to answer

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01:47:58,440 --> 01:48:06,180

here today is what kind of data do you need to
collect to prove or disprove the hypothesis so

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01:48:06,180 --> 01:48:10,200

long as they look at the data they'll always
look at the data speaking of looking at data

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01:48:10,200 --> 01:48:15,780

uh I've been speaking with some Pilots recently
who have commercial pilots in you know what you

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01:48:15,780 --> 01:48:19,320

would expect to fly across the country in
that have been seeing objects just recently

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01:48:19,320 --> 01:48:24,420

just you know as we speak over the past eight to
12 months over the continental United States and

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01:48:24,420 --> 01:48:29,220

and western coast have you been tracking that
and what are your thoughts I mean I've seen the

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01:48:29,220 --> 01:48:34,560

stories of they see these lights circling and
I've seen some of the video uh that the pilots

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01:48:34,560 --> 01:48:40,980

have taken on their uh basically cell phone
cameras uh and I mean the long and the short

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01:48:40,980 --> 01:48:46,260

of it is they don't know what they are and these
are people who basically fly every day for their

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01:48:46,260 --> 01:48:53,100

whole lot you know for their professional lives
and they see something that shouldn't be there so

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01:48:53,100 --> 01:49:00,780

I ask a different I'll actually make a different
point Maybe they always have been there but the

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01:49:00,780 --> 01:49:09,960

pilots just didn't notice them because they didn't
have let's say the the environment to say I should

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01:49:09,960 --> 01:49:15,900

be paying attention to that right or as we all
know maybe they just suppressed it right there's

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01:49:15,900 --> 01:49:21,720

this there's this notion of uh intelligence is
sometimes not about putting one and one together

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01:49:22,860 --> 01:49:28,500

intelligence is just realizing that there is a
one right that you that you see something that

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01:49:28,500 --> 01:49:33,900

other people don't see anyway that that is those
are the innovators those are the people who see

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01:49:33,900 --> 01:49:41,640

something that's there and so maybe there's just a
certain kind of brain circuitry that uh by itself

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01:49:41,640 --> 01:49:47,160

recognizes the anomalous as being something you
should be paying attention to you know I always

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01:49:47,160 --> 01:49:52,440

use the example not that you couldn't physically
see it it's just your internal brains filters

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01:49:52,440 --> 01:49:59,580

saying that's noise that's noise yeah yeah I mean
you know um there's a book about you know reality

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01:49:59,580 --> 01:50:05,280

in their reality that our brains are frankly
not designed to see reality our brains are

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01:50:05,280 --> 01:50:11,880

only there to filter enough information to keep us
surviving and pass our genes on so everything that

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01:50:11,880 --> 01:50:20,460

is extraneous to that essential need just doesn't
get into our brains I've heard you use the term

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01:50:20,460 --> 01:50:26,400

like biosphere or dark biosphere is that kind of
the same Theory where there's there's potential

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01:50:26,400 --> 01:50:31,320

things happening that includes life in some sense
that could be happening around us we're just not

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01:50:31,320 --> 01:50:34,920

tuned into we're just not tuned into it or you
know I mean I hate to use the term frequency

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01:50:34,920 --> 01:50:44,460

because it has so many negative unfortunately
connotations um uh it's uh you know it's

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01:50:45,240 --> 01:50:49,740

it's data off the curve I mean just to
go straight to the to the science of it

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01:50:50,700 --> 01:50:57,300

um so in my lab meetings the students will show
their data and then they'll they'll be like a

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01:50:57,300 --> 01:51:01,140

curve and everything fits the curve oh isn't that
beautiful it's great and there's like a data point

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01:51:01,140 --> 01:51:06,900

off the Curve and I said what happened to that
one and they'll go a few and then back in my mind

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01:51:06,900 --> 01:51:11,640

it's it's thinking what did that mean I said go
back a few slides I think my students are tired

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01:51:11,640 --> 01:51:15,300

of me when I because they know that when I say go
back a few slides it's the beginning of trouble oh

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01:51:15,300 --> 01:51:22,860

boy yeah um but good trouble because it's always
the anomaly that is anomalies by definition are

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01:51:22,860 --> 01:51:32,880

Discovery and so here we have anomalies that you
know enough people are crying fire that we should

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01:51:32,880 --> 01:51:37,620

maybe be paying attention to it because if we're
going to just stay on the curve for the rest of

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01:51:38,460 --> 01:51:44,820

time then we and the anomalies just built up but
this is this is what's called the Kuhn revolution

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01:51:44,820 --> 01:51:50,400

right the structure of scientific revolutions
Thomas Kuhn uh wrote this back in I think the

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01:51:50,400 --> 01:51:57,540

50s or so um where science doesn't proceed in this
incremental set of understandings science proceeds

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01:51:57,540 --> 01:52:04,260

until it reaches and until it reaches a wall and
a wall of anomalies begin to build up because the

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01:52:04,260 --> 01:52:09,720

current understanding doesn't accept that the
anomaly exists uh and then there's somebody on

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01:52:09,720 --> 01:52:15,180

this side screaming but it exists it exists and
then the evidence been begins to build up and then

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01:52:15,180 --> 01:52:22,260

you have a revolution but the the almost annoying
aspect of it is that everybody who was screaming

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01:52:22,260 --> 01:52:27,600

it doesn't exist on the other side tells you oh
of course it did we always understood this yeah

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01:52:27,600 --> 01:52:34,140

right I mean that's fine but I think that that's
where we're at that moment now uh again where

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01:52:34,140 --> 01:52:39,780

people are beginning to realize okay there's
there's something but again it's it's I want

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01:52:39,780 --> 01:52:48,660

to create a science and language structure for
people where they can talk about the anomaly in

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01:52:48,660 --> 01:52:56,940

a way that doesn't create ridicule and so
you know maybe this organization that I'm

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01:52:56,940 --> 01:53:01,860

setting up will will be will be able to do
it the things that you're doing things that

1100

01:53:01,860 --> 01:53:08,940

we know other people are doing there's like
a there's basically a a cottage industry of

1101

01:53:08,940 --> 01:53:15,000

groups being created by many uh and one or more\h
of them is going to be extremely successful\h\h

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01:53:16,260 --> 01:53:22,620

which is exciting it's okay to be interested\h
in UFOs yeah very cool Gary thanks for joining\h\h

1103

01:53:22,620 --> 01:53:29,080

me today so much it was a fun discussion it\h
was awesome more to come cheers yeah [Music]