National Academies of Sciences, Engineering, and Medicine
Leading Practices for Improving Accessibility and Inclusion in Field, Laboratory, and Computational Science – A Conversation Series
Transcript of live webcast of Conversation #1.

NOTE: This is an unedited transcript of a live webcast event that was prepared for the Accessibility and Inclusion in STEM conversation Series held on December 16, 2021. The transcript was prepared by Lauren Ollia (of Purple, LLC) and reviewed by Katalyn Voss (NASEM), and is not an official report of National Academies of Sciences, Engineering and Medicine. Opinions and statements included in the transcript are solely those of the individual speakers at the Accessibility and Inclusion in STEM conversation, and are not necessarily adopted or endorsed or verified as accurate by the National Academies.

Hello everyone and welcome.

I am Doctor Rory Cooper and chairing this

committee and helping to lead this

wonderful group on the conversation

series about accessibility and inclusion

in STEM.

We have a wonderful panel and a team

from the National Academies of Sciences,

Engineering and Medicine working with

us.

I am wearing a blue sweater and am a

white male.

I am in my early 60s and I use a wheelchair

as a means of mobility due to a spinal

cord injury and in the background you

can see a bookshelf and some plaques

on the wall.

I am sitting in my office today and

I use the pronouns he or him or his.

So, this is a conversation series that

will take place in five parts.

We have pre- recorded keynote sessions

and I hope that you took the opportunity

to listen to Doctor Okanlami's wonderful

keynote session and I enjoyed it myself.

I had the privilege of meeting him at

the University of Pittsburgh a few

years ago and actually giving him a

tour of some of our resources.

So I would like to next introduce allow

our committee members to briefly introduce

themselves.

Maybe we can start with Sheryl.

>> I am a Sheryl Burghstahler from

the University of Washington in Seattle.

There I direct accessible technology

services which includes the DO-IT center,

DO-IT stands for disabilities, opportunities,

internetworking and technology and

the IT accessibility team for our campus.

I'm also an affiliate Professor in the

College of education.

>> Great.

Thank you.

Carolyn, how would you like to introduce

yourself?

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Hello, I'm Caroline and I am

the professor for technology and science

as well.

I also teach classes for University of

Galluadet and my background is

a white wall with shelves and I have

a globe on one of the shelves and it

is nice to see you all here today and

I am so happy to be here today.

>> Christopher.

>> Good afternoon folks.

Chris Atchison faculty a professor at

geoscience education at the University

of Cincinnati.

I'm also the founder of the International

Association for Geoscience Diversity

and I am a white male with a graying beard

and a green jacket.

Good to see you all.

>> Julian, would you like to go next?

>> Yes, hello I'm Doctor Julian Brinkley
, an assistant professor of human

science computing here at Clemson University.

I lead the design and research of in

vehicle experiences lab where we explore

issues of accessibility and how to

design and prototype technologies for

personal mobility.

I and early 40s black male with a

blue shirt.

Thank you.

>> Great.

And let's see.

Emily, would you please introduce yourself.

>> Sure, I'm Emily Ackerman and a postdoc

at the biology department at Harvard

Medical School.

I a white woman with long, brown hair

and glasses and I am a wheelchair user,

as well.

>> Wonderful.

Just a few logistics items.

Please use the reactions bar at the

bottom of the zoom and I am sure most

of you know zoom nowadays to raise

your hand and you can also post things

in the chat and Kate and I will try

to use those to help facilitate the

conversation today.

I would now or you've met Emily and

Sheryl and they have

agreed to be the hosts for today's

session and moderate the conversation.

Emily is a chemical engineer and currently

working as a postdoc in the lab

at Harvard assistance biology department

and Sheryl is the director of accessibility

technology services and affiliate for

professor at the University of Washington.

They are both planning committee members

and I now welcome them to moderate

this section.

So thank you all for participating and

I would like to thank our panel members

in advance and I am sure that Emily

and Sheryl will introduce them.

Thank you.

>> Great, thank you so much everybody

for attending.

Before we dive in with our panelists

I want to provide an opportunity for

our speaker to provide sort of an overview

of the highlights of the keynote talk.

We hope that you are able to see it

before today's event but if you haven't

that is okay.

It is still on the website and will

be available along with this recording.

So our keynote speaker for this first

conversation is Doctor Okanlami,

an assistant professor of family medicine

my physical medicine and rehabilitation

at Michigan medicine

and the director services for students

with disabilities and the director

of the adaptive sports and fitness

division of student life at the University

of Michigan.

So Doctor, would you please give us

a brief overview of the key points

from your talk about intersection analogy,

able -ism and racism and how you think

STEM can integrate, you know, these

ideas into our education and research.

>> Certainly, thank you Emily.

Thank you Doctor Cooper and thank you

to all of you at the National Academy

of Science, Engineering and Medicine.

I use he, him I’m a young

to middle age black man with brown

skin and I got on clear rimmed glasses

and short black hair, dark blue blazer

with a blue-collar church and a wooden

bow tie in my background there are

some drawers and an American flag and

a plant and a scooter that I think

Doctor Cooper could do some pretty

cool things do if I let him get his

hands on it.

As introduced I run disability services

for the University in Michigan and

I'm also a clinical faculty in medical

school here at Michigan and also at

UCLA.

I tell people often that sort of the

framework for this talk and he said

to give some highlights and now I hope

that the points and bring up were considered

highlights or not but I'm not sure

if people enjoyed the talk or not but

I get really excited when we get an

opportunity to do this because it was

really a chance to have a conversation

or start a conversation about things

that are very important to me and I

say they are important to me because

in these conversations I also talk

about my own humility and authenticity

and vulnerability of a topic that

is near and dear to my heart because

of my lived experience.

But by the end of it what I was hoping

to demonstrate is that one may not

have a particular lived experience

to be able to then recognize the importance

of equity and inclusion in our society.

I talked really about juxtaposing sort

of racism and able -ism and the fact

that we have two systemic structures

here that are because our society

was not created or built or fashioned

with certain people in mind.

So not being difficult or jarring or

controversial but we know the history

of our country was that so that people

that looked like me were allowed to

be property and allowed to be beaten

and hanged and sold and used and I'm

talking about people of color but at

that same time individuals with disabilities

have not been seen as fully human just

like black people were not seen as

fully human.

And so able -ism and racism are systemic

frameworks and structures that then

disadvantage specific populations

and so I was not pointing fingers at

individuals and saying you are racist

and you are ablest but in order for

us to then start a conversation about

able -ism today in the past sort of

year and a half in our country we have

seen racism be sort of front and center

in conversations and something that

should have happened long ago and

that despite the fact that we allegedly

have laws that make that illegal we

still see the effects of racism today

and so to talk about able -ism is something

that people have not had the same experience

with articulating.

People don't recognize how inaccessible

our world really is.

People don't recognize how they may

be unintentionally perpetuating these

systemic injustices.

I was inviting people in to that see

that world from their viewpoint because

I said that before I entered this world,

as I call it on the other side of the
stethoscope, as an individual with
a disability that takes care of people
with disabilities myself I did not
fully appreciate how inaccessible
our world was and did not fully appreciate
the fact that there are still things
in place that limit people's participation
in so in stem we do have an opportunity
and I say an obligation to then make
the stem field accessible inclusive
to everyone and so utilizing disability
as a framework to then tie how that
then connects with every single community
that we are talking about, if we create
accessibility for the disabled community
we will then, by design, create accessibility
for everyone.
If we then support our most marginalized
and disadvantaged individuals we are
going to then be greeting access for
everyone and I talk about how everyone
can use the ramp and everyone cannot
use the stairs so hopefully we will
then start this conversation of trying

to build ramps to then provide access

for all people and that by his centering

these conversations around the disabled

community we will recognize that a

rising tide will raise all votes and

will get to a day where hopefully we

can create a tomorrow that is better

than the peoples yesterday because

the yesterdays of America did not include

people that looked like me, did not

include people that looks like Emily,

did not include people that looked

like Julian and there are many of us

that need to then have that access

because having that access is going

to then make the work that we all do

better, despite the fact that it is

the right thing to do, despite the

fact that diversity, equity and inclusion

are things that we should believe

in in the body of work that we are

doing we aren't going to create solutions

that are going to then better our world

if we don't have people that then are

diverse in those conversations, dictating

and determining and contributing to

all of the amazing advances that we

will be able to have in science, technology,

engineering, medicine, mathematics.

So that is a brief sort of synopsis

of what I was hoping to then begin

in this conversation and I look forward

to continuing the conversation in this

panel today.

>> Thank you so much for that.

I really enjoyed your talk and I think

it is such a needed and refreshing

perspective that we don't often get

on these kinds of science talk so thank

you for sharing.

And so I guess we can move to introducing

our panelists today who have joined

us for kind of a structured conversation

and then as well as some live Q and

A.

So to do some introductions we are joined

today by Doctor Kate Seelman who is

associate Dean and Professor of rehabilitation

science and technology at the school

of health and rehab science at the

University of Pittsburg.

We have Doctor Gabby Marks who is a
Marine geochemist, also a freelance
science fighter and patient advocate
here in Austin with me and Alexis Mobley
is a PhD candidate in immunology at
the University of Texas and the Anderson
Cancer in the UT health graduate school.
So welcome, Kate, Alexis and Gabby.
We are so glad to have your expertise
here today and we are going to start
with some questions that we can do
some free response with our panelists,
as well as planning if you have any
thoughts, please share.
For those of you that are listening
in the webcast if you have questions
or thoughts that you would like to
share please put them in the Q and
a chat.
We are going to be incorporating them
as we speak so any and all thoughts,
fire away.
So our first question for the group
is what we think that we can learn
from research and practice regarding
other marginalized groups that can

help us to guide our practices with

respect to people with disabilities

in our environments?

Would anybody like to start?

>> Would you repeat the question?

>> So the question is what can we learn

from research and practice regarding

other marginalized groups that can

help guide similar research and practice

with respect to disabled people so

what can we learn essentially from

work that has been done with other

marginalized groups?

Gabi, would you like to go first?

>> Yes, the important thing to notice

at first is including the members of

those groups when we are doing research

on that group and I think it really

should be with that group as opposed

to researching like we are an external

kind of group so they are excellent

disabled social scientists.

Scientists, many of them, are here on

this call so I hope that I hope that

we can include our expertise, their

expertise in studying this group and

I think that is one of the most important

factors.

>> Yeah, great point done nothing about

us without us.

It can be applied to the science that

we do in our actual academic.

>> Yeah, exactly.

>> This is and I will jump in as well.

Many people that know me know that I

go straight for the jugular and I like

having some of these uncomfortable

conversations and so what I will say

is that what we can learn and this

is something I learned from our outgoing

Chief diversity Officer here at the

University of Michigan is that oftentimes

people wait for the system to do the

right thing and they ask the system

to change and they ask for things that

should have been done in the past

and I was one of those people that

asked for things to change thinking

that it would happen and the reason

why I said that I go for the jugular

and I'm being direct is because it

was that shipped chief diversity officer

that told me if you want to see history,

if you want to look through history

to see how change has occurred never

has been the majority group or the

group in power gone and said you know

what, we've been owning the slaves

for a while now and we should probably

set them free.

You know, I think that's probably a

good idea and we should give them their

freedom.

No, that is not how it happened.

It is when people said hey, there is

this railroad underground that we can

get on and we can get out and then

we can fight the system to actually

get to where we need to be so what

we can learn is the fact that it is

going to take a lot of work to get

the systems to change and it is going

to take people then is speaking up

and acknowledging the fact that there

is a problem and so while many of us

are unaware of some of the injustices

that exist when we look at these populations

that have already been identified as

marginalized and disadvantaged it is

still a struggle to then get equity

and inclusion so with the disability

community can look and say yes, we

are 31 years post ADA now but we still

have a long way to go and therefore

we cannot rest until we then continue

to demonstrate the inaccessibility

of all these environments that we

are in.

This is not inciting, you know, violence

by any means but what it is saying

is that it is going to take active

communication and participation to

then move the needle without this voice,

without the voices of individuals

with and without disabilities recognizing

this as a problem, without leveraging

the work of other marginalized groups

and what has happened in history before.

We are not going to then move far enough

into what we need be in the future.

>> This is Alexis.

I am definitely agreeing with all of

that and I'm glad you said that because

I feel like we keep having discussions

which is always great, you know, if

you have not heard these voices and

if you have not heard stories may

be you are not aware and maybe you

don't fully understand how, you

know, you might take advantage like

I can walk down the sidewalk but not

understand how bad cracks in the sidewalk

can be for people that don't walk

or don't walk well.

You know, I used to walk all the time

and now that I have a walker to get

around a lot of my life has stopped

because if you've ever seen a sidewalk

in Houston and if you can find them,

A, and B just how poorly maintained

they are you just get to the point

where I don't want to anymore.

You know, I think that is always something

to keep in mind.

When you are in your environment,

you know, I've always kinda been the

the person, the only person in

the room that is something I've always

had to live with so if you're not used

to being that person take a moment

to say okay, what would it feel

like if I was that only person in the

room and what would it feel like trying

to navigate these different ways and

there are so many stories and so many

resources and so you may need to take

some time to get into that mindset

but once you're there, actions, or

will be important and it will not comfortable

or easy, as we have seen from any other

type of group that has worked towards

equity and inclusion and ultimately

to justice and it has not been easy

and it is been really trying to change

policies and change the power dynamics

and power-it is like inertia.

Nothing will move until you put some

pretty strong force on it and we are

really just trying to build up that

momentum so that once we really had

that thing it will start and it will

move quickly after that point and I

think what we again we had the activation energy and everything else will kind

of come into place but we still haven't

reached that point yet and we just

need more people to get along, especially

the people in power to help change

the system so that we can overcome

and do amazing things make the world

accessible.

>> That's great.

Yeah, Kate, would you like to comment?

>> Yeah, I think back at some of the

things we did at the University of

Pittsburg that were fun.

I will give you an example.

A black wheelchair, hip-hop group.

They visited Doctor Cooper in his laboratory

and there was a wonderful interaction

between them and also that same hip-hop

group build a theater in Pittsburgh

with month one of the most diverse

audiences you would ever hope to see

in the theater.

Another thing that happened which was

fun but difficult was organizing and

faculty had something to do with this

but the first disability led student

with disability organization at Pittsburgh

and it really has worked, it worked

out pretty well.

Those are just two fun things that faculty

can be involved with and very clearly

that leaves or that leaves you to something

like, you get to know the students

and these people with disability studies

and not only the scientific method

but the legitimacy of the narrative

of the person's life.

And one more thing as are more professional

capacities are the models that are

disciplines have set down for us one

in medicine and one with all due respect

to Doctor Cooper who doesn't represent

this model at all and probably the

other engineers here but let's start

with the medical model and the medical

model assumes decision-making and

the professional as you well know and

the knowledge base is very limited

to science and the engineering model

that I think of, which is technology

development model, didn't include

participation and we don't have participation
and development that advises with products
for people with disabilities to be
all-inclusive and universal design
and the testing and then you have a
model that as you know is just not
going to work either so these two models
from careers and disciplines are very
close to us here today and need to
be challenged further.
Thank you.
>> Okay, thank you for that.
We can move on.
Sheryl, would you like to do the next
question?
>> Sure, I have one comment on your
question, too.
One thing is we are looking at future
leaders today but also future leaders
and one thing I learned particularly
from the women's movement in the age
I grew up and people that are going
to be good leaders often need to provide
opportunities to new leaders and we
and our do it center work a lot with

teenagers who have disabilities and

they have a lot of ideas and a lot

of energy but very often students with

disabilities just haven't been given

the opportunity to be leaders in their

schools and communities and so forth

and finally I just expected to be rather

passive and they get used to being

in that role so we all need to work

for helping young people who have disabilities

get those leadership opportunities

to express themselves and so forth.

The other thing to remember is that

any one person represents that one

person and so there is a great diversity

within the disability community so

we need to listen to a lot of voices

and I hear sometimes that groups we

have a person with a disability under

group and there representing all people

with disabilities but no they are not.

It's a person to have people with a

disability in a group of we need to

hear all voices and now we will segue

into something we talked about in our

leadership team for this project and

that is intersection malady.

The question is in what ways does or

should intersection malady issues and

I'm talking here about people that

have multiple disabilities like a person

who is blind but also has a learning

disability and who is on the autism

spectrum but also has a mobility impairment

but also between disability and other

marginalized groups and status such

as race or ethnicity, gender,

other marginalized group status.

So how should this intersection malady

and form our research and practice

with respect to people with disabilities?

So talking about the next step and thinking

intersection malady, as far as

practice and research.

Just one comment I will make is in many

of our programs that deal with one

marginalized group so let's say our

students on campus who are ethnic minorities

are not very welcoming to students

with disabilities who might be in that

ethnic group that they are serving

so how or why do we need to do here

as far as practice and research when

we think about intersection malady?

>> This is not and I will jump in first

and thank you for the question and

provide some additional contexts for

ore from my perspective because I think

that often when we talk about intersection

malady what people here in this word

is multiple identity groups.

Now Kimberly Crenshaw who is a black

woman who truly coined the term has

said it best but what intersection

malady truly is as a framework of oppression,

essentially.

It is the fact that having multiple

marginalized identities is not just

an additive impact so if you have a

disability and you are a woman.

If you are a person of color and you

have any other certain marginalized

group here it is actually an exponential

impact on the oppression so I think

that too often when people hear intersection

malady they use it really when they

are trying to say diversity, right?

They are saying you've got multiple
identity groups that you are part of
and so how can you make sure that we
are supporting each other with our
multiple identities.
That's a really good things I want to
make sure that we can speak to that
during this answer as well because
there are spaces, as Sheryl brought
up, that may not be as welcoming to
one facets or subset of that group
because the black disabled folks are
not to be nice to the brown disabled
folks and it is like wait a minute,
how can we address that but intersection
malady is a term is something that
the definition is actually lost at
times and it is the fact that we must
recognize the additive and exponential
impact on having a marginalized identity
and how that then makes it such that
there is additional barriers that that
person experiences as a result of that
and so we need to then address the
intersection malady is to say that

there's a wonderful image that one

of my colleagues used when we did a

talk about this and this image has

two people at the starting line of

a race and then there is a finish line

in the distance in one individual is

a Caucasian man and the other individual

is a black woman and in their lanes

there is nothing in the way between

the start and the finish for the Caucasian

man but for the black woman her legs

are already chained down to the ground

before she gets started and there are

alligators and crocodiles and hurdles

and bombs and all sorts of things on

the way to the finish line and then

the caption says but the distance

is the same so that is what intersection

malady is a part of trying to demonstrate

is not just that we need to be cognizant

of the different identity groups that

people are a part of but that we also

must recognize the impact that has

on the reason why their journey is

going to be more arduous and more

difficult than someone else's.

Now, I will say before I pass it on

that I am not being critical of that

white man and not being critical of

the majority groups by any means so

it is not my fault that I am a disabled

black man any more than it is Doctor

Cooper's fault that he is a disabled

white man, right?

But we need to recognize the identities

that we are in and how some of those

positions put us in positions of privilege

and I recognize that privilege that

I have at the same time as I can acknowledge

the prejudice that I have experienced.

So just a little, you know, addition

to throw in there as we consider.

>> Great contribution.

Who else would like to comment on this?

>> I would definitely love to jump in

on that as well.

I think something that I have noticed,

especially when it comes to antiracism

where people tend to shy away from

oh, I got called a racist or something

was racist or something I did was ablest and then, you know, they want to make

you feel bad for their mistakes and

I think it is important to remember

that not only do you have to be culturally

competent of whatever that intersection

is going to be but also have to realize

that it takes work and anything that

you have to work with you will make

mistakes and anything you will do

is going to be messed up and even me

now being more physically disabled

and more apparently disabled you know

I had to work against my own internal

able is him and deconstruct that with

myself and even though I may not have

been hourly Ono I'm ablest and I've

done that and put the pressure on

the blame on other people for calling

out my faults I realized oh, that's

a boundary and you know I won't do

it again and I will work to do better.

I think it is also being cognizant that

it is not necessarily easy work and

you are going to have to do some of

it yourself but if you mess up,

you know, okay, I learned something

new today and we move on and we make

the world a better place and we work

together in these types of ideas and

again, just being cognizant of that

balance between, you know, where is

my privilege and where are my disadvantages

and where are my being cut off at the

same time?

I know with the black and X event our

motto was left us as we climb and there

will be people that are above you in

different ways and there will be people

that will be below you in different

ways and it doesn't mean that you don't

lean on other supports and you don't

bring other people up with you because

yeah, okay, I'm a grad student, black

woman but I can talk to junior high

and high school students and there

are people that are not where I and

so I can bring them up as same as

I would lead or lean on senior faculty

and it is not only being culturally

aware but also figuring out how to

spread these dynamics and notice what

is going on in the room and what is

going on in the environment because

I know it sounds exhausting but at

the same time there are people like

me that have to deal with it every

day and that goes into a room and says

Dang, I'm real uncomfortable and I

am going to try my best and speak my

truth and I will be authentically me

but whatever other things that people

feel, you know, that is on them over

them to work through and that is not

my responsibility.

It is still my responsibility to notice

okay, there is only me in his room

so who am I going to sponsor today?

Whose name will I bring in and whose

discussion will I bring?

I think that is always important as

well when you go to intersections again

and not just what are these other identities

but how, again, the power balance

and what can you do again to shake

up that system?

>> Nicely said.

Thank you for sharing.

Gabi, to have anything to say on this

topic?

You look like you do.

>> I have lots but Kate is raising her

hands.

>> Okay, we can go Kate next.

>> I think one of the things that is

missing and with disabilities is people that

are poor.

I remember talking to a professor who

was teaching in a very distinguished

woman's college and they were actively

recruiting from quote unquote minority

population and they had more trouble

integrating lower-class people, however

you want to call them, they did not

know which fork to use and then they

had and if you have three or four identities

like this it puts you in even more

trouble and I was looking at the number

of students on SSI and SSDI who are

disabled and I think it's important

to collect data of this kind what their

situation is and not just-I am really

so happy that I am continuing to collect data with a number of people with disabilities

in a stem but let's know a little bit

about them and so I think class is

a big issue here and it is not one

that is in our country in the United

States recognized very much.

>> Thank you.

Gabi, do you want to add to that?

>> So many things.

I think about this a lot in terms of

academic hierarchy and stem hierarchy

because I think it is sort of a unique

experience in that I noticed that

as a grad student at MIT I had more

privilege than full-time staff members

and not faculty but staff because it

is much harder to get rid of a grad

student than it is to get rid of a

staff member, for example and so having

conversations where that but I'm like

23 and I have no idea what I'm doing

with my life and they have these other

aspects of my identity where I feel

like I don't have that privilege but

understanding for myself like now that

I do have a PhD that gives me more

privilege than people who don't walking

around with my institutional badge

when I met a doctor's visit I get treated

differently and so I'm trying to recognize

as I move through the world in earlier

career and Mexican-American and I am

part of the LGBT Q community and all

these identities that are so important

to me that I like this can be really

hard as a scientist to be trying to

push through these aspects of my identity

and also remembering that I have to

hold onto those privileges that I do

have and just like Alexis was saying

bring people around me to make sure

that I am not the only one because

I know that I only able to or only

able to get a PhD because of disabled

advocates who came before me and so

I am trying to like hold all of that

at once and I think it's a really

adjusting conversation to have.

>> Yeah, any additional comments on

this conversation about intersection

malady?

>> Emily, let's go on to the next question.

>> Great.

Yes, the next or final three questions

have more to do about what we could

do and actions we can take the first

is how can we move from diversity and

that kind of on paper checkmark for

who we had towards true equity in

our educational and research environments

so what changes or would you like to

see happen?

>> I will hop in first and try to keep

it on the disability side more than

some of the other ones and I think

one of the biggest things I would love

to see is honestly just accessibility

in the lab and a lot of people and

breaking down preconceived notions

of what a scientist should be or look

like or act.

One of my accommodations for my graduate

school is that I actually have a research

assistant that does the physical side

of my research.

I just can't.

From day-to-day I don't know how my

body will be and I don't know if my

hands will cooperate and so my home

is become my office and I work exclusively

from home and I have a bunch of accessibility

aids at home to make my work easier

but I got a lot of resistance from

people trying to tell me you not a

real scientist because you are not

in the lab doing the techniques and

to that one of them was I'm sorry

but, I'm sorry but I'm not sorry because

I have over a decade worth of actual

laboratory technique experience so

I don't need anymore, A.

But B, what are you calling your PIs?

When was last time your PI was actually

in the lab physically doing the work

with you and sitting beside you?

Are they not scientists?

If not, why are you training them and

that just doesn't make sense.

And so the fact that I tried to do certain

things within my lab to make things

easier and having things like electronic

pets and trying to make sure that benches were the right way and I think as

I have told people funding is going

to be really important and people will

say that's a waste of money and it

is not, it's an investment.

Being able to have labs that are accessible

in spaces that are accessible makes

everybody else's life easier and even

though I have one experience but my

daughter loves all my accessibility

aids because it makes her life easier.

Even though she isn't disabled, half

the time and telling her to give me

my stuff back, but that is still that

she is able to notice that hey, since

mom has X, Y and Z and this has been

easier for her this makes my life

easier and I don't have to use as much

energy to go around and do these things

and as people start to realize and

notice those, yeah, there are certain

things that may be hard and I hate

my doctor's office had extremely heavy

doors and they are not usually electronic

and it doesn't make any sense but

you see more people going through electronic doors than physically opening them

themselves and that's an accessibility

aids and you see people preferring

sometimes ramps over the steps and

that's an accessibility aids and you

don't realize how much better life

can be once it is accessible to everybody

and it makes it easier that way and

work towards accessibility and do

those investment and plan for more

money because you are just going to

make it better and even down to captioning

I have issues where people are like

I hate captions and they are annoying

but unlike science is an international

sport and I can't understand everybody's

accents and the way that they may say

things or denote things and now I

have the captions and I can say oh,

okay, now I know what you're talking

about and the whole time I'm not like

what is this word and what are they

trying to say and then I missed the

entire presentation and so there are

just things like that that you may

not ever know that will be great but

I will say it in a way, take the risk,

and believe accessibility will make

your life easier two, Anna, listen

to disabled people.

We tend to quote unquote predict things

so if you want to know what is going

on get on disability Twitter and here

we have to say because we will be able

to tell you almost down to the T how

things will unfold in the way they

will go.

So yeah, invest, use your money towards

those things.

>> Yeah, thank you so much.

Any other thoughts on what you would

like to see change?

Jack, Kate.

>> Yeah, infrastructure.

It is a good idea to have somebody who

is an advocate for people with disabilities

within the sciences and the University

situation, vice president for example.

Having banged against other doors within

universities, for example, the implement

office would surely have to change

if we are going to get people out into
the employment and there are many of
them as our guest speakers mentioned
that there is a diversity office sometimes
it is at the vice president level and
sometimes not and even if it is it
depends on, quite frankly, budgets
which is a word that should be brought
appear and in any situation for at
least for the most part it will cost
money to be or make something accessible
and I was in rehab sciences at Pittsburgh
might Dean actually tried to make classroom
accessible for those with very little
hearing.
It was very difficult to do that and
it is not the same kind of ramp that
we can build for but he tried and we
engaged in the ideology department
and I would say infrastructure is
very, very important in budget is
very, very important if you want to
have power or well, any environment
that we are talking about in the University.
>> Yeah, absolutely.

I think that just as a to add to that

I think it is important to acknowledge

that universities and companies are

built in, you know, able body mode

and they are built without thinking

and with forethought and so any engagement

in change is difficult and it is an

effort that has to be purposeful, I

think and so yeah, you run into the

budget, the fact that they are willing

to do it and so yeah, it is going

to take institutional change in quite

a large scale for most of the changes

that we will probably bring out, right?

Doctor O?

>> I light or I will let Gabi go.

I saw her hand at the same time.

>> Mine is quick which is don't use

your students as your broader impact

criteria unless you are providing them

with benefits, including funding, including

whatever supports they might need for

all of those identities.

If you are saying that you have a disabled

lab member and like oh my gosh, I'm

supporting this Latina disabled lab

member like you better have a research

assistant like Alexis has and you

better have whatever they need.

You can write it in your grant and that

is fine but you better have whatever

they need to succeed if you are going

to include us as the impact that you

are making on science.

That is my hot take.

>> That is actually the perfect sort

of segue into I was going to make two

brief points because keeping in line

with what I say in terms of being a

straight shooter and go for the jugular,

we all talk about diversity equity

and inclusion now.

Everyone is having keynotes and webinars

and sessions on it and everybody recognizes

that if they don't seem like they care

about diversity someone will come

and say that they are a problem but

the problem that now exists is while

everyone is not willing to then create

diversity, meaning variety,

differences, people with different

backgrounds, people are not actually

prepared to be inclusive.

They are not actually to then are ready

to make things accessible as Alexis

said.

As you were just saying, Gabi, you need

to actually be prepared to provide

the things that individuals need if

they are coming and so, you know,

I was going to tell a really brief

story and I will tell the abridged

version but I was at it at an institution

that was a health sciences institution

and they were talking about how the

students that were requesting accommodations

for high-stakes exams and that they

were saying, you know, we are doing

the students a disservice because they

are not going to get accommodations

in the real world and so we are setting

them up for failure by accommodating

them now, right?

The institution was having dinner with

the leadership before I gave my keynotes

and they asked me so what do you suggest

that we do when the students ask for

accommodations and we really want to

provide them but don't you think that

it would just be better for us to make

them do what they are going to be expected

to do in the real world and I paused

and said no, I think you should give

them their accommodations and they

said well, I know, we really want

to but we are really setting them up

for failure and you know we really

want to do the right thing so how do

you think we address this and I paused

again and said that's a good question

but you should give them their accommodations

and then one more time they said no,

but really we've been giving them accommodations

and we get what you're saying and I'm

like you know what, I've got the answer.

I figure this out for you are right.

I haven't been hearing you clearly.

What you should do is not admit students

with disabilities since you are not

prepared to take care of them.

And then there was silence.

Because this isn't just some sort of

joke, this is not a feel-good thing.

This is actually about human rights

and so if you are not prepared to provide

people with what they need, do me a

favor and don't even include me in

your presentation, in your population

and I would much rather be at a place

that acknowledges the fact that they

still have room to improve and that

they are going to work with me to then

figure out what accessibility needs

I have and, like Alexis said, that

more people will benefit from you getting

your institution to an accessible and

inclusive institution.

It is not just going to be the individuals

with his abilities and the part that

I need to highlight that we haven't

spoken publicly about in the session

but we talked a lot about things that

you can see, not all disabilities are

visible.

And so the more you then go towards

creating accessibility and inclusion,

individuals with and without disabilities

will then recognize that this is an

institution that cares and we can

make sure that the environment is inclusive

of all people with and without visible

and invisible disabilities.

And so that is why, don't miss me with

your DIA initiatives that are just

meant to check boxes if are not actually

going to then implement the resources,

the change that is needed.

Last part of it is this is truly about

changing stigma because people think

that they are lowering the bar for

people with disabilities when they

do these things and they think that

you are not going to get the same academic

rigor and they think that if you are

not the one pipe putting that you are

not going to be good scientists.

If you are not the one doing insert

whatever tactic here that later on

in life you are not going to contribute

and as Alexis said look at the PIs,

look at the senior faculty, they are

not still doing all of those things

so why do we need people to be pouring

potent stem cells I can do everything

with they are going to that differentiate

to whatever specific thing they want

to work on and we can then give them

the tools to be that.

We are not then allowing these amazing

people with potential to add to the

body of work of what we do when we

are merely failing to provide accessibility

and I think I said this in the keynote

but accessibility provides access,

it does not guarantee success.

We still have to work hard to be successful

and you provide an accommodation is

not then giving me a leg up to be successful.

It is merely providing the appropriate

and reasonable and necessary access

for me to then demonstrate that I can

be successful.

>> Could not have said it better myself.

Thank you so much for that.

We have about ten minutes left and we

have two questions left.

Sheryl.

>> I think Kate had a comment on that.

>> I have a comment that when I was

at NSF we put accessibility

on as a budget line on grants that

were to be completed.

Then and maybe it does but it would

help from the end that Gabi is talking

about when you have the students right

there and you see all the possibilities

of this in person and so we were all

in professional organizations and we

can find out whether NIH and various

institutes have that budget under certain

grants situations.

>> To briefly answer that I know the

NIH does.

If you end up having and I know for

sure and F grant you can get a disability

supplement but just because you have

that mechanism doesn't mean that your

institution or your grants offices

know how to leverage those mechanisms

either because I have been waiting

over a year to even though the paperwork

is done it has not been summative because

our special projects office just does

not understand how that works and so

they may be there but I think that

is also part of the accessibility is

a training people understand how to

leverage those mechanisms and work

through them so that you can do that.

>> Yeah, go ahead Sheryl.

>> I would like to say that sometimes

people have written grants and they

don't include that accessibility in

the grant money to say what can I do

and you find the money somewhere else

in your grants.

It is like we get a pile of money and

I get a lot of grants and there's a

pile of money there and I always include

accessibility issues and what we're

doing but even if I didn't, if

I had some of these accommodations

you just come back somewhere else and

we do everyday immigrants.

We read budget and just make that case.

You can't decide that we did not budget

for accessibility and so we don't need

to provide it.

It doesn't work that way.

Should we move onto the the next question?

>> I was thinking online, may be.

If you want to combine them they are

kind of related to a two-part question.

>> And, I think that would be a good

idea.

How can we support those with accommodation

on marginalized identities at a personal

and institutional level?

And the last question is how do we approach

inclusive community building within

the scientific institutions?

Looking at these two things we are working

with individuals and I often think

about this is simplistic of course

but thinking about accommodations to

create that level playing field and,

by the way, when I get the question

from faculty that well, they are getting

all these accommodations and I will

never get a job in the field so and

I say oh, this is really interesting

that you shared this and I did not

know that we promised students to graduate

in this field that they would get jobs

and is like all the sudden they change

the rules like if a student with a

disability and what if they can't be

successful and I said I tell you had

a conversation about other students

in her class and guaranteeing their

success I don't think that's the right

conversation to have.

Our job is to provide accommodations

so that there is a level playing field

to learn the content of the course

that you happen to be teaching and

so anyway, let's talk about, you

know, providing things for individuals

and systemic change and how we can

make sure that happens and then also

systemically how can we make sure

that diversity, equity and inclusion

efforts include individuals with disabilities,

include those with marginalized status,

multiple status and even incorporating

a portions like universal design or

inclusive design or whatever so who

would like to start talking about that

group of concepts?

>> This is Gabi.

I can start.

One of my big things that I have been thing about lot right now is how to have networking events that are accessible and welcoming and how to do that virtually or physically and hopefully soon that might happen physically but right now what I have seen a lot is that people tend to schedule things at bars and I find that bars are like one of the least accessible, least welcoming places to go.

It is not helpful if you have a hearing disability, if you get migraines, if you can't stand at the bar and there are so many different reasons and it does not mean you should not invite us to the bar and maybe we will go but hosting and inclusive or networking event is very hard to make it inclusive and accessible at a bar so one really quick fix is to not do that and to provide accessibility information to whatever type of event you're going to have and be specific about it and ideally you would have a wide range of access.

For example, we have captions any of

ASL interpreters and hopefully people

are aware of that ahead of time but

my like really easy tip is don't hold

events at a bar.

>> And to think about that systemically

because some people will respond with

stuff like if they don't want to meet

at the bar than we can do it in another

place and they're asking the person

to decide it is not very inclusive

for them but they should be thinking

more generally and if they are going

to meet in a bar meet make that the

optional activity or lease the social

not business oriented.

>> And the bathrooms and think about

all the other aspects that go into

being in a bar like if there is only

to single gender restrooms like who

will be included there and who is not

so that's a hot take.

>> And we have some but there are also

others on line of guidelines for designing

and accessible meeting and accessible

conference and so forth and so there
are things, Google it, find the resources
that we have on a website but also
others have posted.
>> Yeah, I guess I will go next because
you had mentioned you note universal
accessibility and things like that
and I think that is definitely a good
start especially if you don't know
what you are doing and you can at
least push for that.
You know, I like to also remind people
that you may not know what you want
to do and you just want to use your
power to do something so you don't
have to change every university policy
and, you know, that you are at.
Your think and say I just want captions,
you know, you can find that one thing
and you can be the caption champion.
You can hey, I noticed that our flyers
don't have all text when you are sending
these pictures and this isn't accessible
and you can start there and learn where
to get your voice and learn where to

get your footing and then from there

learn more and grow more and do more

and I would also say take the time

to listen to the groups and their needs

and also make sure that they have space

and a lot of people get really offended

when there is this personalize spaces

for people whether it be race or disability

or sexuality and you know so many other

ways that you can identify and again

I don't know what people feel so entitled

to other peoples plates but I promise

you it is not a cakewalk and not rainbows

and unicorns and this isn't fun and

we just, we're trying to get to the

fun and we are trying to enjoy the

same things that we see other people

enjoy and in this case it is typically

the able-bodied white man and we just

want to be able to enjoy our spaces

but also talk to people that know our

plates and understand and me saying

Dang, I've been fitting for the last

two weeks with a bunch of other people

that are disabled and they would say

Dang, I know that and do you need anything and here is a heating pad and I am

sending some water and somebody that

may not be disabled is just like I

don't get it, take naps and don't get

caffeine and you will be fine and no,

no, you don't get it and so understanding

that sometimes people still need that

space to be able to feel welcome and

not only have DI initiatives but have

DI policy and make sure that you are

looking at all the different intersections

and being hopefully competent and if

you say hey, this really is not working

and don't get offended but again, just

adjust and pivot and that is life.

We are all learning we are all learning

best practices and sometimes we are

learning best practices as we go and

nomenclature changes in the Internet

is fast and so you have to be just

as fast as it is and work towards steering

the boat in the correct direction.

So figure out where you want to be that

champion and it doesn't have to be

big.

Figure out other people that you can

get involved in and again it does not

have to be anything official and just

do what you can.

The last thing I will say hopefully,

I don't know we will see, I like to

think of any type of advocacy work

and I sing in a choir and I like to

think about it as music and production.

There are singers, there are musicians,

there is a conductor, there is stage

tech, there is lighting, there is sound,

not everybody is on the stage and not

everybody enjoys being on stage but

even those that are on stage, if I

have to sing a note, one note that

is the entire, you know, she did music

with no breath marks and they just

tied that one note there is physically

no way I can hold one note for five

minutes without passing out and so

you mean on other people and sometimes

you have to drop out and let other

people take up the work that you need

so you can catch your breath and then

come back and and so again also just

figuring out where you are in kind

of the Symphony or the concert of life

and how you make the show better and

help other people in the process because

yeah, I singing and maybe I am the

star of the show but I singing for

my audience.

It is not just for me.

The tech people are making sure people

can see and hear and you know we are

all working together for a common goal,

just remember that and finding people

that help you continue to do that.

>> Thank you.

And continuing to find roles for various

stakeholder groups spirit some people

don't realize what power they have

in a certain thing and they may be

in charge of a budget or a space or

so forth and not everyone can contribute

but we will keep going on his conversation

but it is point we want to make sure

that we open the discussion to those

of you who are listening via the webcast.

We have been monitoring her questions

and we will bring them into the conversation

now and we will still continue to include

the panel, by the way, if you have

more to say on any of this please speak

up and please feel free to add your

ideas to the live question and answer.

>> So I will chime in and add I will

say it is always exciting for me when

I join a panel that makes me feel like

I don't have to say anything at all

because everyone says all the things

so I will try not to repeat what but

will add my little bit to it is that,

you know, we tell people that when

you met one person with a disability

you have met one person with a disability

so what I encourage people is to not

take something that one of us says

and think that you can then just apply

it to every single person with a disability

you meet because disability is I diverse

group of individuals, diverse population

and so that is when people say this

is difficult, Doctor O, how will I

ever know how to help someone?

All these things, you got captions and

text and ramps and how will I ever

know how to then be accessible and

inclusive?

This is the most simple answer.

I say ask people.

I tell people I am still learning, I

do not know every single thing about

this space and I even sent Sheryl a

private message earlier saying I want

to learn more about her do it work

because this is something that is

constantly evolving and as Alexis said

the Internet is fast and we have things

today that we did not have yesterday

and that means we have opportunities

to make things more accessible and

so I acknowledge that I am still learning

and I don't know everything and that

is why I am very comfortable sharing

the things that I don't know to be

able to do better and I think that

all of us need to be able to have the

grace to recognize that we are all

going to be able to learn with and

from each other and that it is okay

to not know because I think that where
this comes from most of the time is
that when you are in a position of
power and when you are the leader and
when you are the majority is not a
safe space for you to feel as though
you are making yourself vulnerable
to a knowledge that you don't know
something.
I think we all need to recognize that
we don't know many things and that
we can then learn from each other but
don't learn from that one person and
think that is the only disability experience
you need to hear from.
That is why diversity is important because
the diversity of thought and experience
and a perspective is going to allow
you to see things, to learn things,
to hear things that you would not have
learned or seen or thought if you did
not have a diverse group of people
around you.
So that is I think a way that we can
strive for if you listen to people
and ask them questions about how they

need or can be accommodated that is

one thing that you can do.

Do not then make people that sort of

monolith for you and I will end with

just a very short story about something

that sort of open my eyes to this.

One of my faculty sort of mentors had

a son who was colorblind and he was

in first grade, can a garden and his

homework with a color the circle blue.

I might have said this in the Keno and

I don't remember but I did or I already

told the story.

>> But it is a good story, tell it in

case spirit I will finish the story

in case someone did not watch.

Really quickly this man asked us on

how do you get your homework done because

it says colored the circle blue and

his son said dad, I never use commands

that aren't labeled.

Sometimes the solution to what the inaccessibility

is is not something that is so far-fetched

and difficult to do but we may not

see the solution ourselves unless we

then include the individuals and then

had that experience.

That is really the way that we can get

there.

It is not saying that there was one

group that knows and another group

that doesn't but recognizing that at

any given time we may be the teacher

and a student at the same time and

that is the way that we can all learn

from each other and that is what we

do in our work and that is what we

do in stem and so therefore it shouldn't

be that hard to apply that same mentality

to then being inclusive and accessible

to then make sure that everyone is

valued in our space.

>> Great points.

I would like to add funding to that.

Is there some basic things that you

should not have to ask somebody for?

For example, if you are giving a PowerPoint

presentation do you make sure that

you verbalize all the key content that

is on the PowerPoint and that you just

don't say the circle over here or

whatever?

When I gave a PowerPoint presentation

I simply try to think that there is

somebody or I think that there is somebody

calling him by phone because I can't

get their video up or it could be someone

blind and I don't know but I just assume

when I go into my presentation that

there are some people that can't see

the screen and so you make sure you

provide that in multiple ways and that

leads us to universal design and other

proactive approaches where there are

some things we just do like we had

the elevators in buildings and ramps

and so forth so that is one area you

can work on to, that basic what is

a good thing to do to make sure everyone

is included?

Kate, did you have a comment?

>> Well, I was thinking of my disability

studies class which is the perfect

or one of the perfect places to get

to know other people with disabilities.

Anyway, we had one on sex and other

than money we don't talk about sex.

It was led by two people with disabilities,

a man and a woman, and then working

with somebody who did not have a disability

and it was really highly successful.

Maybe Doctor Cooper will tell me on

prejudice but we have a lot of engineering,

male engineering students in our class

and they are pretty basic.

I learned that the is a very unusual

and diverse organ so that came out

there and then another guy said when

he went into a bar before he had his

accident and then when he rolled in

as a person with quadriplegic he felt

like he was not attractive anymore.

Then a young woman and I certainly feel

this said my boyfriend whispered into

my hearing aids and started ringing

but there are lots of little things

you can get to know disability studies

is certainly one of a platform for

those doing that in another area that

we introduced in that class was diction

and the experience of and I actually

we actually brought in a very bright

CPAs and so on and so forth so I think there are many avenues that are social based that, you know, we don't have to get into regulation and law as well as of course we have to fight for infrastructures and budgets.

>> I will jump in I think based on more social things I think I want to touch on community building because I think that meeting people that are disabled has been, I mean, events where I meet people that are disabled, getting coffee with coworkers that is disabled with someone I would meet for some kind of, you know, other shared thing like Kate was talking about or those are the things that really sustain me to do, not just like, you know, in my life but to do work and to feel energized at my job and working with another disabled coworker and so I think that you know meeting people and having opportunities to meet people and to openly space to talk about being disabled to feel welcome in spaces where I am

the only disabled person to talk about

my disability those are the kinds of

community building activities that

are what keep that diversity and transform

it into equity.

Focusing on creating spaces for people

if you are not disabled or, you

know, seeking out those spaces as a

disabled person and I think is really

key.

>> And, I don't know if there are any

questions but I did want to briefly

mention that we automatically assume

that Abel -ism is the default but you

really are just one accident away

from becoming disabled if you really

think about it.

You are a few years away, as you start

aging, from being disabled and having

those conversations and diversifying

who you seek can also help and especially

with healthcare being the way it is

in America there are still kind of

two definitions of disability, whether

it be, you know, medically defined

disability or your self defined and

self diagnosed disability and so for

people that may not have access to

healthcare either that is also something

to consider when it comes to accessibility

things like that of a lot of times

you have to have some type of doctors

note or some type of test to verify

that you are as disabled as you say

you are and that can also be a really

huge hurdle for people that may not

have access to healthcare and to be

able to do those things.

By just making or you know people may

not be comfortable.

Mental health is still very heavily

stigmatized and so you don't want to

exclude somebody that doesn't feel

safe enough to, you know, disclose

this type of information so building

all of that in keeps people safe and

it shows that you care and that you

are willing to work with these individuals

and that it is welcoming but again

if you don't do any of that you are

not saying or doing much and you need

to reevaluate your life.

[LAUGHTER]

That is just the nice way I will put

it but, you know, again thinking about

all the barriers that somebody can

come up against and I mean is most

Americans we are all in the healthcare

boat and it's a really huge discussion

and if nothing else even just think

about that and the access to healthcare

that people have.

>> Any other comments or questions?

>> It is Kate.

Can I say something?

There is a movement out there and I

have not heard and it is not been spoken

of here very much but called the disability

movement and born along, long time

ago and carried a lot of the water

here and when I was or to skip I was

in early age and other

people I am sure here and I don't see

any other white hair but in any case

in Pittsburgh there was a Council on

disability at the municipal level and

there were many Easter Seals and many,

many so one time a young woman PhD candidate came in and she was not in rehabilitation but was a young woman and had autism and we started and I connected or reconnected her into various networks in the community and she is now sitting on the state legislator and I think she is still in her 20s and but this can happen but we do have to do outreach a little bit out of may be, you know, it might not be so easy sometimes but just sources are extremely well developed for disability and scientific community and we need to find each other.

>> There are some questions that have come in in the Q&A chats.

One that I think is worth talking about here with our last few minutes is how do we address hidden disabilities and mental health challenges?

I think that I have been looking at this whole session as talking about including those as well at various types of disabilities but some people don't always see that and I think we

can still look at that and the things

that we have said here and it has come

up to talk to people with disabilities

and talk to them about what they might

need and in a specific situation working

with the person of disability and

I read in a research article along

time ago where people with autism asked

for more accommodation than students

with disabilities and I don't know

if that is true but that was an interesting

thought and it would not surprise me.

But also that is where University of

design could come in as well and also

inclusive practices that are proactive.

If you work for work with someone on

the autism spectrum or someone with

executive function issues both invisible

disabilities unless they have an intersection

with another type of disability one

of, if you do much reading on this,

one of the key thing you can do is

just make instructions very clear and

instructions in the science lab, for

instance, step-by-step and sometimes

instructors back in the old days when

we were on site where they put something

on the PowerPoint, you know, and then

they would go into the lab from there

and make sure that there is a handout

that has very clear instructions and

is one of the best things we can do

for individuals, invisible disabilities,

especially when applied to executive

functioning and so forth and any other

comments about specifically about

addressing hidden disabilities, including

mental health?

>> Well, my very short experience with

that in the first of all I think that

was a great response.

Thank you very much.

It was very concrete and when I was

developing relationships with students

with disabilities the people with mental

related disabilities, one of their

complaints was their relationship

with their faculty and I heard more

of that so it is probably true that

we have to learn more of what Sheryl

is recommending here with infrastructure

and so that, you know, we can follow

through and I think it is very fickle,

very and not as easy and I mean I had

a hidden disability all my life but

it is a lot different than having a

mental or cognitive disability.

>> I will chime in and this is Doctor

O speaking.

If you can't tell that I like giving

responses in story form I gave a Ted

talk a couple of years ago and it was

framed around Mr. Rogers so I might

be dating myself a little bit but Mr.

Rogers had a song at the beginning

of the show and it was talking about,

you know, would you be my neighbor

and so I framed this conversation around

the fact that people tend to address

things that they are proximal to pray

I gave sort of an analogy about if

someone's house is on fire, you

know, if that house is your house you

clearly care that the house is on

fire and at the house is your neighbor's

house you might care if their house

is on fire because one, they are your

neighbor and you care about your neighbor

or may be that you worry that their

house will then cause your house to

catch on fire.

And so if you feel as though there is

something in your neighborhood that

may impact you that is why then people

tend to then do something about it.

Now, I give this little story because

I think that the problem at times is

we create an us versus them dynamic

in this conversation around disability

and, you know, Alexis touched on

his earlier in a way that at times

when I more engaging and back-and-forth

conversation this can come across as

contentious but once you said you're

one accident away and you are a couple

birthdays away from having some mobility

difficulties or hearing difficulties

or seen difficulties and why we create

this dynamic that disabled people

are other and edit is them that we

are doing these things for that is

the reason why we don't have things

that are accessible so I'm using this

want to talk about how we also address

the hidden disabilities a mental health

challenges and if we recognize that

that is really community, right, every

single one of us exists on some and

I will use the word spectrum,

right, some spectrum here of disabled

or a bold and there is no line in the

sand that says this is what then makes

you disabled and even as a healthcare

provider when we talk about this medical

model of disability we are looking

for a line somewhere and there is no

line.

I think that if we recognize this as

what can we do to make sure that as

many people have access as they can,

write, that is what we then do so hidden

disabilities invisible disabilities,

mental health and when we organize

that hey, this pandemic has showed

us that if you are sick, don't come

to work because people don't want to

get sick now, right?

But we need to normalize the fact that

people may need brakes and people may

need time to then spend by themselves

and so these are some small things

that have created a dynamic now that

we have a lot more flex ability in

our work environment and a lot more

sort of understanding that there may

be things that happen in life and you

need to stay at home and quarantine

with your child because third-grade

had an outbreak of COVID and you had

to be at home so these are some of

the things that the disabled communities

have been asking for for a long time,

remote work, virtual work, time and

fix abilities so these are things that

when we realize this is going to benefit

all of us you don't have to think about

it purely through the lens of I'm helping

my disabled here here and you see it

as I'm helping humans and helping make

this environment an environment where

everyone can be more welcoming because

that that doesn't make people worry

about doing the disability dance of

how can I make sure that I am not stepping

on the wrong toes and I think that

if we view it that way that changes

the stigma around disabilities specifically

and even though I have nothing wrong

with saying the word and calling out

disability and making sure that is

recognized there is still some people

that they little sphere of influence

and they can impact change is truly

just in that vein without feeling

like they have to understand disability

and you just understand people and

the fact that people all have different

needs and therefore let's figure out

what we can do to then support people.

>> Excellent way to draw our conversation

to a close here and it's even interesting

exercise in workshops and in presentations

I think to look at ability rather than

disability because everyone in this

room, some people have disabilities

and some don't in this particular

conversation today but we all have

abilities and so every one of us can

raid our ability to see, to hear, to

manage our physical health or mental

health and we can do that individually

and my guess is there would be no two

ratings exactly the same its own diversity,

intersection analogy and all these

things are the way things are in the

world and so being proactive about

making things more inclusive and then

being responsive to individuals who

have specific needs and being successful.

We had a great time.

Everyone, thanks for the fantastic conversation

that we had today and how intersection

analogy is critical to stem and particularly

in fostering the culture and actionable

plans to improve accessibility and

inclusion in stem.

We talked about some practical ways

to address this issue but there is

a lot more that we all need to think

about on her own campuses and institutions.

We heard at the beginning of the conversation

this is just the first of many discussions

and our next conversation in the series

will be on Tuesday, January 25.

Mark it down.

Tuesday, January 25 from 10:30 until

noon, Eastern standard Time for it

we will focus on specific recommendations

to improve accessibility and inclusion

in the context of lab work.

That came up a little bit today but

we will focus on that the whole time

next time.

We hope you can join us.

Additional information about that conversation

will be available on our series website

and so this webcast will be recorded

and posted on the website, as will

all future conversations.

Enjoy the rest of the day and we hope

to see you in January.

So, thanks for joining us.