

Shawn:

Hello everyone thank you all for joining us today. As you can see on the, the slide that's screen shared here, I'm, I'm Shawn Dorius professor of sociology here at ISU and we're here to talk just a little bit with you today about the work you do is part of the genomics to phenomics initiative, and the larger work you do in these two spaces. And with the goal to give you a a little dose of social science thinking and approaches that mostly, we have good evidence to say that this idea of diversity inclusivity in our work is beneficial for science and moves science forward more efficiently, effectively, and most importantly, in new directions. And that's kind of one of our key goals as we're looking for new and better ways to solve both old and new problems. And we're going to pitch an approach to hear that we think is useful for your personal research, agendas the teams and departments, you work in and, and we'll try and keep this efficient, we recognize everyone's time is busy. Want to make it worth your while. So Rachel if you'll move us a slide along. If people are just joining us, feel free to put your names of your department, association, and title, things in there on the chat for so we can know who's with us today.

Briefly the agenda is an introduction which were we're doing it. And then I'll, I'll tell you briefly a little about this concept of ELSEE. Just a different way of thinking about diversity equity and inclusion. Then we're going to take you through, two, two activities, two Hands-On activities. One about stakeholder mapping. The goal here is to help you to think a little differently about the key internal and external partners, people, you work with on a regular basis and people outside the organization and maybe outside your networks that you work with a little less frequently, but that are, that are external to your, your organization or work group. And then we're going to do a little time with it would call a Persona development activity. And this is to get us thinking about the people behind all of our work. We're all working on different and interesting, and I think quite important activities. Many of you are working in the space around this very substantial challenge of maintaining a healthy and safe and resilient food supply for all the world's people with the expectation of a growing population. As we think about the who of our work we want to push you to think about your specific lines of research and then the work you do in collaboration with AG2P. Who are the end users? The end beneficiaries of your work and, and we'll talk to you soon ways to to take some advantage of that in your work forward and then

we'll do a quick wrap up and tell you about a workshop falling behind this. Rachael you can move that forward.

Right. So just as we get started here, you'll see a map on the right. And that's a map of registrants for the, some of the early registration for the workshop. I thought this is kind of cool. You know, we've got folks from in the network from all over the world so you can work and think internationally and you work and think often in terms of international collaborations. Those are some of the most challenging collaborations to maintain because of differences in time and resources and, and, and the challenges on the ground in the places we all work. And yet this is a network that's getting that done. So this is pretty cool and exciting and we have some good representation here today. The key with our Workshop today is this is just a chance to talk earlier fairly informally. This is a kind of a lunchtime activity, there's no wrong answers. We will be collecting some information throughout that we will share back to you in I think a way that you'll find useful. And our, our, our challenge here is you're going to be open, think about different ways of doing the work we do and have a good time chatting here a little bit together and getting to know each other in our breakout rooms. I always enjoy the zoom breakout to meet people. That is a thing that I find to be really just brilliant and interesting. And I think you'll find the same here and hopefully you'll see some old friends and make some new ones along the way and maybe develop some new Partnerships and collaboration. This will be interactive, creative, and fun. Move forward, Rachael.

Okay, so I want to give you a concept here and don't worry this, this, this this lecture of mine is going to be all of two slides and not too painful and there'll be no quiz at the end. But ELSEE is a concept that, it's really pretty prevalent here in the US and it comes in different forms in different countries around the world. But ELSEE, is a phrase that we, we refer to as the ethical, legal, and social implications. And by that we mean the implications of the ethical legal and social implications of the research we do. In the US it's a really important part of our proposals when we seek Federal funding and often from some private funding sources as well. We need to talk through and show we've thought about the ethics of the work we're doing, the legal implications, and then probably the social implications. In the US that ELS, the ethical legal social, has been

expanded to include two Es, and then we still pronounce it ELSI here, but it's economic and ecological. So, when we think about the work we do we often, especially all of us, we get a very narrow track and we think about something very close to our lab and our data, and our disciplinary theories. And for a moment at the beginning of our studies, as we write proposals, as we build our team, as we work out what's the big problem we'll work out, it's very very valuable for, for Downstream Effectiveness. If you want to have impact down the work with your- with the down the road with your work, at the beginning let's think through some of those issues of the ethical, the legal and the social. For example, for the social we're thinking about things for the people and communities that might be affected by this project. The technology I'm developing, if the problem I'm attacking is successful, then how will, how will things be implicated? What are the waves that will come from that? We mostly, because the problem we're trying to solve, we mostly assume only good things will come from our Innovations. But mostly the challenge is we find that's not always the case.

If we haven't thought through some of these Dimensions, some problems can come down the road, some unintended consequences that can maybe have some ethical implications or more to the point for our things, maybe some ecological implications about too intensive on the input side or not resilient enough on the output side. So let's think through those Dimensions as we craft our teams and design our work, and we'll do better work. And our work will have greater impact.

Okay. So our goal here is to think about, to propose a way and to work with you on how to intentionally incorporate the ethical, the legal, and the social Dimensions, into your into research. And the goal here is if we do that, if we get a diversity of people, get a diversity of ideas and perspectives, all at the front end of our research, and it all the downstream steps and decisions and, and ramifications. It'll typically just work out better in lots of ways that we in our diverse cultures define as better. And so, our goal here is just to show you a way to enact more inclusive and diverse approach to reaching those, both the under-represented stakeholders, marginalized groups, and those important allies or partners that we just haven't traditionally thought of. They're just not in our routine or in our circle. We'll push about how to find those groups and bring them in. So you can bring in some Innovations, new ideas, some new partners, some new resources. And most importantly, this gets us at this idea that the people we engage with, don't

have to be the beneficiaries of all of our hard work, but they can be collaborators in different stages of the process.

Rachael:

And back to me. Thanks so much Shawn. So today we're really going to take a different approach from maybe a lot of the meetings that we sit through. And today we're going to clearly Define our stakeholders and we're going to develop some Personas, some ideal people that we communicate with. This will help us to make Outreach design research decisions to answer our user identified needs in an approachable and engaging way.

How do we get there? We, we take this step by really having you guys do the work. This is going to be where we jump in. We're going to have this engaging process. It's customized for AG2PI and we will be developing these idealized users to really take that people first approach to increasing our diversity and inclusivity. To begin with, we will identify our stakeholders. Stakeholder mapping will help us clarify and distinguish between different levels of our stakeholders. And then after that, we'll, as Shawn noted, we will be jumping into developing our personas more specifically. And really the ultimate reason here is that by intentionally incorporating our user personas, we build a human centered approach.

This- every research development that comes afterwards is improved when we design our Communications, our practices, even our questions with our end users in mind. By the end of today, we're going to be able to identify not just who we're thinking about right now on the top of our heads, but who is missing? who do we need to include as we move forward? And we will start today with stakeholder mapping and this is going to be a full group. We all work together on this on this piece. And we, we start working on our stakeholder mapping.

It's useful to think along two Dimensions as Illustrated above for a stakeholder map. We have likely influence along the side from low to high. And we also have likely interest on the bottom from low to high. Each quadrant represents stakeholders along these Continuums and helps us to identify who goes where. Inviting the full range of stakeholders to every discussion, every piece along the way is just unreal and unnecessary. So

to understand the perspectives and influence of all of our diverse stakeholders, critical first step is figuring out where they land on these quadrants. This is what it looks like when we add descriptors to each quadrant. Powerful stakeholders with strong interests labeled critical in that upper right, they demand most of our attention. Critical stakeholders who are likely to be advocates for AG2PI and should be engaged early and encouraged to help address the concerns of other groups that may be influential, but maybe less supportive. Stakeholders help us ensure that our highest priority questions are addressed using the AG2PI data and that the interpretation of our findings as well informed. Successful implementation also depends on the corporation of stakeholders who own or hold data, ideas, communication skills, provide- those who provide access to funding and other resources, and we need to know where they are, where they stand, and how they can be persuaded ultimately to cooperate with us and to advocate for AG2PI, that's essential.

So, how do we map this? Well, what we're going to do is we're going to build this together right now. Kelsey's gonna add a link into the chat, and this will take us to a mentimeter where we will begin folding in our answers right away. I'm going to stop this share and start a new share on the mentimeter. So let's get that in there, perfect. Alright. Wave at the camera when you're all set up or do like a thumbs-up on your on your piece when you're in there and, and ready to get started and please select the menti option. And this is where we, we let our fingers do the walking. All right. I see that's a thumbs up and people waving that's exciting. Let's get started. Of course, our minds immediately go to those most critical stakeholders who are those people that are do or die that we involve with our, in our relationships. They're highly interested and highly influential and you can begin entering your responses and I will share the screen here so that you can also see the responses as they come in. Hopefully, we will be inspired by each other.

Rachael reads the answers as they are provided by the participants and pop up on the program.

These are people who with whom we negotiate, they would negotiate on our behalf. And they enlist the support of allies. They can also be our champion, who are those champions that address concerns of maybe

people who are more resistant to our work, to our communications.

Rachael:

All right. These are our most important people administrators. All right, I like it when we get to the point where it starts rotating. That means we've got these great ideas flow. University administrators too, this is exactly what we're talking about. And these are our people who one more shot here, the whole project falls apart and dies if they lose interest.

Rachael:

These are great. You guys are doing awesome. Okay, right at the top of your screen, you'll see the next definition and we're going to move to the important people next, the important collaborators people in relationships. These are the stakeholders who are highly influential, but they may have a lower interest in in what we're actually doing here.

Shawn:

As you think about these important, important stakeholders? If you think back and recall someone, I put them in criticals they're actually not critical it's important. No problem to put them here as well. And sometimes, there are these stakeholders that are kind of at the seam between two categories. They don't cleanly fit in one of the other, so, okay.

Rachael:

Great point, Shawn.

Rachael reads the responses as the participants submit them and they pop up on the program.

Rachael:

The stakeholders are people who have a lot of influence, maybe need to be reminded every so often that we're here and that we're doing something vital.

Rachael:

Undergraduate students. I love that. We have undergraduate students at

the high influence. That's awesome. We are going to be thinking about how, I'm interested to hear more about that as well. How they wielded that influence on them and how they are important.

Rachael opens the floor up for some discussion as desired. Participants are free to unmute themselves to ask questions or discuss answers.

Rachael:

We have our active supporters. Active supporters are those stakeholders who have little influence, but they have high interest. These are the people who go to the mat for us. They're there, there they show up early. They're like seven AM right here. Ready to help. They have high interest and high commitment to what you're doing here.

Rachael reads the answers as they pop up on the program.

Rachael:

Our final group, and again you'll have to forward on your phones to see this one. These are our informed stakeholders. These are stakeholders with low interest, low influence, but yet, we still have them in this vital quadrant because this is, these are people that we need to communicate with. These are still stakeholders. Thinking through, or do we just want to really be informed of what we're doing?

Rachael reads out the responses as they pop up on the program.

Rachael:

We're going to be talking through these personas and all that later on too, and it's really interesting. When you see who these informed people are that we're, we're thinking about. Who, who are they? How do we keep them informed? How do we communicate with them in maybe a different way from those critical stakeholders who need more details?

Shawn:

And it looks, looks like our informed group was the hardest to fill or it was the smallest space that we could quite easily identify our critical and important stakeholders. The active supporters, pretty good. But informed those people that have maybe low interest in the influence that we want to

keep aware of the work we do. That's a bit of a smaller, smaller space of distinct ideas. Just an observation.

Rachael:

I'm going to hand us over. We've done the Big Picture. This Is Our Big Picture stakeholders, and now we're going to hand it off to Cass. She's going to walk us through thinking from the big to the individual. So, thank you - great effort!

Cass:

Thanks, Rachael. Okay, so the goal here, I just want to pause us, because, you know, like many of you, I teach a lot of undergraduate students. So I think about learning happens and neuroscience, what they teach us about, scaffolding and how we take in information. And one of the key things is you have to hear it a bunch of times. So not to be repetitive, but to be repetitive from a learning standpoint, to remind us again and say, why are we doing this? It's because we want to have more diverse and inclusive teams because that's good for our research. So when we think about what we just did with Rachael and when we write this into a report we'll send it to y'all. It's really the idea is what stakeholders do you need to enlist. This is something that's really helpful to do at the beginning of a research project. You can sit down with your team and do this. I've done this with teams where we're getting very particular people. They'll say I know this legislator, let's call them and we have this funder, I'm going to call Kara tomorrow and really try and reach this thing. So this can be very particular people if you're doing this for your team, they can also be these kind of large groups that we're thinking about like we did today, because this team, the AG2PI team is really quite large and diverse, so it's really good to think kind of big picture. But these are people that you want to keep communicating with throughout your cycle and that is helpful for research because it tells you what are those touchback points. So you just found an awesome finding and you want be able to go back and share that with the right stakeholders at the right time, and that builds trust. So one of the things that really keeps technology including our research, our products or services from moving forward in the world, is there's a lack of trust. People just won't adopt these new ideas. And so thinking about, who these stakeholders are and keeping them informed that the level that's appropriate for them helps you build trust with a lot of these other groups.

So the second piece of the activity. There's three parts of the activity today, and the second piece is really thinking about who are these ideal, not the ideal users, we're thinking about who are the typical users of your service or product of your research. And because people here are tackling these issues in kind of big ways, you might have different sorts of end-users. This is, this is the sort of thing. What we'll do is we're going to show you images.

You see that bunch of images in front of you, now, these are Silhouettes, so it's not an actual person, but it's supposed to Spur you to think of an actual person. And what we'll do is, we're going to go through. We're going to use the pool today. To help us think about who are the end users of our, of our research of our products of our tools. And this will be, we'll do this by looking at these images and we're going to select the ones that remind us of the people that were really going at work for and we'll rank those and we'll choose our top five.

And then we'll go into a breakout room where we really hope to dig in and develop identities for these people we'll help create personalities where we'll think about their motivations and their challenges. And the reason we do this, again, it's better for our research.

We're better able to communicate the effectiveness of our research when we apply for funding or better able to do that reach back to different groups with the results that we find, and amplify trust which helps technology to move forward at a faster pace. So, inclusion and diversity is, is a really critical thing, it's something we talk about all the time, but it's not just a general social good. It's actually a really important process for research for making it sink in and work for lots of folks. So usually, if we were all interested in sitting around a table together, we would print out all of these pictures and people would be able to flip through them. And I'd be able to hold one up and say this is the person, you know, I think about what my research really, who I'm doing this for. I'm thinking about, for example, other researchers. I do basic science.

So I might see a silhouette that reminds me of a basic scientist and that's mine. That's really where I'm at. Another person, you know, we've talked to other people in this group who say, I do this to feed the world. So your end user might be a family or a child or, you know, a particular, a particular person, and a particular country, who you are really trying to affect your work. Or you might be building some of these cool robotic AI driven tools

that are in- to go right into the field, and your end user might be a farmer. In which case, a silhouette that really reminds you of being out there in the field and using this tool to support the farmer, is one of the groups I think about.

So as you see these images, think about across the broad range of, who are you doing this for? And why are you doing it? And this helps us make simplifying decisions later on. I was recently in a meeting and we were all talking about algorithms and how we're going to pull people in to do this, because, you know, immigration across all of these different organizations Data Systems. That was a very complex, very technical decision. And then what really happened was someone in the group said, but who are we doing it for? And then we talked about it and then the end result was well we don't need that, that's not something that would be beneficial to them, we don't need to bring in that sort of data, we don't need that sort of thing. And it was that simplifying decision of bring in that human centered design that really moved forward some of the technology when we were really debating about how to move forward in areas that required bringing together both the legal and technical and the research work that we all do you and do so well.

So we're going to play that today, play a little game. And a shout out to Masoud on our team. He took our ideas where we said, this is what we do when we're sitting around a table and he made it into a great tool, so shoutout to Masoud, thank you Masoud. We're going to, in a minute, share a link with you and you will see a screen and you can either do this on your phone or your computer, and you'll have a chance to get started. So you begin by just grabbing the screen and moving it forward, and then you'll be shown this image selection, you'll 25 images to think about, you'll be asked to start and you just hit go. And it's just like a fun app, it's kind of designed after dating apps.

You'll be able to see when you see an image and you think wow, that image reminds me of one of my stakeholders, for me, maybe this reminds me of a funder or maybe it reminds me of a community group or an administrator at my University, but I would click on it and select that, that group.

At the end of it, as you can see on the left-hand side, depending on,

whether you're in, on your phone screen or you're on your computer. You're going to have a chance to hit next. You've just done the 25 and are going to hit next. And then you get this little image that says wait here. And you can actually move forward we're just showing you this. Because at this point, you're going to change your hats from thinking about, is this, does this picture spark something in me? That makes me think they're going to be one of my users. And now you're ready to get on the next step, which is going to be narrow that down to your top five. So, on the left you see a screen, you're going to see, you're going to have to narrow it down to 5, but it's okay to choose as many of those twenty-five as you want to get started and then you'll have a screen where you can just click on any one of the images. And as you click on the images, a little green check mark will show up. And after you've selected five, you hit the done button and then we get a chance to rank these.

Now, depending on whether you're on a desktop or mobile, you'll rank your images just a little bit differently. So on the desktop, this is draggable. You'll just actually select an image and move it up and down. And when you're on your mobile device, you'll hit on one of these arrows to move this image. If I want to move this image up, then I hit on the green arrow. And if I want to move this image down then I hit on the red arrow and that will move it up and down and you'll be able to order. When you think about your work, who was that number one key end-user? And then who's the secondary one? Who's the third? Who's the fourth? Who's the fifth? So you'll rank your final five choices and then we'll take a minute and look at it as a team. What did you come up with? Because one thing that's interesting is this picture might mean something to me that is totally different than what that same picture means to someone else. So we'll have a bit of a conversation of who did you think these people were when you were selecting them? Why did you select them and what's the motivation there?

Cass:

Okay, as we're wrapping that up and please keep wrapping that up, I'll tell you a little bit about our next steps. So our next step is, we'll look together at what the five group personas were. We'll talk about each one and see what people liked, or didn't like what you thought when you saw them and then give everyone a chance to champion, if they had something an end-

user that they felt was really important to their work and it just doesn't show on the list, let's have that conversation and see what that person is. In the next step, when we go into our breakout rooms, we will actually take each of the pictures and will make a persona about them. This is Sammy. He works at a research station. He does this particular job, this is why he uses my work, like we'll actually delve in a little bit deeper. And at that point, it's okay to kind of expand out these personalities of the people, so that they match some of the goals. So even if you had one picture that you thought looked like this end-user for you, and someone else had another picture that was this end-user, we can kind of bring some of those ideas together in our next step. So it doesn't have to be perfect. But it's a really helpful way to start thinking about who are the beneficiaries of our work and our product. And again, this helps us think about our communication. Our Outreach efforts. How we can build trust, how we can communicate our findings to our funders how we can communicate our findings, to our audiences in a way that really works for them. So well-honed research team will use this approach to really help them figure out how to be, not just more thoughtful about the work they can do, but they can actually amplify their work for other audiences in that way. So that's where that diversity and inclusion come in and help to build trust and strengthen teams. Diverse teams tend to select and do, are able to achieve more complicated problems together. So we like to think through this diversity, first of our stakeholders, and then think about our end-user and those are two of the key cornerstones of human centered design in research.

All right. We'll try this again from the reaction button. If you have had a chance to work through it and you submitted your results, please put a thumbs up. About half of the people did not respond before. Okay. Is there anyone who would like more time? All right, then I will share the results here and we'll chat about them. Let me update them. Okay, so for the group today, for those of you that responded. These were the top- sorry, this was our top person, our 2nd, 3rd, 4th, and 5th. And then, we have these other folks, who were included. And this is a chance where we think about, in our next step we're going to take five, and we're really going to delve into those five, so you can unmute, you can talk in chat, but let's talk about this, were these right 5 and who were we thinking of when we were doing these five? So who's the first person who's the most voted on person by the group? Who were you thinking about with this person?

Cass then leads a discussion as people start to describe what the personas represented to them as they went through the selection process, and then reorders the ranking according to the discussion.

Rachael:

That was fantastic. So, what do we do there? Anybody, you know, we're running low on on time. We're going to wrap up here, but that was so inspiring to see everybody coming together. Really putting those different hats on for the different people that we were talking about it was really great.

So what we did today, we really sort of carefully constructed these individuals and this gives us insight into the ELSEE process, from the very beginning of research, thinking about the end-users helps us develop those skills that we need at the beginning, to increase diversity, increase that sort of, the availability of the research. We want to thank you guys and say, you focused this human-centered approach today. That's when we take the society as a whole and think of it as Society is a group of real life people. And how did we impact and affect them? So that was a really awesome!

What did we do today? But we did a lot. We had an hour-and-a-half. We killed it. We worked through ELSEE. And thought about how we can do fewer harms if ELSEE is considered at the beginning of the research.

We mapped our stakeholders and are learning to differentiate those key groups between the critical importance, active and inform stakeholders. Really gets us a touchpoint later that we can move on to when we're saying, How do we develop this communication who are reaching out to. We spent a bit of time finding our inspiration with our images.

We went through that persona development tool and, and that really triggered a lot of great conversation, that we focused on when we developed those personas in our breakout rooms. And so I want to give you a heads up of what we're going to be doing next, and that's the PSC team. We're going to take all of this great information, we're going to pull it into some specific personas that we'll, we'll name and get you guys those reference points and we will provide you a report of today. So you can look at this, you can share with your teams. We can, always are willing to meet with you and go into more depth as well if that comes up again.

So speaking of seeing us again, our next workshop with the AG2PI team is in February of 2022, so we're all going to, in the States we're going to eat a lot of food at Thanksgiving. We're going to celebrate our holiday season and we're going to come back ready to jump in to work in February of 2022. We're going to do another ELSEE Workshop. This one, we're really going to help us understand why AG2PI research occurs by eliciting attitudes about the collaboration, the research teams and data sharing. It's going to be more data focused than our presentation today on their personas.

So as we, as we say, thank you. Thank you. Thank you today. We open it up now for any final questions, and then we have some email connections here, and you can always reach us through Nicole as well. We welcome your ideas, your feedback and, and appreciate your time. Cass and Shawn anything you want to add?

Shawn:

Thanks for coming. Great to see you all have a great day.

Cass:

Yes, thank you all. We'll pull it all together get this into a report and try to get your feedback in the next session. And we'll talk about it, as Rachael said, it's a different topic on the same sort of thread, we'll keep pulling this thread together. Awesome. Thank you all.