DL-David Lo, Biomedical Sciences, SOM
BL-Bruce Link, Public Policy
LF-Lisa Fortuna, Psychiatry and Neuroscience, SOM
JK-Jeanette Kohl, Art History, CHASS
DS-Dana Simmons, History, CHASS
KM-Kalina Michalska, Psychology, CHASS

PRELIMINARY DISCUSSION

DL: What I was hoping to do with this chat was that by having people from different fields is, talk not just about biology or mental health or psychiatric disease, but actually get into that problem of how it's not adequately addressed by Western society by government policy decisions and things like that. And why not? What could be done differently? And also, you know whether people who are familiar with other ways in which is addressed in different cultures. You know, what are we doing wrong? Are we defining it wrong, in terms of mental health and wellness? That's why I thought this group would have that kind of conversation. Part of the question was also that the NIH funds research on mental health. However, psychiatrists organize mental health very differently than the way NIH organizes funding. So the DSM 5 is a basically a statistical manual for defining what all mental health diseases are. Every several years they rewrite the book.

KM: Now it's DSM 5 TR

DL: All the categories are defined by the way psychiatrists define things, in terms of symptoms, kinds of approaches, but none of those map onto NIH research programs. And so there's that. And then there's all this in between stuff which I think is why it's good to have Kalina here is that, with in between things, and we said the way we address things like society, impacts, weathering, social effects on not just neurobiology, but also on mental health. Again, is it because people are basically allocating. "Well, this doesn't belong to me, it's somebody else's stuff," right. And so there isn't really a kind of integrated way to look at this kind of question. And if you think of like in, say, older cultures, you know, rural communities and things like that are issues of mental health dealt with in a community level rather than you know, "Here's the office you go to." The last time we were talking we had this discussion about in cultures where you actually have people who are considered "healers" and that covers a lot of ground. Right? I mean that there's that responsibility for wellness that doesn't mean like you're the one who just prescribed the drug. You're the one who runs the X-rays and things like that. And so this is why this topic, I think, falls in between and kind of falls between the cracks. You keep hearing people saying, "Oh, you know, we should run government differently. We should run elections differently." Who's going to make that decision? Who's going to impose that on us? Because there's no ground-up saying like, "Oh, the only way we're going to fix this is, we all agree that this is the way it's going to go." So we don't have that kind of ground-up consensus, or even an authority to take action. So I thought that would be an interesting discussion.

KM: We have a paper from my lab where we surveyed UCR students, and we looked at what prevents them from seeking mental health services and the Latinx students and the Asian students, they shared cultural values, and their shared cultural values actually predicted whether or not they would seek out Western based medicine, and they were more reluctant to seek it out. So it's even relevant to our university here.

DL: Well Asian cultures too…

KM: Asian and Latino students both.

DL: So you know I had read this about Asians and I think, who are the people actually using mental health services? Is it all white people? No.

DL: We had recently done this study, and we have about a thousand respondents in Coachella Valley talking about resilience and mental health during the pandemic. And to our surprise - of course, there is a whole benefit from having all family ties in Latino communities - but I started the study thinking that all we're going to hear a lot about how they don't trust the medical profession or healthcare, professional, especially mental health, especially in communities where we think that mental health is more of a stigma or a concern, but in fact, at least in the responses we got, they said they already benefited from all this network and family ties and things like that that actually help them put in confidence in professional services. At the end of the pandemic, they actually had a little bit of an uptick in terms of more trust in the healthcare services. So I was kind of surprised by it by that

LF: The San Francisco Participatory Action Researchers did their own research through the pandemic and they identified mental health as the primary issue and concern and their solutions were not to just exclusively work with the community cultural resources - Yes, most definitely that - but they were interested in the integration of mental health providers, psychologists, psychiatrists, working with them and collaboratively, right, around, combining the resources that they have that are protective and helpful as well as getting - they say "we also need professionals to do mental health services that are responsive to what our needs are." For a long time, with all my research, I've really downplayed this idea of stigma because, you know, being a Latina psychiatrist who's bilingual who thinks about cultural pieces, who thinks about spiritual pieces, I've never had problems having a patient flow everywhere I have practiced. I've had more patients than anybody else. Even as a resident I had double the number of patients, which was very unfortunate, because I had a lot of very sick patients in my care, even as a resident. And I just have people coming constantly. And I've had, and it's not just me, I've historically had the least high no show rate. When I was in Boston Medical Center, and when I moved from like clinic to clinic, people would actually stalk me and find out where I moved. And they're like "we're coming," because they found someone who can speak the language, understanding cultural pieces, spirituality pieces. And then it's all by word of mouth. "This person is good." Right? So I've always said, it's not stigma, it's what are you providing, right? If you're not providing care that's appropriate and acceptable, then that's on us right? It's not so much that stigma. There's not that complete sort of "We don't do mental health" in the community anymore.

DL: During the pandemic, when we were doing all these town halls about the vaccines we didn't see that kind of push back either, at least in our communities here or in Coachella Valley, with people saying "Oh you're just saying that because of Big Vaccine," or something like that. There seems to be at least a certain amount of, "we are here to do our job." That's great. But I wonder why, over time I've been hearing this story that there's a stigma. Even in Asian families like ours, I didn't know anybody who had mental health issues. But I always assume that, Chinese were not going to go see services.

JK: It's the same in Germany with a lot of opposition to taking anti-depressants. People think it makes them appear weak. "I can handle this myself. I should be able to do this. I'm not going to take any medication." So there is a stigma, I would say, in that culture. I'm not sure if this is typical for all of Europe. But something that you, David, wrote in your talking points struck me as quite interesting, because it related to the occasions when I'm exposed to potential issues with

mental health as a teacher here at UCR. Students are different. You know the reaction that some of us initially had when campus opened again was, "Oh, that's going to be great! We can be together again." What I found, instead, was that people continue - students in particular - to seek particular forms of isolation. And it's not only skipping class and staying home, or wanting to have hybrid or zoom courses instead of in-person instruction. It also shows in the ways in which students behave when they are there. In the classroom, I increasingly see people wearing headphones even in lectures. Some hide in the dark parts back in the corners of the lecture halls. So not wanting to listen to your environment, to instead isolate – the constant looking at the cell phones, in order to avoid having to look at others, or the instructor. Also, I think, a residue from the pandemic in not getting close to others any more, a fear of touching, you know, shaking hands. And I'm wondering what all that does to our students.

DL: Well, that's partly why I put it in here, because I've seen a huge change in the way the students behave when coming back from the pandemic, but then also again, these whole issues with Israel and Gaza is a significant, real thing. But how much of it is also driven by the isolation of pandemic, causing more polarization and feeding any of these kinds of things? And they already there, they're legitimate, but how much does drive it more in certain direction because of the isolation polarization because of that kind of change in society, and I think I see it as a mental health issue in general, because it's everywhere. It's not, you know. It's not, maybe not an individual depression kind of thing, but it's like society's mental health.

JK: I think we are in the middle of a deep ontological shift that we are perhaps only beginning to see. The relation of our body to our mind and the relation of both to what immediately surrounds us is drifting apart, or in new directions. Just imagine, in a couple of years most students might be wearing Apple Vision devices, so that the virtual takes over, simulating to be a form of reality. But it is not. And I have a feeling that will be a new culmination point of this tendency toward self-isolation that I am seeing in the classroom already. What does that do in terms of mental health, that kind of immersion, full immersion, into other realities?

DL: We had a brief discussion, Dana, about this, but also for the rest of you about the issue of how many societies address this, how the historically different filters inside society address it as a responsibility and what has changed? What are we doing differently? What are we doing wrong? What can we be doing from a policy point of view all the outcomes that we want to measure and how all of these things overlap.

DS: No, I mean, I guess I actually have a bit of a different experience in terms of the psychological dynamics through and in the tail end of this pandemic. I actually am feeling as though something is opened that had not been before. I'm feeling as though my, both as an instructor and on the part of students, I'm feeling an openness to speak about anxiety, depression, isolation, sadness. Actually, in a way, that's highly present. And so I guess I'm almost having the opposite experience, which is, I'm feeling a surfeit of emotion in collective spaces. and thinking about how to how to address that in a way that's critical and understanding. I feel as though something is became visible that had not been previously.

DL: Can that coexist with the polarization?

DS: I mean I don't feel that polarization is particularly new. It's expressing itself in very different ways. I would say, and this is a little bit of a perpendicular comment, but I would say that one thing I really, really appreciate about the science disciplines is the way in which history, the history of the discipline has always been so central to both to instruction, to thinking about practice. And I really appreciate that and part as a historian, but also because I think it opens it

opens gateways to thinking about ways that things have been done differently and recuperating certain lineages, certain traditions. I'm thinking, in particular, of, the Lafargue Clinic in New York, just established by Richard Wright and Frederick Barton, in Harlem that that offered psychoanalytic services for free. There are lineages, and there are approaches in this very, very rich and international history of the psychological disciplines that I think could return, but offer possibly new ways of practicing new ways of thinking.

[MEETING BEGINS]

DL: I think that we can get started. Today, the theme is mental health and neuroscience. Mental health is widely rated as a top health concern in in many communities, but it can be kind of difficult to define and even more difficult to treat whether we're talking about as an individual or community level. We have a whole manual on mental disorders, DSM 5, and each edition reflects the fact that constantly being updated and focused by practitioners. Yet at the same time the NIH, which has billions of dollars dedicated to research on the aspects of human health, doesn't organize funding priorities in a way that maps onto the DSM 5 categories or diagnoses. So the biological aspects of neuroscience behavior don't really match this question of identifying disorders or treatments, or things that address mental disorders. Now, that is also on top of the separate question of whether or not society's definitions of mental health and the understanding of how these things work also may not align with the way, say, basic science/NIH people look at questions of mental health. And so things may be not moving in compatible directions at all. And so people can talk about mental health or these kind of wellness sorts of issues, and have completely different definitions in every individual you ask. And so that is, I think, a problem. But the hope is that from this kind of discussion we can sort of feel out where those incompatibilities are in definitions, and where overlaps and some things need to be addressed.

The pandemic - we already recently talked about - that is that the shutdown and the isolation, and so on, that really eventually revealed a system that was really not ready or prepared to address the need so existing disparities were only made worse. So various underserved communities are falling even further behind,. That could be identified, whether we're talking about isolation, fragmentation, polarization, and some of the more visible, destructive impacts on behavior, society norms, and that sort of thing. And so the question is, can we use this as a way to start reexamining the questions of neuroscience, mental health care, delivery needs, as well as the role society and making these kinds of connections. So maybe I should pause here and have everybody introduce themselves briefly around the room.

DS: Sure. Hi, I'm Dana Simmons. I'm assistant professor and chair of the new Department of Society, Environment, and Health Equity here at UC Riverside My research is on the history of human sciences and health, and I just completed a book on the science and politics of hunger, including, the role of hunger and the origins of the psychological, experimental psychology, and animal experimentation. So the history of psychology is dear to me, and I'm happy to be here.

JK: Hi! I am Jeanette Kohl. I am an art historian with an interest in portraiture and the history of the human face. I was co-director of the new Medical and Health Humanities program here at UCR a while ago. I have a new project on the ethics of beauty, and I'm interested in all sorts of questions related to the humanities and medicine. And I am also here as Co-Director of the Center for Ideas and Society, which is happy to host this series.

LF: Hello, I'm Lisa Fortuna. I'm the chair of the Department of Psychiatry and Neuroscience at the University of California Riverside. I'm a psychiatrist and child and adolescent psychiatrist by

training and also in addiction medicine. I have a background in health services research, especially on health inequities and disparities and mental health services with implications for a cross, cultural and underserved communities. I'm also an Episcopal priest with an interest in pastoral theology and the integration of spirituality and mental health.

KM: Hi, I'm Kalina Michalska. I'm an associate professor in the Department of Psychology. And I am the director of the KIND Lab, which is the Kids Interaction or Development Lab, and where we study - I'm a developmental neuroscientist by training - we study the neurobiology of emotion development in kids with pediatric anxiety and with disruptive behavior problems. We're very interested in understanding the intersection between biological factors and social factors. I recently received an NSF Career Award to study the effects of ethnic racial discrimination on children's threat neural circuitry and how parental socialization might mitigate some of these factors. So very interested in the parenting and social effects on threat neural circuitry and mental health in kids. Happy to be here as well.

BL: I'm Bruce Link, I think I know most of you. I'm in Public Policy and Sociology. I've studied really two themes in my work. One is the reproduction of socio-economic inequalities and racial inequalities in health. Even though the diseases keep changing and the risk factors change, somehow it keeps reproducing the association. Well, how do you explain that? How do you account for that? And so that's one area, and the other one is more relevant to what we're talking about today, and that's psychiatric epidemiology. And then, especially how the public thinks about mental illnesses. How they think about mental illnesses as it's changed over time, how it varies across cultures and things like that. So those are the two big things I've worked on.

DL: I'm David Lo. I'm moderating this discussion. My background is in basic sciences. I've been the director of the Center for Health Disparities Research, and my interest is in finding ways in which there's interaction between communities and societies and all kinds of interdisciplinary sciences, and see how they all can affect various kinds of outcomes. So I had worked on a bunch of topics that we'll see if we can get through some of these, to really talk about as I said in the introduction. The people that we've gathered here, I think, have a lot of really great perspectives on various aspects of this, so we're going to see how we can all get it all mixed up here.

So let's start off with one first question, which is, whether Western society's views on mental health are preventing us from identifying and treating individuals with specific mental health care needs. Or are there other societies or cultures that are better able to manage these various kinds of needs. And we talked about this before we got started, about this question of whether there is in fact a stigma in terms of mental health, diagnoses and treatment. So if anybody wants to sort of get us into that question.

BL: I can say something about the public's view about major mental disorders when they're presented them, as a little description, and how they respond to them, and where they want to keep them away from them and then the trajectory of that over time in the United States. And it's really interesting, because we'd hope that at a certain point, that if we made it more biomedical, if we got the public to think, "oh, this is, you know, in the brain and in the genes," then they would excuse people and say, "Oh, okay. And you're in. You're part of us. You're not different." But that didn't happen over time. As the public, did come to see mental disorders as more biological, it didn't change how they wanted to keep people away. Until recently, around depression, it's gotten a little bit better. But schizophrenia, describe that to people, it's gotten worse, and in multiple cultures. Germany is one. Some of the best studies have been done there. So that's really that's just something I can say about that theme.

DL: So let me ask Dr. Fortuna. So you're describing this idea that by placing more of a science focus - that makes it more real and more objective. So then, you know, as though a scientist in a white lab coat said, this is schizophrenia, this depression, or is it just showing failure of that notion?

BL: I don't think the public, the public worries about the mental illnesses aren't so much that they're real or not, you know, in biology. You can tell them they're in biology, but if they're afraid, it doesn't matter if it's genetic or not, they're afraid because of what they fear the person might do. Or they think just can't understand what's going on with that person. It's unrelatable, and that's fearsome, you know. And those things aren't tamped down by saying, Oh, biology. Those people still have those feelings. And that's why, especially with schizophrenia which people have trouble connecting to, that you'd expect that.

LF: I agree. I think we have made some differences in showing, you know, clearly for addiction as well. Right? That's another set of disorders that we've made more medicalized and biologically based and that that has helped to some degree. But I think, nonetheless, there are still those cultural and societal constructs that continue to have people be concerned about being identified with having those illnesses. I still don't think it's the same as having - having schizophrenia is not the same as having diabetes. I think at least culturally and socially, even if we buy in that it's medical. Part of that is in certain cultural contexts, what does that mean for me as a family or as a parent having a child who has schizophrenia where there is still, even with the biological stories, there's still a lot of blame around something gone wrong. The mother who 'creates psychosis' and all kinds of other things, I think, is still implanted within even our American culture and definitely in societies where how your children come out to be has implications of something you've done wrong or not. And if we look at spiritual factors and religious factors, they're additive. Guilt and blame around sin and judgment and punishment of having a child that should have such a severe disorder that in Scripture is sort of correlated with having demons within you. So there's still a lot of stuff to untangle and so some of the interventions that that I think have been really helpful is when you - I mean, this has been done decades ago in New York, where they really worked with Latino families in New York City who had children who had schizophrenia. The transformative piece of being able to talk in in confidence with other parents that come from your cultural context, who are experiencing a child experiencing psychosis, and being able to talk about that shame and guilt as part of the transformative process. And I don't know that our mainstream therapeutic context takes that enough into consideration to make that a safe space.

DL: So I wonder, talking about guilt and diagnosis, I think about autism, where there's a lot of parental guilt about having a kid on the spectrum, but is part of the problem, is having to feel that society hasn't given a label and a diagnosis rather than community say, you have neuro developmental issues. Does that need a label? Or can that be addressed from a community way. I mean, things like group housing, those kinds of community based ways to address individual needs rather than saying, you have to have this label there for your guilt because you created one of these. Is there something that we are doing in the way that this is so much of a rationalized, "scientificized" society that's put us in that position.

KM: I think one of the challenges in neurobiology is that even though there are individual differences that are measurable, accessible, I can put an individual into the scanner. I can see group differences. But then, looking at the origins of some of that, we haven't really comprehensively mapped, so called, like exosome, and really looked at like where? What is the source of these individual differences. Some of them might be biological vulnerabilities, but

there's so much that has to do with neighborhood effects, poverty, health disparities that all play a role. And so, if we could shift the conversation to these are biological differences, but they are influenced by such a wide variety of social factors that are disparately experienced by the population. Then then maybe some of the blame can shift away from the individual to the society at large, and then the question is what to do –

DL: We don't do this kind of thing like "hate the sin, not the sinner" for people with various kinds of developmental or neurology or psychiatric issues. We don't blame conditions so readily. It's still a focus on the individual.

KM: Exactly. Well, exactly. So if we could zoom out and sort of give the broader context, then maybe we might be better positioned to come together as a community and say, well, here are the conditions that are increasing the likelihood of somebody developing greater vulnerabilities, and then that could give us a language to better come together rather than individualizing some of these issues.

DS: I think disability justice work helps us think this in some way in terms of locating the issue. Is the issue located with this individual who has identified as neurodivergent? Or is it the issues classroom structure, the workplace? The university? The society? are badly organized for this person, and the way they want to express themselves. This not all related to my research, but I'll give you a personal example. Which is: I had a cousin who recently passed away. Who was trisomic, so was diagnosed with Downs syndrome but she did not identify with that diagnosis. She was born in the late seventies, and her mother was extraordinary in that already in the late seventies, she created this space for Rose, who's my cousin, to live a creative life. My aunt essentially sacrificed herself, and fought and fought and fought reserve space, to bring in music teachers who would compose songs with her, to send her - to give her writing classes, to provide her with a space where she lived a full and creative life. And in fact, there's a posthumous art exhibit up now in Montana for hundreds of character drawings of different characters who she imagined in this world that she lived in. To see that, I have to say I don't think I - I loved her dearly - but I did not realize the extent to which her being was protected by her mother. That has really shifted my sense of thinking. She's also half Crow and in the Crow tradition there is a person that is 'Hayoka' and she was understood as that kind of figure by some and others pushed her away. But to see that, I think it's really given me a lot of insight into the extent to which the normative pressure - of how intense normative pressures are, and the kind of combat that my aunt fought for 40 something years until her daughter passed to create space simply for Rose to be who she was in all of its all of its aspects, as frustrating as sometimes they were. That was a battle. It was a lifelong battle that that I think not everyone has the strength to wage.

DL: So we don't have a society that's created to have space for creative people.

JK: Well, we have strong norms that guide us, and we carry a lot of historical baggage that comes with these norms: religious, societal, scientific. What counts as normal and what not these days? There are such strong paradigms of judgment out there. When I read what you wrote about mental health and its definitions, I wondered what exactly these definitions are and how to best work on them, because that seems to be a root cause for a lot of the troubles we have named. In the end, it is all on a spectrum. And how do we redefine and refine that spectrum? I don't know if it can be done top down, by some scientific entity or group. We're back to square one in a way, right? How do you solve the issue of defining mental health?

DL: But I have a totally irrelevant story. Maybe because of the nervousness of preparing for this, I woke up in a panic last night, realizing that I had no marketable skills. And at this age, what am I going to do for a living? But because of this kind of idea of like you have to have this and this in place, you know, a professional basketball player, something like that. And I always had this anxiety that I don't actually know how to do anything. The only thing I can do is be a college professor.

KM: I heard you're a pretty good cook.

LF: But I think in terms of the definitions where we're talking about diagnostic manual, it's a group of experts who? This is how you said it. Go in a room and hash it out. What do we see in the literature? What do we see out there in the field? How do we define these things? And the last DSM definitely moved into the idea of a spectrum of disorders, a spectrum of but illness. Right? But I don't see - it's not tied to a spectrum of human presentation. It's more the spectrum of disorder. And how do we define that.

DL: Not 'spaces'. Spaces rather than disorders.

LF: And you know it's handy for billing and writing down your diagnosis and for communicating across providers. You know, where I'm talking about schizophrenia. I'm talking about schizoaffective disorder, major depression, recurrence, moderate. You know all those things to help define what is what is wrong with the patient. I think on the clinical side, so talking about the individual side, a lot of what I've had to do is translate that. So to translate for that person. What do they understand depression to be. Across culture, people understand - Well, it means, to be down, and all these other things. But a lot of my Latino families will talk about how it relates to their relationships and the stressors in those relationships, and how that's related to their depression. Not speaking around sort of individual, "Okay, it just means that I'm down for the last 2 weeks, and you know, without an improvement on most days." It's what my depression is - is the stress that I'm having with my child, who was sexually abused, or who - all these things in my role as a mother. Or I feel like I can't work, I feel like my body is achy and pain. People are always talking about, Oh, you know, people from other cultures are so not psychologically minded. And they're all about their bodies. And they're all about like their contexts. And I'm like, guess what? That is actually probably more important than what's written down in the DSM. What you're feeling in your body and your functioning and your relationships is probably more critical than whether I'm saying, Okay, it's been for 2 weeks? Most days than not? You know, in looking at the DSM. And it helps me define where this person might fit in our sort of biological medical frames, but it has to have the translation of what does it mean for that person? Because what I found is, I cannot help anyone just focused on my DSM criteria and trying to sort of see that go down. I have to be able to be responsive to what they are feeling in their body, feeling in their being a mom feel, and contextualizing it. And once we contextualize it, that's when I have felt it's been the most effective. That's when you know, even adding SSRIs and all that which we're also having questions about how effective the SSRIs really are, especially with young people. Serotonin uptake inhibitors, antidepressants. You know, we thought, that's going to fix everything, and then we'll augment it with all these other atypical antipsychotics and do lithium augmentation, all of these things. I often see my colleagues talking about these complex cases where they're like, well, let me add this to the mix of medications, looking from that biological frame, and I'm often one of the few people in in the room in those contexts who would that also say, How for that young person have we changed what's going on in his or her classroom? Do they feel like they belong in the classroom, or are they always being thrown out of the classroom? Do they have what they need to be able to do their best from where they're coming from, and their talents in that classroom? Is that happening? What

support has been for the mom, because often that's not sort of the thing that's calculated. It's "oh, let's go up on the medication."

DL: So you were talking about antidepressants. In one of the places in my medical training, they emphasize psychotherapy, even if you're going to do chemotherapy. The question is - a lot of these antidepressants were basically picked because of the P values, not the actual biological function. Is that again, the scientific medicalization of disease rather than a focus on the needs of the individual, and how they perceive and how they are self-aware enough to know what the real issues are, with help. With help. Again, even the way environmental influences affect your biology, the better you are where you are of those influences helps what can you do about it.

BL: I have one thing I wanted to bring to the conversation. So often, I think, when bad stuff happens like the pandemic or trauma or something, we try to think about what we can do for the individuals involved. I think we need to think more about how to address mental health problems, as some of you were intimating, from a contextual way. I think we have got to get more creative about that and thinking about what's the hurt of all of us and how can we address that hurt? That would help a lot with the individual problems. I'll just give one example of that. This psychiatrist that I work with at Columbia, and I called her a psychiatrist for communities. Her name was Mindy Fullilove. She would figure out what hurt people in the community and one of the things that hurt in that local community where we were was the parks have been divested from. They stopped taking care of them. So she organized these opportunities for everybody to get together and try to make the park better and then it kind of like helped everybody. Or after 9/11 we should all walk from one end of Manhattan to the other end of Manhattan together because we were all a little bit traumatized by that. So that kind of thinking, I just think we need more of it, and I think some of the things folks were saying fits that.

LF: I absolutely agree. I think that's what's happening in some of the work that we're doing in San Francisco that's community led. They have completely said, we buy into psychology and psychotherapy because there's a place for that, when you individually are suffering to such a degree that you're so depressed, or you have so much PTSD. And some of them have experienced a lot of help from care in the medical and psychological field. But across the board, in that community what they're saying is, and we need to be able to have our community ways of healing. They have the saying of 'La cultura cura.' The culture heals, in the sense that we have to lean back into - not just a deficit model, like look all the things that we don't have in our community that's been taken - but what do we actually bring in terms of our traditions and our relationships in our community and our culture. Whether it's our music or cooking together or walking together. There was a group of gentlemen in the mission district in San Francisco. They started to create a low riders men's group to be able to work with their hands and work on their low riders and talk about the stuff that's happened. There was a reopening of thinking about mental health, I think, for some people because of the shared experience of Covid, and what it really did to the community, that did open up conversations. What's interesting and creative is that it's opened up ideas about solutions. How can we do it on our community level and in partnership, which is an interesting opportunity with us in the psychological and psychiatric field.

DL: So Bruce was talking about after 9/11. So it sounds like, though, these are generalizable. It's not like a specific trauma needs a certain specific solution, that these moments to talk and things and address any of these - like recovering from the pandemic - is that what you –

LF: I think so, I mean, if nothing else. It's more complex than what I'm about to say. But you know what we have seen in post-traumatic stress disorder, which is one of the things that I study a lot. You know, the most protective thing is social support and community, even after

horrible disasters. With strong community support people do better. Right? Mental health, not perfect. There's still PTSD in the community, but the more social support and resources of that support that are available, it really helps people. There are all kinds of cultural practices that are around feeling more reintegrated and improving post-traumatic stress disorder, feeling more connected. An opportunity where people are starting to talk about - we talk about post-traumatic growth where some individuals might be able to - actually after a trauma - actually grow, not into a disconnection, but lean in more into more connection. There are more models now coming out around collectivist post-traumatic growth. Which is what I think is happening with COVID, where we are at this stage, that people are really starting to talk about that and trying to figure out in certain communities. How do we have sort of a Collectivist post-traumatic growth that also, by the way, includes trying to improve some of the resources and the socio-economic issues that put us in such a risk through the pandemic.

DL: Is that a bottom-up sort of thing? Because part of what I wanted to ask was this question, whether from a policy or a top-down approach? Or would that immediately make it too political if you could try something, provide support on broader scale.

KM: I like your comments about the space. In a lot of this work, we think about mental health and resilience, but the absence of mental health problems and mental health disorders does not equate to human thriving, just because you don't have a disorder. And so I liked your comment about like widening the space to also include wellbeing, thriving, which is absence of mental health disorders or more issues, plus community plus thriving plus individual growth. So I appreciate that. I think people talk about it and it's still missing from our taxonomies.

DL: I've never been completely clear on how you define 'thriving'.

KM: I guess, in terms of wellbeing, Wellbeing doesn't necessarily only include the absence of distress or the absence of mental health. Am I fulfilling my potential? Do I feel connected? How's my wellbeing like? So it's not just - am I not depressed? It's also - am I happy? Am I fulfilled? And I think when we think about mental health, often the range starts at 0 to negative, instead of 0 to positive. Our communities have so much richness that they bring to the table, and we rarely look at that end of the spectrum.

DL: Is there a 'there' there? You check off a sufficient number of boxes and can say "yes, I'm thriving"? Or, I need a little bit more of this, a little bit more of that.

KM: For those of you who are clinicians, subjective experience matters. So what patients are saying matters. I can measure someone's brain response. But what are they telling me? Do they feel happy.? Do they feel fulfilled? I think there's a subjective experience. I mean, we rarely connect what we're measuring. And you know, I'm a neuroscientist so obviously, I'm biased because of my training. So there are differences, but the question is, what do they connect to? Who measures what they're connected to and are we measuring that space comprehensively? My student, Dana Glenn had a recent paper, and she looked at - we study children's anxiety, so we were looking at whether children's anxiety affects how they perceive facial expression. So we looked at how sometimes, when somebody is anxious, they might misinterpret a facial expression. They might misinterpret a neutral face for a threatening face which causes them distress. So we looked at that in the scanner, and there were associations between anxiety and the way that children interpreted faces and responded to different faces, especially ambiguous faces. But what she also found was that those differences were affected by whether or not children were anxious about being in the scanner and being in the research space. And those differences were correlated with socio-demographic factors. So they were correlated with socio-

economic status, objective socio-economic status. So the interpretation of the data is different once we account for different kinds of features, and we're mindful and thoughtful about what they are. So I think they do correlate, but we don't measure it adequately or comprehensively enough, myself included.

DS: I wanted to ask both of you exactly that kind of question. I know you are both in departments of psychiatry and neuroscience, you're working across scales and thinking about biomarkers at the same time as you're thinking about communities, and I can imagine that that's a real challenge. I think it's sometimes easy for humanists or others to dismiss the biomarker. You know, wanting to focus on representation and on the social structures. I don't share that view. I think there is something happening in following biomarkers. But just curious how you think about how to mediate those and mediate the scale, either in terms of the usage of drugs or in identifying levels of hormone or cortisol or brain activity. I would love to hear your thoughts.

LF: It's a complex question. I think the way I approach it, my training as a psychiatrist - ideally we are trained well in thinking about things in a very bio-psychosocial way. On top of that, my training in theology and seminary, and thinking about spirituality. I think, where we fall is to think that things are disconnected. How can our mind be connected to our brain, which is a biological organ which has many, many chemicals and many, many other things happening across our body. And it's not just in our brain. It's in our guts, everywhere. We have serotonin and all kinds of other things. Our whole body is wired chemically and electrically in a very fascinating way. How could these not affect each other? What we're thinking, and what our body is doing, and what our body is doing, and what we're thinking. And how could that not affect how we understand the transcendent and the spiritual and connections? And how does that not connect to our relationships with the world and how our environment is interacting with who we. Our physiology is very porous with our environment, which will be a very interesting thing with the new educational program that you have [in SEHE]. It's porous. We live thinking that we're disconnect, that we're a defined unit that has these compartmentalized components and we're compartmentalized from the environment. But it's all a fluid, porous thing and so, at any point, any measurement that we make is just a sliver of the whole story. To me, it is like looking at the cosmos, and you're looking at the moon, but you're not seeing the whole universe. You know where the moon is and what it takes to get there but there's this whole other universe around it that we're always exploring. And I think humanity is like that as well. I don't know how you think of it in neuroscience.

KM: I like that framing. For me, I'm trained in development so that frames a lot of my thinking, because the brain - we know how the brain develops. What some of the questions that I can ask are, what is the influence of certain kinds of experiences, and at which time point? And how do they interact with things like parenting and hormones? So I think the developmental framework helps me to dissociate some of those factors or think about the interplay between those factors, instead of in a system that's fully matured already. What we try to do - and that's thanks to the Health Disparity Center really - is, we take a community based participatory approach. We invite community members. We have a standing Community advisory board, and they give me feedback, which has been very humbling. They give me feedback on my protocols, on my recruitment strategies, my questionnaires. I ask communities, How do you feel when I ask this question? When I use these particular terms. Am I missing something? Am I characterizing your experience adequately? And they give me feedback. We've been doing that for a number of years, and I think it takes some humility to take critical feedback, but then it strengthens the work. This work is so interdisciplinary, so being open to disciplines that have been doing this work for a long time, sociologists - Bruce, Rengin, others - have been doing this work for a long

time, so learning and collaborating and just creating more opportunities to address these questions together have been instrumental for me.

LF: I think the community expertise as well, I would add to that. There are things that the community brings up. It's not only the feedback, but it's also ideas that blow me away. I'm like, "oh, that is a fantastic way to look at that. Let's try that." That's what has been really satisfying for me around the community- partnered work - the unexpected. I thought I knew a lot of things, but a lot of unexpected ideas and ways of conceptualizing all this.

JK: So is the idea of community, those strong pleas for community that I hear, are they based on an ideal in-person community? I think when we talk about mental health, as I said at the beginning, it might also be a generational problem, a problem that shows itself in different ways in the various generations. The problems that reach the surface look different. That deeply human relation of body and mind, the flow and the complex entanglements between both of them – I'm wondering how those deeply penetrating new experiences of *virtual community* shift and shape younger people's approach to real-life experience on the one hand and the experience of their own bodies on the other. Is there research being done in that direction, trying to figure out and describe the consequences of the shift from real world and our exposure to one another as humans in a room toward something more abstract?

DL: Part of a larger community, you mean?

JK: Online, virtual – those are illusions of community in the traditional sense, and yet in a way, they are *new forms* of community – fundamentally different from the community that you might find in a room, in a church or a classroom, together with others.

DL: So let me use this chance to ask what I think should be the last question. So, as Bruce said, a lot of the discussion would make me really optimistic that we're connecting all these things, but it's more on the individual level. When we talk about the larger virtual community or things like that, is there a responsibility where - yes, you can have bottom-up activities, and it can be very effective. For the people who don't know about these things, is there a larger responsibility for either policy or for communities to spread the word, to take responsibility, providing services, provide resources. And how do we do that? Are there examples of people having been able to do that in the past that can inform what we could be doing now.

DS: Well, something that immediately comes to mind is the way in which mental health became front and center during the pandemic and courses were redesigned. Institutional rules and ways of operating or redesign in response to this awareness. And I can imagine a similar process happening at the level of, say, urban planning, that when you place community and social interaction and creation of community front and center, then you build squares. You have spaces where people can walk and sit together. I'm thinking maybe there's an analogy in the way that little by little, the field of public health has begun to intervene in those sorts of areas more strongly on the basis of a public health argument. It may be that that mental health, as a as a field, as a profession, is doing so as well, to start to reach toward "how are neighborhoods designed? Who's interacting with who and which freeways are cutting them up? When you start to think about level, then then I think you start to open up possibilities for a structural change. I guess what I'm thinking with is that we have to enter in the whole process with porousness and humility, and not presume any of this.

LF: There's some movement to make some changes. I mean, if we look at NIH, and these Com-PASS grants which are Community Partnered Research for Science and Society. What the

Com-PASS stands for, and they're funding communities as principal investigators and they're asking for communities to come together and think about those structural roots of inequities that impact on health, including mental health. So the project should gear towards those upstream issues and thinking about community resource planning and all kinds of other things. And then looking at health outcomes over time. I think it's still a scary enterprise for mainstream science and NIH and funders to trust the community. One of the things that I'm really experiencing is, you know, they put a lot of structure into it. The hubs - they're supposed to help guide and the academic partners, like we are with this particular group. To help put - it, it still feels like putting guard rails a little bit and making sure that the community can handle leading science. And they'll say they're anxious. They said, in the first meeting, we're anxious about this new initiative, because it's completely shifting a paradigm of who gets to lead science.

DL: And they had to build it from an existing bureaucracy.

LF: And the structures that we have.

DL: I recently saw a short film about how King Charles has been focusing on villages in a way that changes can have an impact on things like mental health, instead of housing projects.

Anyway, this is great discussion. Thank you so much.

JK: Thank you for bringing us together.