Ramona Schindelheim, WorkingNation editor-in-chief:

You are listening to Work in Progress. I'm Ramona Schindelheim, editor-in-chief of WorkingNation. Work in Progress explores the rapidly changing workplace through conversations with innovators, educators, and decision-makers, people with solutions to today's workforce challenges.

Advancements in technology continue to change all jobs across all industries, from retail to healthcare to computer science. Demand for workers with tech skills is exploding, particularly in high-tech industries. And they're appealing. They offer higher pay and more job security than many other industries. However, Black, Hispanic and women remain substantially underrepresented in that high-tech workforce.

What's being done to change that? I sat down with Katy Knight, president of the Siegel Family Endowment, and Allison Scott, CEO of the Kapor Foundation, to look for answers to that question. I started out by asking Knight to define a high-tech job.

Katy Knight, Siegel Family Endowment executive director & president:

We're thinking about software engineers, and though their work does not actually look like this, I think what you think of when you think of the matrix, all the code flying by the screen, those kind of jobs are prevalent. But they're not just at tech companies, which is an important distinction. There are a variety of types of engineering. I think I've said recently that being a technologist is like being a scientist. There are many different ways to be a scientist. There are many different ways to be a high-tech worker on the engineering side.

Ramona Schindelheim, WorkingNation editor-in-chief:

What is the workforce makeup in this group, this underrepresented group? It's a small percentage of Blacks, Hispanics and women are in this group, so how small is it?

Allison Scott, Ph.D., Kapor Foundation CEO:

Recently we actually saw a release from the EEOC where they have been tracking diversity in the tech sector over the last two decades. What we've seen, unfortunately, is the lack of any meaningful progress in increasing representation of women, of Black workers, of Latinx workers and native folks as well.

So the current data, which again you can find at the EEOC's report, the current data shows that Black workers make up about 7% of the workforce, Hispanic workers about 9% of the workforce, and women less than a quarter of the overall tech workforce, and that's the overall tech workforce.

We've also done a bunch of research at the Kapor Center on some of the largest tech companies, and we've looked at their trends. So the largest tech companies that employ the most workers and have the highest salaries have even lower percentages of underrepresented groups and of women. Unfortunately, this data just has not changed over the last two decades.

Ramona Schindelheim, WorkingNation editor-in-chief:

I think what's striking about that too is that, for example, Hispanic workers make up almost a fifth of the workforce, and they are not in these jobs that are paying well and offer advancement and job security.

Katy Knight, Siegel Family Endowment executive director & president:

Well, and not only that, but when you look at Hispanic workers, that great example, not only are they underrepresented in the tech workforce overall, but as you get higher on the rungs of the ladder, representation drops off even further. So even if these subsets of workers are able to access the industry, are they able to access it and have an ongoing scaffolded career ladder that advances them to the highest leadership roles? It seems like not really.

Ramona Schindelheim, WorkingNation editor-in-chief:

So Allison, when you look at that data in there, do you see a particular area? Is there more disparity at that higher level? We see the managers. There's a lack of diversity there, but is there a particular field that we see this happening in a particular part of the industry?

Allison Scott, Ph.D., Kapor Foundation CEO:

There's the high-tech workforce, like we were saying, across the tech companies, the non-tech companies, banks, manufacturing, that kind of thing. And we do have, and I think increasingly over the last couple of years especially have been trying to incorporate that more into what we talk about because we have been primarily focused on more the high-tech sector and the workforce within it. So the big tech companies, the FAANG companies have been a target. The startup landscape and ecosystem has been a target. Things that I think had a very clear and obvious there's a lack of representation here and there's huge economic mobility opportunity here, but we've also, at both of our organizations, I think widened the aperture beyond just the tech sector, but it's where we need a lot of help.

Ramona Schindelheim, WorkingNation editor-in-chief:

So what is the, I guess bluntly put, what's the problem? Is it lack of access, lack of network? It's not lack of skills. Everybody has skills. Everybody can do these jobs, if given the opportunity, so where is that gap?

Katy Knight, Siegel Family Endowment executive director & president:

The pipeline is leaky, as we know. So it happens across the board. I'll let Allison speak I think more to the on-ramps because I think what we've seen and what I've been really curious about and what I think is reflected in this report is what happens after people even get into the tech sector, why are they not able to access higher paying jobs, why are they not able to get promoted? Why are they falling off in representation as they get up to management level?

On the other side, how do we get people into this industry at all? What is just the barrier to entry at the beginning and then what are the continued hurdles? But the barrier to entry at the beginning I think comes from a variety of different blockers to opportunity.

Allison Scott, Ph.D., Kapor Foundation CEO:

As Katy was mentioning, one way that we like to articulate the problem is through a leaky tech pipeline metaphor, which basically just articulates that from pre-K12 education to post-secondary education to the workforce, all the way to venture capital and entrepreneurship, there are biases and barriers all across the way, and many of those barriers are structural.

So a few examples, something that both Katy and I focus on a lot is K12 computer science education. So we know that we only have only about 57% of high schools across the country offer computer science

courses. So you're automatically restricting the ability of about half of our students to even pursue a course to potentially gain interest or the skills needed to go on to pursue computer science and higher education.

And then there are also a whole variety, as Katy mentioned, a whole variety of biases and barriers that have been documented around the ways in which particularly the largest tech companies are prioritizing talent from certain institutions, like biases in the hiring process is something that we continue to see a lot of as well.

Ramona Schindelheim, WorkingNation editor-in-chief:

I'm stunned by that number on the computer science courses in high school. I haven't been in high school for a few decades now, and I even had a computer science course back then, and it would feel like that should be really a part of any kind of education as we prepare people for being out in the world because computers are part of all of our lives. So that, I have to admit, I'm pretty stunned by that number.

Allison Scott, Ph.D., Kapor Foundation CEO:

Yeah, absolutely. And then the numbers are actually even lower if we look at schools where primarily Black, Latinx, indigenous and low-income students attend. So again, you are automatically restricting the opportunity for a huge segment of our population to ever explore these courses to ever gain interest, to understand what the field is, to understand what the possibilities are for careers in the space, just by the structural barriers that are in place at the K12 level.

Katy Knight, Siegel Family Endowment executive director & president:

And when you look at it through the lens of then what happens next, so to even be, given the explosion of interest in computer science and interest in tech jobs, the number of applicants to CS programs at undergraduate institutions has skyrocketed. And so as the barrier to entry there gets higher because everyone wants to do it, so the admissions offices are looking for students who seem most adequately prepared, those students who are at the schools where they have access to CS courses to get that exposure who have taken AP CS are going to be better candidates and better prepared. And even when they are not necessarily any more skilled or smarter than a student who hasn't had that access, it's just with the pool so big and so deep, there are just certain impediments that come up because you've got to create some gates. The admissions officer can only do but so many things.

Ramona Schindelheim, WorkingNation editor-in-chief:

Anybody that's listening to this podcast know I have a little bit of an obsession about visibility. How do you make sure that people see that those opportunities are out there because there are opportunities, and you don't need a four-year degree for every role that pays well. I know there's free certificate programs that can get you on the pathway, get you in a door with some internships or fellowships and that which mentoring, that seems like a good way to maybe expand that population. I'd love to hear your thoughts on that, both of you.

Katy Knight, Siegel Family Endowment executive director & president:

Yeah, I mean, I'll start. I'll say I have a former colleague who used to work with us at Siegel and is now at The Tepper Foundation. And she would remind me, once a month it would come up in conversation, she

would remind me of the staggering statistics on not only the ratio of student to counselor in most public schools, but the simple fact that most guidance counselors are not trained as college and career counselors. They're doing college and career work on top of whatever other issues the kids have, which could, depending on the environment, could be incredibly intense or just sundry.

So there are just so many things that they're dealing with and there's no clear and obvious pathways because there are so many ways that you can enter this field, this traditional bachelor's degree in computer science, go work at a big tech company, get a master's or PhD. That's one path. But we, in the philanthropic and non-profit community, have done a lot of work to try to create alternatives which have had I think some traction, but they require you to do a little more work to have access to the social capital that will allow you to get an internship, that will allow you to understand how to navigate the field.

I look at the work that something like a Break Through Tech is doing to help women get access to those mentors and those jobs. These are women who are very prepared. They're more than adequately prepared for the roles that they are looking to occupy, but they need the scaffolding. They need the human who will help them get in front of the right other human to get those jobs, and that part is that intangible that is really difficult to scale.

Allison Scott, Ph.D., Kapor Foundation CEO:

I just wanted to add to what Katy was saying maybe two points about visibility and representation. One, I think we, the global we, have not done a good enough job in articulating the variety of careers and the career pathways, both into what we think of as traditional big tech companies, but also startup companies. Also more traditional financial, the big financial industry, all of those different pathways that still, even medicine, you have folks who say, "I want to be a doctor. I don't see how computer science and medicine are intersected." So I think we need to do a better job of creating visibility to a variety of different careers.

And then also, I'll definitely give Katy a shout-out who's been leading in the public interest tech sector, which I think has been very helpful in trying to change the way that higher education institutions are preparing tech talent to go into a variety of different careers, including in the public sector, so utilizing those skills in different ways. And I think there's some evidence that shows that especially the younger generation are very interested in meaningful work as opposed to what's the most lucrative position they can have. And so some of those opportunities could be public sector, it could be private sector, they could be startups that are focused on addressing critical needs of communities. They could also be creating their own companies that can address some of these challenges. To your point, I think visibility is super important.

Ramona Schindelheim, WorkingNation editor-in-chief:

I just had a recent podcast come out also about increasing representation in the venture capital area because I think it's less than 2% are Latino or Latina, and there's a nonprofit out there that is trying to increase that through mentorship because the more people that you can get from these underrepresented groups, the more startups from those groups can also get funding. And in this country, small businesses, startups are the number one job creator out there, so new jobs that can be created and they can be created in a community.

And again, going back to this idea high-tech is needed in every field, I, "Yes, and...," that. And Katy, the Siegel Family Foundation, I read that you recently started a partnership with the National Science

Federation and you started a new investment. Tell me a little bit about the projects that you're working on in that area.

Katy Knight, Siegel Family Endowment executive director & president:

We have been really just overwhelmed I think at the success and the willingness of the NSF to pick up this public interest technology bend and to work with us to think about the responsible design, development and deployment of technology. So Red Dot or Red Dot, depending on how you pronounce it, we just did $18 million in grants to a really wide variety of projects, research projects that are focused on how we do what we've been doing, which is build new technology, innovate, be iterative, throw stuff out into the world, but how do we do it in a way that does have more consideration for community voice, for ethical implications, for what our chairman calls the pollution, the societal pollution that can occur from advancing new technology.

And I think what's very cool about that, we started the partnership is with Siegel, and with a number of partners including Kapor, McGovern, Pivotal Ventures, the Ford Foundation, I think that's everyone. Oh, nope, and Omidyar, I try to forget no one, and the NSF all coming together to say, look, we all have different reasons that we care about tech and the tech world, tech products, the tech workforce looking a bit different. Let's try to advance this through something as big and as meaningful as the National Science Foundation. That's huge. I think it gives a sense of legitimacy to this work that I always believed in, but perhaps is helpful for everyone else to understand.

Ramona Schindelheim, WorkingNation editor-in-chief:

You're both philanthropic organizations. How do you integrate the employer into this process? Because they're the ones who need the talent. They should have a role in it.

Katy Knight, Siegel Family Endowment executive director & president:

I'll start, but I know Allison has more to say on this. Employer engagement across the learning and workforce interest areas for us in our grant making has been a space of constant iteration and a challenge. And I think it also depends a lot on the macro conditions. So when the labor market is tighter, there's a lot more interest from employers to engage with us on questions of training and placement from underrepresented groups. When it's not so tight, interest wanes. And so keeping that attention and making sure that we're working with partners who understand the long-termist view of developing a pipeline of workers so that it's, they're available and ready to be part of the industry in an evergreen way instead of expecting when you suddenly need workers that suddenly there'll be 100 trained people is really important.

Allison Scott, Ph.D., Kapor Foundation CEO:

That was great, Katy. The only thing I'll add is, particularly in the computer science education space, I would say that we've had some success in working with some really great partners who represent some of the largest companies, to Katy's exact point, that understand the need for early investment in computer science education.

One of the challenges on the back end, however, is employer engagement in the actual hiring process. And particularly as we're arguing for things like non-traditional tech pathways, different credentialing opportunities, apprenticeships, that's been more of a challenge. And I think that's something that we absolutely need the support of tech companies.

Katy Knight, Siegel Family Endowment executive director & president:

That reminds me of something that I'm so excited to say that I interrupted you. I'm sorry. I want to give a bit of a shout-out to Citi who has partnered with Pursuit, which is one of our long-time grantees at Siegel. And they are a tech training program, and they've evolved over the years to train people for a variety of tech jobs. It started with basic software engineering, iOS, Android development, and have grown from there.

Pursuit now has the first registered software engineering apprenticeship in New York State as of a few months ago because Citi has seen the value in their work, seen the value in the employees that they see come through that Pursuit pipeline and have said, "Hey, let's work together on this." And so there is a true apprenticeship at Citi for Pursuit fellows who complete their training, and Jukay, the CEO at Pursuit, managed to go through all of the bureaucratic hurdles of getting that to be a registered software engineer apprenticeship, which I think is a really crucial model for us to be thinking about if we're going to advance and modernize apprenticeships.

Ramona Schindelheim, WorkingNation editor-in-chief:

Is that a registered apprenticeship through the Department of Labor?

Katy Knight, Siegel Family Endowment executive director & president:

Yes.

Ramona Schindelheim, WorkingNation editor-in-chief:

That's incredible. That's the first one I've heard of, which brings up an idea of policy in terms of federal government and local governments. Do you feel that enough has been done? I know we have anti-discrimination laws that are trying to create a more balanced workforce, but of course we've been working at that for a long time and obviously the numbers, while they may have incrementally gotten better, there's still people willfully underrepresented in this field. So how can the federal government or local governments really get in there and help?

Allison Scott, Ph.D., Kapor Foundation CEO:

I'm happy to hop in. I know Katy has lots of thoughts on this. We spend a lot of time talking about policy. I think this is one of the most critical areas for us to address. And as philanthropic organizations, oftentimes I think there's a reticence to engage in some of the policy conversations. However, if we want to see true structural change, I believe we do need to be focused at both the federal, state and local levels.

Just a few of the examples, some of the work that we are prioritizing at Kapor Center to advance equitable technology policy like in three categories, so education in the workforce. That could include everything from access to computer science education to expanding opportunities for apprenticeships and re-skilling pathways.

Tech accountability and protections, which I think is a huge area that thankfully we've seen a lot more attention recently on AI regulation, but there's a lot more to be done about worker protections, about addressing algorithmic bias. We are seeing things both at the federal level and at the state level, and very hopeful that we will continue to see progress there.

And then finally, on the innovation and infrastructure piece, it gets boring to continue to talk about this, but we still have a major issue with the digital divide and access to broadband. So that's a fundamental infrastructure piece that's still needed, as well as in the innovation economy, thinking differently about the venture capital space, about how we can fund new technology companies that have more of a responsible, ethical and equitable lens is another potential priority that I think policy can play a role.

Katy Knight, Siegel Family Endowment executive director & president:

I think across everything Allison said, for me, is just there's the through line is it takes a variety of policy instruments from places that you might not expect to get this work done because we're not just looking at policies that are directly about the tech sector, although that's part of it. And we're not just looking at policies about current workers, although that's part of it. There's the longer term view on the education front in K12. There's some of the things that have been more traditional workforce development concerns, like the way that training programs are funded and updates to things like WIOA, the stuff that everyone has been working on for years is still very relevant for our work. And I'm always encouraging us in the tech space to think about our partners outside of tech because we're small, but there's a very robust workforce development field, and this matters to them as well, even though they may not be focused on the exact same people.

And then the ability to innovate and to do cool things, like finally get a registered software engineering apprenticeship at the New York State level, happen more often at the local and state level than they do at the federal level, but they're really important proof points if we're going to get anywhere at the federal level.

Ramona Schindelheim, WorkingNation editor-in-chief:

The venture capital profession, there's underrepresentation in there of Blacks, Hispanics and women as well. Changing that mixture, changing that percentage, I think it's under 2% now, I think I quoted earlier the Hispanic workforce, but changing that, what does that mean down the line for the high-tech industry?

Allison Scott, Ph.D., Kapor Foundation CEO:

I think it's a really important point and sometimes, oftentimes overlooked in the role that venture capital plays in the entire tech sector. And so if we think about who are the individuals that are raising funds, who are the individuals that are deploying that capital, what are the types of companies that they are funding and what are their principles around the types of companies that they're funding beyond just the bottom line, a couple of quick points.

One, some of the most recent data unfortunately shows even a negative trend in the amount of capital that Black founders are receiving. So the most recent data point from this year was Black founders receive only 0.3% of the 79 billion invested in US-based startups in the first half of this year. And again, that's a decline, so we are going in the opposite direction.

So what is the potential impact of that? And I think there are probably, there are more than three, but for sure economic opportunity, so that the potential upside of starting a company, growing a company, potentially taking it all the way to IPO and the huge financial upside.

Two is the lived experiences of folks from more diverse backgrounds and the types of products, the types of business models and the types of companies that they would go on to start.

And then the third is just the overall, back to your point, the overall representation in the sector. We are literally concentrating both the wealth and idea creation to a very, very small segment of our population.

Katy Knight, Siegel Family Endowment executive director & president:

And just like with all of these issues, there's an overlapping set of concerns and possible solutions. There are organizations that are trying to diversify just the workforce in venture capital like Somos VC and BLCK VC.

There are also, I think, considerations beyond those focused exclusively or explicitly on race and ethnicity like geography, and so organizations that are trying to target folks in deeply socioeconomically depressed places, in rural places. Our partners at Center on Rural Innovation, have a small fund at their sister organization that's deploying some capital to rural entrepreneurs solving a different set of problems and employing a different set of people that will hopefully go on to be successful and turn around and be able to invest back into their own communities. I think that piece of it as well has been, it's a longer term play, which longer term is my phrase of the day right now, but helping people be successful as entrepreneurs is also key to diversifying the capital ecosystem.

Allison Scott, Ph.D., Kapor Foundation CEO:

Picking up on a point that Katy made about different policy levers in the VC space, one thing that we're tracking closely is a new bill that'll go into effect in 2026 in California that requires venture capital firms to disclose data on the diversity of their portfolios. And that's like a, believe it or not, that has never happened. And so part of what we would argue is that data transparency is really important to understanding the space.

And then the second piece that we're following closely is the Fearless Fund lawsuit. Fearless Fund was providing grants to Black female entrepreneurs, and they were sued for providing those grants directly to a population that's extremely underrepresented in the tech startup space, but there's been a huge chilling effect. And so for folks who are interested in expanding diversity in this sector, I think we have to think really creatively about how we address this problem, and we can't just be on our heels and refuse to acknowledge what's happening.

Ramona Schindelheim, WorkingNation editor-in-chief:

So, Katy, Allison, do you think we're making progress?

Katy Knight, Siegel Family Endowment executive director & president:

I have to believe it if I'm going to get up and keep doing this work every day, so I will say I think we're making progress. It is always slower than you want it to be and harder than it might've looked, and around every corner there may be a setback. I think even though all of those things are true, we are chipping away at this work. We are seeing the narrative transform. We are seeing people be more concerned about it and develop and implement new ideas to try to solve for it, so that gives me hope that we will continue to make some progress.

Allison Scott, Ph.D., Kapor Foundation CEO:

And I will add at times things feel very stagnant, especially now in the current climate. It feels as though we made a bunch of progress. There was a lot of momentum and things feel a little bit stagnant right

now, but the thing that gives me the most hope and that I am actually very hopeful about is Katy's point about narrative. It feels like there's much more interest in resisting what has been in understanding the huge influence that tech has over all of our lives and the realization that very few of us are benefiting economically from it, as well as folks raising very significant concerns about ethics and equity. And so I think that there's a whole generation of talent from across the entire spectrum that are really interested in tackling these problems in a different way that we didn't see 20 years ago.

Ramona Schindelheim, WorkingNation editor-in-chief:

Allison Scott, thank you, CEO of the Kapor Foundation, and Katy Knight, president of the Siegel Family Endowment, appreciate you joining me on the Work in Progress podcast.

Katy Knight, Siegel Family Endowment executive director & president:

Thank you.

Allison Scott, Ph.D., Kapor Foundation CEO:

Thanks so much for having us.

Ramona Schindelheim, WorkingNation editor-in-chief:

I'm Ramona Schindelheim, editor-in-Chief of Working Nation. Thank you for listening.