

Statement on Diversity, Equity, and Inclusion – Peter Abbamonte, UIUC

This statement reflects my views on diversity, equity, and inclusion (DEI) and the University of Illinois' role in advancing social mobility in America. The views expressed here could be rigorously defended, but I will treat it as an opinion piece and just summarize my views.

My background. I was raised in a single-parent family in an inner city in Texas, descending from a long line of progressive feminists. My great-grandmother was an entrepreneur who managed the Chicago Carpet Company, which laid the carpet in the Wrigley Building in the 1920s. My grandmother, one of the first women to earn an MBA from the University of Chicago in 1949, taught cost accounting at Wilbur Wright College in Chicago for 25 years and authored a successful cost accounting textbook. My mother earned her accounting degree from Loyola University in Chicago, served as head of finance at Motorola, and eventually started her own business. Progressive, feminist, and entrepreneurial values were drilled into me as soon as I could talk.

I am a product of the U.S. public education system. As a member of the first divorce generation, I grew up unsupervised in the 1980s and struggled academically until taking an interest in physics as an undergraduate at the University of Texas at Austin. Every diploma I earned, from kindergarten through my Ph.D., was from a public school. So I have a baked-in appreciation for the importance of accessible education at all levels.

I hold a unique perspective on the University of Illinois. My wife and I both earned our graduate degrees here, and both our daughters attended college here, as did two of my nieces. My grandmother taught accounting at UI-Chicago for two years. So I have a perspective on this institution as an alum, a faculty member, and as a parent.

Democracy in America. The United States is a high-functioning democracy that works as well today as ever in the past. Those who believe otherwise would benefit from studying the political turbulence of the 19th century. I do not see democracy as being under threat from the incoming administration or any other. Though I do believe we are far from perfect and that our future stability as a nation requires continued improvement.

The core of a thriving democracy is an educated populace. As Tocqueville observed, 'The health of a democratic society may be measured by the quality of functions performed by private citizens.' Individuals in a democracy must strive for self-improvement so they may achieve the independence required to prosper in a free society.

The driving force behind independence is education. In a free society, no one can be compelled to better themselves; self-improvement must be a personal choice. The mission of a university is to serve as an agent of encouragement, inspiring and motivating individuals and providing them with the support and resources they need to work toward their goals.

Social Mobility. The story of America is one of social mobility. It is often told as the arrival of waves of disaffected immigrants. Before the Civil War, two of the largest were the 10 million individuals forcibly brought here through the transatlantic slave trade, and the millions who fled Ireland during the Great Famine of the 1840s. Between 1900 and 1924, following Reconstruction, over four million immigrants arrived from southern Italy and Sicily, seeking relief from grinding poverty after Italian Reunification, as well as three million Jews fleeing genocide and persecution in Europe. Following

World War II, 15 million immigrants arrived from Latin America, along with nearly 10 million from Asia, fleeing poverty and pursuing opportunity. These waves of disaffected people, in turn, displaced Native Americans, who still make up nearly 1% of the US population.

This messy and chaotic history has contributed to an underclass in America whose scale is not seen in Western European countries. It is the product of countless global misfortunes—slavery, the Civil War, the devastation of the Great Depression, persecution of Jews in Nazi Germany, internment of Japanese Americans during World War II, and countless natural tragedies like the 1918 flu pandemic. The number and variety of stories of hardship is beyond comprehension.

As much as we wish otherwise, we cannot travel back in time and undo these misfortunes. Slavery, for example, was a global institution practiced throughout history; slaves made up nearly 20% of the populations of ancient Egypt and Rome. It was not until the 18th-century Enlightenment, when the concept of “human rights” was invented, that democratic ideals first took root and slavery began to decline. The relevant question should not be how to reverse the wrongs of the past, but how to build a brighter future for everyone.

What makes America remarkable is its repeated demonstration that, when given even a small opportunity, people will find ways to better themselves. Despite our tragic past, only 12% of Americans now live below the poverty line, compared to 22% in 1950. Over 25% of U.S. adults hold college degrees today, up from just 8% in 1960. The practical way forward is to disregard the historic causes of poverty and disaffection, and extend opportunities to everyone who needs it—emphasizing those on the margins of society where our efforts can make the greatest difference.

Role of the University of Illinois. Institutions of higher education play a vital role in advancing civilization and strengthening democracy, by empowering individuals to pursue self-improvement. Different types of institutions serve different missions. Community colleges, for example, often focus on disadvantaged populations, providing their first exposure to post-secondary education, emphasizing practical skills and fostering pathways to self-improvement. In contrast, elite private institutions, such as the Ivy League schools, focus on educating societal elites and achieving the highest levels of scholarship and excellence.

The most important institutions are those that bridge the gap between elite education and broad accessibility. The University of Illinois, which has won multiple Nobel prizes yet maintains a 45% acceptance rate, exemplifies this mission. It offers a world-class education to individuals from a wide socioeconomic spectrum, fostering social mobility and empowering people to improve. This mission has always resonated with me, and is why I declined job offers from elite private schools to remain here and do my part, such as I can.

Primacy of the individual. Human psychology is shaped by our tribal instincts, which incline us to simplify complex issues into a binary struggle between good and evil. This is why Hollywood films, notably superhero movies, feature clear “good guys” and “bad guys.” While such simplifications make for entertaining movies, they pose a serious problem when they mislead us to conceptualize real-world problems as binary conflicts between defined protagonists and antagonists.

The reason this is problem is that most major challenges facing society are extraordinarily complex and multifaceted, driven by entropic forces within large systems of well-intentioned but imperfect

individuals. In the real world, there are no clear good guys and bad guys; the vast majority of people are flawed but trying to do their best. When we reduce complex problems to oversimplified, binary conflicts, we misidentify the root causes and risk pursuing solutions that fail or even exacerbate the problems we aim to solve.

In recent years, it has become fashionable in academia to adopt Marxist concepts and map the complex, sociopolitical problems of our society into a conflict between advantaged and disadvantaged “groups.” This narrative, which seductively appeals to our tribal instincts, was widely used in the 20th century. In 1920’s Nazi Germany, Jews were labeled an advantaged group because of their control of the German banking system. During the cultural revolution in China, educated individuals were labeled “class enemies.” From tensions between the Hutu and Tutsi in Rwanda, to Serbs and Muslims in the former Yugoslavia, the story of the 20th Century was one of simplifying complex problems along tribal lines, and taking action against designated groups to undo injustices from the past. The outcome was greater injustice, and often genocide or war.

The lesson many historians take from the 20th Century is this: *Never categorize people into groups.* Everyone is an individual and their circumstances are unique. An Asian student who is the child of two professors and attended Phillips Exeter Academy should not be categorized with an Asian student whose parents run a nail salon in Los Angeles. These individuals should be judged and treated according to their circumstances, not their membership in a fictitious group defined by names or physical appearance.

The antidote to discrimination and injustice is not reverse discrimination and injustice. It is the elimination of it.

My philosophy of diversity and inclusiveness. Diversity and inclusiveness are at the core of everything I do, having been ingrained in me by my upbringing (see above). These are central to our mission as a university, and are necessary for building a stable and better functioning democracy.

According to recent reports, the racial and gender diversity of the Grainger College of Engineering are worse now than they were ten years ago¹. While I don’t believe in categorizing individuals into groups, it suggests that ten years of group-based DEI efforts have not fostered the progress we had hoped. One view is that this is due to worsening racism within our College. In my opinion, the problem is that group-based solutions were ill conceived from the outset, and we should be taking a more sophisticated approach.

My view of diversity differs from prevailing DIE thinking in two ways. The first is that I believe everyone should be judged as an individual and according to their unique circumstances, and not by an assigned group identity. For example, an ethnically black student might have been a victim of racism and discrimination, and we should do everything we can to create a supportive and welcoming environment that helps them rise above this. But we should do it because they need help, not because they are black. Similarly, a white male student who was orphaned and drifted between foster homes as a child may face struggles of similar gravity. We should not deny him equal support just because he is white.

¹ This anecdotal statement is based on reports I have seen in several college-related meetings.

Second, I believe in a much broader definition of diversity than group membership. To me, diversity is an expansive concept that encompasses temperament and personality, socioeconomic class, geographic origin, neurodivergence, faith and religious affiliation, degree of introversion or extroversion, gender identity, nationality, political affiliation, etc. When assessing the diversity of our College we should seek more nuanced measures than taking head counts of artificial “groups.” Our ultimate goal should be to help everyone become the best version of themselves possible, in the labs and classrooms of our College and beyond².

The reader may have noticed that I have not yet used the word “equity.” To me, equity refers to outcomes—the progress of disadvantaged individuals in achieving success comparable to others in our society. Equity is the long-term measure of progress. While we can make immediate strides in fostering diversity and inclusiveness, history shows that progress on equity takes generations. Over the past half-century, disenfranchised people of all sorts have made tremendous progress, which gives me optimism for the future. But we need to be realistic and accept that equity may not be useful as a short-term metric measured over weeks or months. A more nuanced approach is needed.

How I have implemented this philosophy in my own research group. My beliefs are not abstract. I put my money where my mouth is and implement them in everything I do.

It is well documented that diverse teams—composed of individuals with varying skills and perspectives—make stronger and more capable organizations. My experiences have taught me something else just as important: Diverse teams demonstrate better conduct. The unfamiliarity of people from different backgrounds causes them to interact more formally and to treat one another with a higher level of respect and professionalism.

For this reason, in my own group, I have always recruited people who are as dissimilar from one another as possible. I also make a point of hiring oddball individuals with nonstandard backgrounds that I judge may be on the cusp of improving and outperforming their resumes. I take this approach to recruitment at all levels—undergraduate to postdoctoral. One of my crowning achievements was having a devout Muslim, a Jew, and an Evangelical Christian work on an experiment together and publish a paper in *Nature* [A. Husain, *Nature* 621, 66 (2023)].

I take my biggest risks in hiring of undergraduates. I usually have 5-10 undergraduates working in my lab at one time, who I mentor personally. I make no effort to recruit “top” students. I seek oddballs with peculiar back stories who I sense may be brink of getting their lives together. Here are some examples of undergraduates I have hired:

- A semi-legal Parkland student from the local community, registered through Obama’s DACA program, who was working in a band of illegal immigrants putting siding on buildings for \$6.50/hour. I hired him to work in my lab. He eventually got a CS degree from UIUC and is now making a six-figure income at a software company in Chicago that recruited him with a \$10k hiring bonus.
- An orphan with a 1.8 GPA who grew up in the foster care system, was working odd jobs and sleeping in a cot. He is now working as a lab tech at a local technology company.

² Yes, this is a Ted Lasso reference.

- A student with serious discipline problems who also had a 1.8 GPA. He revamped an x-ray machine in my lab and was eventually hired as a service technician by Bruker.
- A homeschooled student who struggled with in-person interactions. She made excellent progress and eventually transferred to another group.
- Two students with serious anxiety disorders. One has become proficient in x-ray crystallography and is now applying to graduate school.

These are just a few of many examples. My strategy of hiring misfits is based on two unifying beliefs:

1. Any individual, no matter what tragedies they have endured in the past, can at any moment get their act together, improve, and start rising above their challenges.
2. Gender and ethnicity are irrelevant. The DACA student was a Hispanic male. The two students with anxiety disorders are Asian women. The orphan was a white male. It makes no difference—I help them because they make my team stronger, and because they are ready to benefit from my help.

What I would aim to accomplish as Head. A more diverse population of physicists would benefit everyone. It would lead to better science and greater progress for humanity. Building a stronger physics department therefore requires cultivating new talent from all corners of the country and the globe, that reflects the expansive and individualized vision of diversity outlined above.

If I found myself in the Head position, I would initially support existing DEI efforts in the Physics Department, the College, and beyond. But, over time, I would advocate for changes.

I would push for transitioning from a group and “head count” view of diversity to one that is individualized and recognizes the unique circumstances of all individuals, mentoring them in way that addresses their particular challenges. Such an approach would result in more effective teams, greater progress in human development, and more fluid social mobility than one that arbitrarily groups individuals together by immutable physical characteristics.

I would seek and use individualized information in admissions. In reviewing applications of all sorts—undergraduate, graduate, internships, REU’s—I would advocate for a system that asks applicants describe their background, the challenges they faced, and what they have done in their life to overcome adversity. I would seek to use these narratives to identify which applicants to designate “disadvantaged.” When making decisions about which of these students to admit, I would place a higher emphasis on *evidence for grit and determination* than traditional metrics like GPAs and test scores. Such an approach would *naturally* give an advantage to ethnic minorities, who are poorer on average than the population as a whole. But it might give an advantage to a poor white male over a wealthy black female, in circumstances where this is warranted.

When assessing the diversity of our department, I would advocate for a more expansive definition that recognizes characteristics such as varying temperament and personality, socioeconomic class, geographic origin, neurodivergence, faith and religious affiliation, degree of introversion or extroversion, gender identity, nationality, political affiliation, etc. I would deemphasize metrics based on immutable physical characteristics such as sex and skin color. Expanding our thinking in this way would lead us to broaden our outreach to the widest possible

underserved communities, such as rural and religiously fundamentalist communities that aren't always top of mind in conversations about university recruitment.

Finally, I would advocate for cost reduction strategies at all levels of the university. There is widespread discussion today about “institutional racism,” i.e., structural barriers that prevent underprivileged people from making advancements in society. In my opinion, one of the greatest such barriers is the exploding cost of higher education. Tuition today is more than 10× what it was, in real terms, than when I graduated from college in the 1990s. There have been efforts to make UIUC tuition free to low-income students (see <https://osfa.illinois.edu/illinois-commitment/>). But nearly half the cost of an in-state student attending UIUC is now made up of non-tuition surcharges for health services, athletic facilities, and materials and supplies, such as the Engineering Surcharge. This does not even mention books and other secondary costs. These hidden costs alone can put attending UIUC out of reach for many low-income families, even if tuition is free. In other words, while we talk publicly about fostering diversity and creating a welcoming environment for disadvantaged people, in private we implement policies that directly undermine those efforts. We cannot foster change if we price ourselves out of the market entirely. I would advocate for doing something about this as well.