

# A Call to Action

April 23, 2019

NJIT is going through its next priority-setting exercise, “2025 Vision,” and the developing documents represent a careful evolution of our previous priorities. Given NJIT’s success in a precarious time for higher education, this is understandable. At the same time, while political and economic circumstances have a direct influence on the success of a research university, our world is going through changes that are arguably more important than those brought about by politics and economy. These changes will affect human life perhaps for decades or centuries, and therefore in this document we argue for a bold step in our institutional vision.

The double threat of climate change and environmental degradation will soon change the landscape in which we operate, both figuratively and literally. Most sober, pragmatic analyses of climate data predict increasingly disruptive and costly consequences that will upend our quality of life and dramatically affect national and local economies. No-one in higher education will be immune from these effects: budgets will likely be reduced and priorities will certainly change, both in our institutions and in society as a whole. This is no longer a prospect that is decades or centuries in the future: most climate change indicators are outpacing the ‘worst case’ scenarios of a decade ago, revealing the existence of nonlinearities and positive feedback cycles in our environmental systems. New works such as David Wallace-Wells’ “Uninhabitable Earth” have been labeled as ‘alarmist’ by the denial machines, but are simply an objective round-up of the latest science.

Is NJIT responding appropriately, and if not, what should we be doing? Economic issues are making young people question the value of higher education in general, while at the same time a new environmental awareness is coupled to an impatience with the slow pace of change of existing institutions, exemplified by the student climate activism led by Greta Thunberg. The students we send out into the world will be the ones dealing personally, and in many cases professionally, with the consequences of our past inaction. We argue that we have both a moral obligation to take a stand and a pragmatic opportunity to reflect this stand in our 2025 Vision statement.

Despite the pressure to conduct themselves increasingly like corporations, institutions of higher education, especially public ones, serve a higher purpose: we are responsible for acquiring and disseminating knowledge for the betterment of the human race. More specifically, NJIT and Rutgers University have an obligation, to the people of New Jersey, to provide expert advice and education to ensure and enhance the long-term prosperity

of the State. If we recognise the imminent arrival of dramatic environmental, economic and cultural shifts, we should be saying so, loud and clear, with an institutional voice. To do otherwise would be a moral failure; one we would have to explain to future generations.

Many of us ostensibly study topics related to the problem, such as conservation biology, sustainable materials, environmental justice, etc., and these topics are part of our strategic plan. A case could be made that we are already doing our part. But is not a strong stand. As academics, we have been studying these problems in our usual manner — individual research questions, grant by grant — for decades, with little real-world impact on the political and economic institutions that are the only ones that can effectively tackle these problems. UK based academic Jem Bendell, Professor of Sustainability Leadership at the University of Cumbria, recently argued that academics, including himself, have been in denial.

“If we recognise the troubling implications of these facts but respond by busying ourselves on activities that do not arise from a full assessment of the situation, then that is “implicative denial”. ...there are endless ways for people to be “doing something” without seriously confronting the reality of climate change.”

(<http://lifeworth.com/deepadaptation.pdf>). It makes for uncomfortable reading. It's also uncomfortable from an institutional perspective. Again from Bendell:

“I mention this to highlight how it will not be easy to identify ways forward as academic researchers and educators... For the academics reading this paper, most of you will have increasing teaching loads, in areas where you are expected to cover certain content. I know you may have little time and space for reinventing your expertise and focus. Those of you who have a mandate for research might discover that the deep adaptation agenda is not an easy topic for finding research partners and funders. This restrictive situation was not always the reality faced by academics. It is the result of changes in higher education, that are one expression of an ideology that has made the human race so poor at addressing a threat to its well-being and even existence.”

The suggestion here is that academic institutions (and those that fund their activities) have become so locked into a particular model of individual, incremental work that they have largely lost the ability to pivot to address big questions like those we now face. Our conventions disfavor bold, provocative statements in favor of careful, modulated conclusions, even when the situation calls for provocation. And the constraints of

institutional budgets mean that we chase money by increasingly aligning our priorities with those of funding agencies, rather than deciding what is most important.

We, at NJIT, can choose to take the implications of the scientific evidence as seriously as they warrant, and make a concerted institution-wide effort to step up and address the challenges of climate change and environmental destruction. In drafting our research priorities, our stand should go far beyond beefing up the 'environment and sustainability' section of our strategic plan, which would be an example of business as usual. We must put the entire plan inside a larger box, shift the resources of NJIT towards the most important problem we face, and speak with a unified voice. With broad institutional commitment, we could find support for the bold and necessarily cross-disciplinary research needed to meaningfully address the problem: radically different economic models, bold architectural and engineering adaptations, new science, and perhaps most importantly, a vision of what a prosperous future might look like even as we adapt to those changes that are already inevitable. This would involve every part of NJIT.

Implementing such a vision is potentially disruptive, both institutionally and personally. For many of us, this means reassessing our own research priorities. But, in addition to our moral obligations, there are several pragmatic reasons to take this step:

1. As problems mount up, more and more funding will be diverted to studying imminent environmental issues and their consequences, and because these are complex, multi-disciplinary problems, the money will go to those institutions who have teams in place. Publically committing NJIT as a whole to solving these problems, and proactively putting coalitions together, will not just help us compete for this funding but encourage this shift. Rather than waiting for others to identify problems and put out RFPs, or for political opinion to shift, we would be driving the public conversation and shaping the funding landscape.
2. As Bendell points out, such shifts are hard, and the larger the institution, the harder it is. NJIT is in a good position though: we are small and coherent, our historical focus is on problem solving, and our reputation is rising. We would stand out and get a lot of attention. And there is no conflict with our existing reputation for value and upward economic mobility. In fact it is a long-term extension, because failing to grapple with our environmental challenges will make the economic future uncertain for everyone.
3. There is a new generation of young people wary of institutions but hungry to solve practical problems. If anyone is going to solve these major challenges it is them. But we could help them do it by being the place where they continue that journey. This would mean taking things we already do well and packaging them. Providing

opportunities for students from all majors to contribute to the various large-scale, problem-oriented research initiatives that flow from the institutional focus (see 1 above). One could also imagine something new like a cross-disciplinary major (say, in ‘sustainability’). Other institutions already have those. More important perhaps is to continue training engineers, doctors, computer scientists, historians, etc., but give everyone who wants it the opportunity to work in a cross-disciplinary team dedicated to solve a pressing environmental problem. Our pitch would be: “NJIT is committed to saving the planet. Join us.” This will help us swim against the tide of decreasing interest in higher education and attract a wider base of highly-motivated students.

We believe that NJIT has an obligation to be a key player in the upcoming challenge to adapt our society and preserve our quality of life for future generations, and to be a strong institutional voice to our elected officials and the public at large. We also believe that doing so will enhance our visibility and reputation, improve our funding situation, attract the best students, and ensure our long-term success.

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