

Vicki Bier: Last speaker on the panel this morning is Jeanne Narum. She's actually the only person on the panel that I didn't know personally until this symposium, but I'm very glad to meet her. She is the founding director of Project Kaleidoscope, which is a national alliance to improve the quality of science and technology education throughout the country, and again, a close friend and colleague of Denice's. Jeanne?

Jeanne Narum: Thank you, I'm very glad to be here. It's a little strange that the two non-scientists – two of the three non-scientists on the panel – are both named Jeanne, spelled the same way and we're both musicians. And so, my work on Project Kaleidoscope really has deep roots at the University of Wisconsin-Madison, even though I'm not here. My first grant from the National Science Foundation to the effort that became Project Kaleidoscope, was awarded back while Bassam was at the Directorate for Education and Human Resources. And I think, one of the things that Bassam told us right at the beginning when we started our work – and it's relevant in this discussion today – he said, "Don't point the finger; point the way." And so we've always kept that in our thoughts as we plan the efforts and Project Kaleidoscope. So what Project Kaleidoscope is basically, it's a network of leaders developing leaders.

And so, how did I come across Denice? Well I'm sitting in Washington D.C. trying to figure out who are the leaders that should be modeling our network around, spotlighting, bringing to the attention, and shaping the kind of agenda of leadership development in undergraduate science. And so the Presidential Young Investigator report comes across my desk – that red, white and blue – boy, that was a challenging, provocative cover, even, you just look at the metaphor of the, it looks like the American flag, but when reading that through – the PYI report – and I think that was one of the first kind of groups of young faculty nationally who got together and said, "the system's broken; let's fix it." But they didn't complain. They just made out recommendations. And so I either phoned up Phil Certain or Bassam and I said, "Who can I get from Madison to work with the young faculty group that we had emerging in Project Kaleidoscope?" We had support from the Exxon Mobil Foundation to develop a cadre of faculty leaders, and they floated me toward Denice. So that was I think 1992, and ever since then we've shared fun times, lots of good food – I was telling Denice's mother that the last time I was in their house the puppy was two months old, and so between every spoonful or course we would throw bologna under the table so the puppy could get it and come back. So it was a very hectic evening. [TAPE BREAK]

And I'm going to end my music reading Denice's words. She spoke to a group of young faculty in 1995 about what it was to be an agent of change. The title of her talk was *Lessons Learned*. "There are both pitfalls and benefits to being a change agent. The pitfalls include notoriety. You are both under a microscope if you are different in looks and in approach. A belief in the value of diversity if one reason I took the risk of being a change agent. Another pitfall," and this is very hard for me to read right now,

"another pitfall is that there is lots of negative feedback, and many people expect you to fail. The challenge – the external challenge – is to educate senior colleagues. The internal challenge is to be able to endure cynical and critical comments and attitudes. But the benefits of being an agent of change are very real – also including notoriety, believe it or not. There is a self-satisfaction in knowing that you are doing something you love, and that you might be beginning to change the system. With each success your confidence builds." And I think that's been resonated here. "Early in my career, I learned to choose my battles; I learned to go beyond departmental colleagues in the college. I also learned to stay centered," *Zen*, I think was how she put it, "to keep focusing on what was important to me. Finally, I learned to ignore not the negative feedback, but to be reasonable enough to shift to positive from the negative. The key was my ability," and if you think, here, talking to a group of 500 early-career faculty, pre-tenure faculty, "the keys are my ability to identify allies wherever they might be, to be politically aware, and to learn to work collaboratively. Perhaps most important, I learned to connect my work as a change agent to my work as a scholar. I did not forget my disciplinary home." And when Terry Millar and I were talking about this session and the following session, Terry kept reminding me about her strength as an engineer. She knew her field. Denice continues, "There were also other important lessons I learned: the importance of key international efforts in regard to educational transformation. There is life beyond tenure and departmental politics." Now, I'm based in Washington D.C. and I go to NSF meetings, AAAS meetings – Denice was always there, no matter what the topic was, when they wanted people to come in and really help shape the agenda, Denice was one of the persons invited. So again, when you think about how we lead this agenda with some – I'm going to do this too – connecting our local work to the national agenda is very important. Denice continues, "I leave you with some final words of advice: Do not over-prepare, do not burn any bridges, know the rules of the system, but also know that rules must sometimes be broken. Do not believe everything you hear. Do not say 'yes' to everyone and everything – be selective. Don't worry about upsetting some people some of the time. What you should do is learn how to delegate, empower, and relinquish control," these things sound so much like Denice I can still hear her saying them, "have a back-up plan, and plan ahead. Leave all options open, develop, sustain, and support great work. Choose your battles. Cultivate allies, mentors and colleagues within and beyond your campus. Understand the formal organizational chart of your community. Get the lay of the land, understand the folk wisdom of your community."

At the last meeting of the Project Kaleidoscope Faculty for the 21st Century, the keynote speaker was Jim Gentile, who is now the president of the Research Corporation. And Jim's admonition to the faculty was "remember the people you meet along the way." And Jim spent an hour talking about the five people he's met along the way, from the person who guided him through a trouble when he was a doctoral student at Yale, to the person who hired him as president of the Research Corporation, and about the way each of those people kind of intuitively knew when they should be in touch with Jim, and

just kind of called him up and said, "how are you doing?" And when Jim said that I thought about, in the early days of Project Kaleidoscope I was going through some kind of uneasy times. And Ted Williams, who was a chemist at Wooster, and Bassam and I'm sure some of you remember Ted Williams, a black chemist at Wooster who did a lot for diversity in the same way that Denice did for all of us. And Ted called me up about every other week and maybe once a month, and just said, "Just checking on how you're doing." And I forget, now that Ted is gone, and I have to remind myself to find somebody, and to be calling in and checking with people and saying, "Hi, I'm just checking in; how are you doing?" So that's going to be one of my ways to continue in the celebration of Denice, is to be a little bit more feeling, gotta get up in the morning, have to eat oatmeal, you know, these are things you have to do, and you also have to check in with people. So that's my celebration of Denice. Thank you.

[Applause]