I want to begin with three questions, questions prompted by Debra Stewart's charge to this panel to "focus on principles to be observed" when a Dean is trying to provide leadership for interdisciplinary programs rather than on "details of institutional context." Besides, some of you may have heard a presentation on interdisciplinary programs at the University of Colorado, Boulder, given by then-Dean Susan Avery just a little over two years ago at the summer workshop in Puerto Rico; that presentation is archived on the CGS website and describes the state of Boulder's interdisciplinarity in a way that has not changed substantially in the time since. Debra Stewart has also recently written an excellent overview of the state of interdisciplinary graduate education that appeared in an issue of the CGS *Communicator*, and I urge you to read that if you have not yet done so.

One point I would make about my institution is that there is a significant gap between the sheer volume of interdisciplinary work being done on the Boulder campus and the number and kind of graduate education programs that directly reflect that effort. Why should that should be so? That question, I think, is relevant not just for Boulder but for many universities. In thinking about that problem, I have been led to ask the three questions I mentioned at the outset, questions that I hope will make us think about principles.

One, is interdisciplinary work/curriculum/teaching/research actually something new and therefore in special need of innovative institutional structures?

Two, are we more worried about being interdisciplinary (meaning providing institutional structures of curriculum and degrees) than we need to be? This is the question Stanley Fish raised twenty years ago, with his essay anxiously titled, "Are we being interdisciplinary yet?"

Three, does curriculum need to match up with practice? That is, are new degrees or certificate programs the answer?

To anticipate my conclusions, my answers to these questions are, no yes, and, no. But allow me to elaborate briefly.

The first question I raise is, of course, really a question about the nature of the disciplines. It is one of the peculiar features of life on a university campus that a concept such as that of the academic discipline, which is a more or less arbitrary or artificial, and at the very least certainly inherently unstable, division of the broad field of knowledge, is treated as if it were an idea delivered from on high long ago in words painfully carved on stone tablets. The lion shall not lie down with the lamb nor shall the chemist lie down with the physicist, lest the very fabric of intellectual life be dissolved.

Two points, I think, are worth bearing in mind: first, the ways in which we do and do not divide up human knowledge into categories has changed over time; second, what there is to know has expanded. Those are related assertions but not, I think, the same point: what

was once called "natural philosophy" included all of what we now know as "science." It has proven extremely useful over the centuries to refine that broad category of natural philosophy into what came to seem like its constituent disciplines, chemistry, physics, astronomy, biology, etc. However, as we learn even more, those divisions have begun to appear more and more limiting, more and more arbitrary.

One not irrational conclusion that we can draw from this very brief history lesson is that the line between what is "disciplinary" and what is "interdisciplinary" may not be an easy one to draw. Those of you who know Virginia Woolf's *To the Lighthouse* will recall that novel's profound perception, "Nothing was simply one thing," which is to say, that every apparently discrete object or idea or field of knowledge is always, and from the moment of its inception, an aggregation. What we call interdisciplinarity is often simply an acknowledgment that English includes philosophy or that History includes statistics or that Biology includes mathematics—and in some sense, they always did, however fervently we may proclaim that we have yoked together the previously unyokeable and thereby produced something new.

My second question is really meant to be a way to have us acknowledge a curious fact, that the discussion of interdisciplinarity seems bound to a certain emotionalism. Interdisciplinarity—the idea of it, the desire to do it, the promise to encourage it—is remarkably productive of anxiety. The very thought of it can make some of us—especially administrators such as deans—feel inadequate: how can I promote it (since promoting it is, after all, in the strategic plan!), how can I remove the barriers, how can I design interdisciplinary programs that will attract students and faculty, and so forth.

That anxiety is, I think reflective of an abiding contradiction at the heart of university life: universities want to produce new knowledge but, in general, they want that knowledge to be produced without any institutional change. Put another way, we want to change the world, but we are most reluctant to change ourselves. It is of course widely claimed that the academy is populated by professors of an exclusively leftist orientation, and the most conspiratorial of these accusers insist that this demographic fact has been achieved by systematic design. This ignores the undeniable truth that almost nothing happens on a university campus by systematic design and in response to those who make such claims I have formulated what I modestly call Stevenson's Law, which states, "Those who claim that there are no conservatives on university campuses have never attended a faculty curriculum committee meeting."

We are thus anxious to prove ourselves to be interdisciplinary but also anxious about the changes that would be necessary to make such an interdisciplinary nirvana appear, a double bind of competing anxieties that makes us, well, that much more anxious. What is a graduate dean to do?

One answer, and this brings me to my third question about the alignment of curriculum and practice, is that interdisciplinary work always exceeds the ability of curriculum

(which is to say, program design) to describe or contain or (most importantly) create it. There is, if you think about it, an inherent contradiction between the concept of a curriculum and the idea of interdisciplinarity. A curriculum, like a discipline, is a convenient container for knowledge, a line drawn around a certain set of questions and practices and foundational information. And given that no curriculum can ever be more than an introduction to a discipline, it is really a container inside a container. The spirit of the best interdisciplinary work is to break such containers. How, then, can you design, say, an interdisciplinary graduate degree program without creating a container that defeats the very thing you are trying to encourage? I am put in mind of the Renaissance poet Sir Thomas Wyatt, who sighed over the failure of his pursuit of the King's girlfriend, Anne Boleyn, by saying, "I leave off therefore/ Since in a net I seek to hold the wind."

My point here, however, is not that the graduate dean should decline from anxiety to despair. Rather, I am trying to raise the possibility that we are too worried about trying to institutionalize interdisciplinary practice. Such efforts are a little like what is often said of military strategy— that generals are trying to fight the last war rather than the one in front of them, or deans are trying to institutionalize an intellectual energy that has already moved on.

Graduate students learn to do interdisciplinary work, I venture to say, most often because they work with faculty who are themselves working in an interdisciplinary manner, and are doing so, not because they are committed to such work in an abstract way or because their FTE has been housed in an interdisciplinary program, but because breaking the containers that the traditional disciplines represent is what makes sense as a way to answer the questions that consume them. Interdisciplinary work, that is, is a manifestation of the kind of restless curiosity that has always animated the best research and scholarship—a wind that no disciplinary net can hold.

Let me conclude with what might strike you as a ludicrously anachronistic surmise and with a quotation that, I hope, will at least make that surmise less implausible. One way to think about interdisciplinarity is not in conceptual terms but epistemologically: it is a way of thinking, one marked by intellectual flexibility and a broad curiosity. As such, it is not an end in itself but a way to create the possibility of fresh paths to discovery, paths whose ends should not be predictable. Seen in that way, interdisciplinarity at whatever level is a manifestation of the spirit of the liberal arts as the foundation of a good education—a collective effort that makes for a different kind of mind and a different kind of person than someone who has not had that kind of training in breadth and flexible thinking. A great deal of what we heard in the last few days points directly to the need to create the intellectual leaders of the future in a way that will allow them to pursue new knowledge and work on wicked problems as creatively as possible. I will leave the last words to someone long dead, but who captured I think the spirit of what an education should provide so as really to prepare students for a life in which they will face questions and problems that no program could prepare them for in a predictable way:

"At school, you are engaged not so much in acquiring knowledge as in making mental efforts under criticism. A certain amount of knowledge you can indeed, with average facilities acquire so as to retain, nor need you regret the hours you spent on much that is forgotten, for the shadow of lost knowledge at least protects you from many illusions. But you go to a great school not so much for knowledge as for arts and habits; for the habit of attention, for the art of expression, for the art of assuming on a moment's notice a new intellectual position, for the art of entering quickly into another person's thoughts, for the art of submitting to censure and refutation, for the art of indicating assent or dissent in graduated terms, for the habit of regarding minute points of accuracy, for the art of figuring out what is possible in a given time, for taste, for discrimination, for mental courage, and for mental soberness."

William Johnson Cory, a master at Eton, 1861.