

UNIVERSITY OF MASSACHUSETTS AMHERST
OFFICE OF THE FACULTY SENATE

From the 688th Regular Meeting of the Faculty Senate held on October 15, 2009

PRESENTATION BY NEAL ABRAHAM
EXECUTIVE DIRECTOR OF FIVE COLLEGES, INC.

Ernest May, Secretary of the Faculty Senate

Neal Abraham arrived in the Pioneer Valley in August 2009 to serve as Executive Director of Five Colleges, Inc. and as Five College Professor of Physics. He received his Bachelor of Science degree in 1972 from Dickinson College and his Ph.D. in physics in 1977 from Bryn Mawr College. He was a faculty member, department chair, and holder of an endowed professorship in physics for eighteen years at Bryn Mawr College, after three years at Swarthmore College. He has held visiting faculty appointments at 13 institutes or universities in seven countries (Germany, Italy, France, Belgium, Spain, Russia and China). His areas of research include: laser physics and quantum optics, and nonlinear dynamics and chaos. He has published more than 200 scientific publications and has been elected a Fellow of three professional societies—the Optical Society of America, the American Physical Society, and the American Association for the Advancement of Science.

Most recently, he served as Executive Vice President, Vice President for Academic Affairs and Dean of the Faculty and Professor of Physics and Astronomy at DePauw University in Greencastle, Indiana, where over 11 years he led two strategic planning endeavors and contributed substantially to both its internationalization and diversity and gender equality programs. He was also an inaugural member of the Committee on Undergraduate Science Education of the National Research Council and one of the principal authors of its handbook for science teaching *Science Teaching Reconsidered*. He has served on a number of other national panels, and as a member of the NRC's Commission on Science, Mathematics and Engineering Education.

His background also includes experience in working with academic consortia, having served as a member of the Board of Directors of the Great Lakes Colleges Association, and having worked in the inter-institutional and inter-departmental cooperative environment among Bryn Mawr, Haverford and Swarthmore Colleges and the University of Pennsylvania. While at DePauw he managed three multi-million dollar inter-institutional grants from the Andrew Mellon Foundation for consortial faculty development programs.

We are certainly delighted to have attracted such a luminary to the best college town in America, and it is a pleasure to present Neal Abraham to you as the newly installed Executive Director of Five Colleges, Inc.

Neal Abraham, Executive Director, Five Colleges, Inc.

Good afternoon. Thank you very much for this opportunity to speak with you. As I mentioned to the Chancellor and to the Presidents of the Colleges, somewhere in the history of the Five College Consortium was an agreement to invite the Executive Director of Five Colleges, Inc. to attend all of the governance sessions of the various faculty bodies. Had I known that before I was hired, I might have said I had already had my fill of faculty meetings. In fact, I have enjoyed attending the faculty meetings of the Colleges. I have been to several of Mount Holyoke's, and one each at the other Colleges. Now, this meeting completes the cycle of my inauguration to the ways of faculty governance at our five schools.

I would like to say a couple of things about what attracted me to this job and then to speak about the opportunities that we face together. I come from a position (at DePauw) which I took because a graduate of this University on the search committee was persuasive that the job would be rewarding as well as challenging. She was a Ph.D. graduate of the philosophy department here at UMass Amherst. Hers was such a strong appointment that it persuaded me that we could have such two graduates in our philosophy department at DePauw. I hired Erik Wielenberg (who earned tenure recently and now is chair of the department), to join Marcia McKelligan there. I should also say that my introduction to the University began even before then in a collaboration with physicist Bob Hallock, on the Grants Advisory Committee of Research Corporation. While at DePauw, I benefited from the expertise of faculty members here in areas such as Women's Studies and Modern Languages from Sara Lennox, and in review of our African American Studies program from John Bracey. So you can see that there have been many contributors to my own

academic experiences who came from this University. Most particularly, one of the final hires I made at DePauw was Michael Forbes from the African American Studies program. So it is clear that I have had deep respect for this University, as I have had for the Colleges, several of which I have visited in advance both as a soccer coach bringing teams to Seven Sisters soccer tournaments and as a reviewer of physics and astronomy departments and programs at Mount Holyoke and Smith.

Chaos, as it invoked the reaction as it did during Ernie May's introduction of me, merits a brief remark for those who are not specialists in the field. For most of us, we understand it is as was intended by the whimsical application of the term to the scientific field of chaos. Chaos of common understanding suggests a form of disorder that is generally quite frightening when we think of social groups or organizations. It suggests a situation about which there is generally little control or predictability and, perhaps at its very best, it suggests that common academic metaphor for academic management which is herding cats or corralling things. In the face of that sort of chaos, all one can do is to build and set boundaries.

As an owner of four cats, I would dispute that herding is the best strategy for managing the family enterprise. In fact, the cats are quite intelligent and cats have quite distinctive personalities as well as particular desires, needs and decision-making processes. Respecting their decision-making processes leads to much happier households than in one which has a variety of barriers and closed doors. Controlling chaos as a scientific discipline is a much better metaphor because the scientific term *chaos* applies to dynamical systems: those that are rule governed (albeit by nonlinear rules). They have principles that they follow -- intentionalities, and elasticities.

When one wants to modify a dynamical system then one encourages tendencies but does not have to push very hard. One restrains those tendencies which might be self-destructive, but gently because there then are other more attractive things to do. Controlling chaos, or managing chaos as it is done scientifically, often turning very erratic systems into interesting periodic or stable -- constant -- situations is a much more interesting metaphor for me, and I must say as a specialist in the field of chaos, I am not afraid of that as a circumstance for a challenging administrative position such as this.

This consortium not only represents itself as one of the oldest and one of the best, but is viewed by the outside world as one of the oldest and one of the best academic consortia. It is different in many respects from other academic consortia. It is not a long-distance consortium such as some of those in which I have participated, in which one must reach out to the occasional serendipitous event such as a faculty development activity or a trip that might lead a group of peers from across a group of institutions to some distant place for an experience that they might share. Nor is it as close together as the Claremont Colleges, where students and faculty members need only walk a block to find a different institution and a different set of curricular activities. It is a more intermediate consortium, very much like the one in which I studied as a graduate student, taking courses at both Bryn Mawr and the University of Pennsylvania, and where I taught at Swarthmore and Bryn Mawr within that four-institution arrangement.

This is an unusual consortium, not only because of its history and what it has built, but because of the partnership between private and public institutions. A flagship research university partnered with predominately undergraduate liberal arts colleges is not the norm in academic consortia. This consortium is substantially academic, though perhaps not taking advantage of all of the academic opportunities. It differs from consortia that are formed for economies of scale only, and primarily in the business area, so that if they buy toilet paper together they will save a few percent on price. The scale of the challenges that the Provost has just described and which the Chancellor has described reaches far beyond what further economies of scale with regard to purchasing might bring us. The economies of scale generated by the Five College consortium in its early days were so successful that the state took over the buying consortium and the Massachusetts Higher Education Consortium now serves the whole state and its institutions. There is very little in the way of consortial buying operations within our consortium now. We are a matured consortium. We are an academic consortium. We are a public-private partnership. All of these are very attractive to me particularly the strength of the institutions and the maturity of the consortial activities.

In a meeting with department chairs at Mount Holyoke College about a month ago, we had representatives from those departments and interdisciplinary programs for which we could get at least three of those leaders from the five institutions together. We talked about things we will be doing in Five Colleges in the way of strategic planning, going right to the point that we ought to identify what we do well, and be careful in our conversations about the future that we not neglect what we do well. We ought to identify what we do, but not so well, so that we ought to improve. We

ought to identify those things we haven't considered and explore them, and I suppose, though I didn't ask that question at that meeting, we also ought to identify the things that we try to do that we ought to discontinue because they are not core to our mission or really offering us promise of success.

I invite all of you to contribute, as the roughly 85-90 attendees of that meeting did, to the answers of those questions, both because it is important that we continue to do well the things that we do well and that we take the opportunities to take the opportunities that are missed. I think that there are a variety of those opportunities and I want to speak to those briefly.

As a member of the Graduate Council, I found that there would be good Five College opportunities for me to contribute and for the colleges to contribute to the conversations about research ethics. This is another in the list that the Provost could have enumerated even at greater length, of areas of regulation where we are required, for example, by federal funding to offer those who do research with federal funding a research ethics training program that goes well beyond the long-standing requirements of training in the care and use of animals in research or the use of human subjects in research -- the broader research ethics issue provoked by scandals of unethical behavior with data and citations or dealing with colleagues that has led to embarrassments in various institutions and in various countries. The federal government has created an unfunded mandate that we have to provide these research ethics programs for those who are funded. Developing that together may well provide us opportunities to share both in the offerings of modules -- there is a grant the librarians here at the University have to develop some of those instructional programs. I think it is an obvious area of partnership since it is a requirement, given the amount of federally-funded research at the Colleges, as well as at the University.

There is broad interest in fifth-year programs. There is interest here and at the Colleges. Three of our five schools have some and at least four of our schools imagine having others. It's a particularly cogent issue for liberal arts colleges because they often face a difficult balance between the focus on liberal education with a future to come later and a need and desire to graduate those who will go on to be successful in society and their careers, whether through graduate/professional school first, or directly into the workforce.

Where is the practicality of a liberal arts education? It is a question that is faced in much of the arts and sciences education at the university as well as at the liberal arts colleges. Liberal arts colleges are at a disadvantage, by choice, in not being like a comprehensive university that might have a major in every job. Pick the job. There may well be a major that matches that job, and therefore the person who wants to be an aeronautical engineer can find aeronautical engineering. But even more specifically, if you've watched CSI and you want to be a forensic pathologist, you might find a major in forensic pathology at a comprehensive university, or other similar connections right on down the line. Liberal arts colleges quite deliberately avoid any of those. There is some of that in all universities and some of the comprehensive universities have sought their admissions solutions through naming the job, matching it to a major, and therefore attracting those interested in that job by saying we offer a direct pathway to the job.

Fifth-year programs offer an opportunity to blend a broad arts and sciences training into more specific opportunities for either graduate and professional schools or for career opportunities. Among those that the Colleges have been thinking about are those that would provide bridges from their arts programs into Master of Fine Arts programs, whether here or at other MFA programs. Students prepared with only a Bachelor of Arts degree generally do not have the portfolios necessary for them to advance into MFA programs. They are at a competitive disadvantage in that application process. A fifth year, whether it's a certificate, a postbaccalaureate program, or an equivalent that earns them something like a BFA, or perhaps as a bridge program into an MFA program, might not be at all be equivalent to earning a MFA in a fifth year. A bridge program of some sort would both strengthen arts programs (and their recruiting) among our Five Colleges by having connections to a next step, while those who participate might also contribute to the arts programs as teaching assistants or as musicians in ensembles. It would also help those students find the career path that they settle on once they discover that their ten fine arts courses are insufficient to move them in the career path that they wish. In theatre at least, Smith already has an MFA program.

It would be a shame, in my view, if we all find these opportunities, both for revenue and for service to our students, and then compete by trying to build separate programs, where we might do better together. There are faculty skills and expertise in the Colleges that might well serve and contribute to a five college endeavor in these programs that might help with some of the issues that I heard inklings of in the comments about 12-month programs, such as, who exactly are the faculty members who will teach in all three of the major sessions during the year, or must we use

adjuncts in the summer because our full-timers teach only during the academic year? There are some vexing questions about the schedule in which faculty members teach for both the Colleges and the University. Some partnerships might help there.

I also was impressed by the RFP process because I have seen it at work as described in several other universities. Often bemoaned is the fact that in the Colleges it is rare that there are enough resources that can be grouped together to create a collective, such as is focused in one recent area here at the University -- biophysics. How do you get the collective possibilities to move ahead in areas for which there is not enough or not any resource currently allocated. Partnerships are among the possibilities. We are fortunate that there are a number of foundations that actually believe that there are some problems with the go-it-alone business model, both for colleges and for colleges and universities. Those foundations are willing to provide funding to explore opportunities for collaboration. We now, unlike any other consortium that was represented at a recent consortium meeting, have not just one (which would be unusual), but twenty-two joint faculty positions, in which needed specialties, needed both at the University and the Colleges are served by faculty members with positions that are funded by more than one, often by all five institutions, and lead to teaching at more than one, often at all five institutions.

While there are some vexing parts to sharing faculty members and having more than one home and more than one place to do service, these are things to figure out. We have been a richer consortium for having those who teach in more than one place bringing their expertise to several of our member schools, and through other things such as borrowing of faculty members, we have been able to share specialties and therefore have each institution benefit from more specialties than we otherwise might have.

We have also had the opportunity to let faculty members in specialized subfields find peers. In sub-sub specialties it is often a lonely opportunity at one institution and yet a very rich and supportive community when we combine the five. It is far from lonely in Women's Studies with 350 specialists who come together in the Women Studies Research Center based at Mount Holyoke. This is one of the richest communities for Women's Studies anywhere in the nation. There are other combinations of various sizes, as well as these new initiatives that I have described. We still have, funded with money from the Andrew W. Mellon Foundation and some of the endowments of Five Colleges, Inc., funding for three more joint positions -- funding in the sense that the first three years will be funded by these grants before the institutions have to take up the appropriate shares of those positions. We have another grant that provides grants for three-year post-docs, each of those post-docs to teach six courses, five at the home base and one at another of the institutions. We hope to launch searches for three, four or five of those post-docs this fall and to launch searches over the next two years for the balance - for a total of ten of those positions. Only roughly 1/4 of the funding must come from the host institutions while the balance will come from the Mellon grant and Five Colleges resources. There are opportunities to go for those kinds of funding. There is opportunity to find further funding to explore ways that we can strengthen our libraries while dealing with the tough times and the skyrocketing costs of electronic resources that savage our ability to acquire individual books and monographs. Having the libraries work together on the technical services and in other areas in which they can collaborate will make the libraries stronger for the research and the teaching that we wish to do.

There are many untaken opportunities. Because we haven't done it in a while and because I'm new, we will be having conversations this year which explore ways the Five College Consortium can be even stronger to benefit teaching and learning and scholarship at all of our institutions. One of the tasks that I will request be delegated (and I will talk to the Rules Committee soon, but I leave to each institution to the faculty members at each institution to figure out), is the nomination of faculty colleagues with broad institutional experience and perspective from each institution to come together for conversation from faculty experiences, from the teaching and learning and scholarly roots that faculty members bring to these conversations. We will discuss what we do well, what we can do better than we are presently doing, and what we could do that we are not already presently attempting; and we will try to envision what a stronger consortium would look like ten, fifteen, or twenty years later.

As some of your questions to the Provost indicated, if we are to be the kind of institutions we wish to be, we will need to change, and changing in times of downsizing is extremely hard. But I think it is unreasonable to imagine that there will be less change in the next twenty years than there has been in the last twenty years. If we look where our institutions were twenty years ago, in terms of the methods of teaching, the topics we teach, the ways students learn, and the kinds of students we bring to our institutions, we have to be confident that there will be similar changes in the future, and we have to find ways to move our institutions forward to accommodate those changes. And, at least in the

short run, as we move towards those changes, we will have limited resources that can only be the richer for collaborating than for trying to go alone.

I am pleased to join you. You may remember how to pronounce my name, as Ernie has done correctly, by remembering the 'H' is silent as is the 'H' in the town in which I work, Amherst, and the 'H' in the town in which I live, Whately. Three silent 'H's' come together to get that right. I look forward to any questions you may have as I begin this journey.

Secretary May. Thank you for your comments. We had a brief conversation a couple of days ago and it did strike me that the way Five Colleges have worked most effectively have been on a low-level coordinated collegial aspect where colleagues happen to be in the Valley and they get together and things start to happen. At the managerial level, Five Colleges has always been a very central administration centric activity. The invitation to have us join in some planning effort or even, I would hope, a Five College Faculty Council, as a coordinated group could be a welcome vehicle to make things more cooperative.

Executive Director Abraham. I agree the micro-ecologies of faculty cooperation are among the greatest strengths of this consortium and they are often hard to report. Individuals who say, "I have a colleague from one of the other institutions and this is working for me or us," that is something we ought not to lose. I have watched, as many of us have, over the last forty years, perhaps thirty, that first the federal government and next corporations and foundations in their giving, have stopped supporting small things in favor of large single initiatives that are supposed to solve problems. In academic environments we work in these smaller cultures. At the departmental or sub-departmental or sub-specialty level, we have to keep our eyes on that richness at the same time we look for corporate solutions that might help with some of those things that are appropriately corporatized. The ecology of the academic environment is quite different and one we should support. And it is one we will carefully consider and one we will discuss, I hope, at our strategic planning conference with faculty members from across the institutions. I hope we will also discuss the importance and utility of a Five College Faculty Council. We'll be having a similar conversation with the Trustees later this year to think about what are the right ways for Trustees to come to understand what a consortium is and what it can bring. That may involve more regular conversations with the Trustees rather than the consortium dangling out there as some opportunity not fully realized and which is not well understood.

Are there other comments or questions that you have for me at this time? If not, I certainly encourage you to communicate with me after this meeting and to invite me to come when and where you would find it helpful. I look for many ways that we can communicate as this year unfolds, in particular, and for a number of years to come.