

Linking Mobilization to Institutional Power:

The Faculty-Led Diversity Initiative at Columbia University

-Emma Freudenberger, Jean E. Howard, Eddie Jauregui, Susan Sturm

I. Introduction

In 2004 a diverse group of motivated faculty conceived an initiative that would yield sustainable, lasting change in the area of diversity at Columbia University. Their work led to the creation of a Vice-Provostial position dedicated to diversifying the university's faculty and administration and heralded an unprecedented period of cultural change within the institution. Supported by an initial \$15,000,000 commitment, the initiative has stimulated innovation across the Arts and Sciences and the university's professional schools and has mushroomed to involve change agents within the faculty, the student body, and the academic and administrative staff. In what follows, we will briefly outline the origins and history of this mobilization effort, and, more importantly, we will attempt to outline the theory of institutional change that continues to guide the effort. While the initiative's successes have been due to many factors, including the canny deployment of data, the cultivation of a strong leadership network, and an orientation toward concrete program building, they have above all depended on finding how to implement faculty ideas and mobilize faculty energies in ways that have the greatest impact on key decision makers within the university—chairs, deans, vice presidents, the provost and president. In short, this is a story about how faculty mobilization, a source of power in itself, can be effectively linked to other sites of power within the institution to promote progressive change.

The authors undertook the writing of this chapter as part of a broader effort to build self-reflection into the diversity initiative. Two of the four writers—Jean E. Howard and Susan Sturm—have been important architects of the Columbia diversity initiative. Much of the history here described involves their own efforts, and they can not claim to be impartial observers. In an effort to introduce a critical lens on the initiative, however, two other researchers have been engaged in the process of documenting and analyzing the diversity initiative. Eddie Jauregui and Emma Freudenberger, law students enrolled in a field research seminar who were not involved in the work of the initiative, joined the study team and reviewed the extensive documentary record of meetings, reports, and email exchanges concerning the initiative. They also interviewed many of the major players who have been involved in the initiative and played an important role in narrating the story, validating or refuting Jean Howard and Susan Sturm’s interpretation of events, and framing the analysis provided below.

II. Origins

In 2004 the core group of faculty leaders spearheaded a mobilization effort that emerged in part through a sense of urgency about the lack of diversity in key parts of the university and in part from analyzing the limits of previous reform efforts. The two senior faculty members who convened the group—Susan Sturm from the Law School as co-chair and Alice Kessler-Harris from the History Department as its most senior faculty member—had been involved in the University Senate’s Commission on the Status of Women which in 2001 produced an important report, “The Advancement of Women through the Academic Ranks of the Columbia University Graduate School of Arts and Sciences: Where are the Leaks in the Pipeline?” (familiarily known as “The Pipeline

Report”). The data in this report revealed that except in a few places in the humanities, women and faculty members from under-represented minorities were not present on the faculty in numbers commensurate with their availability in the key pools from which Columbia hires. In addition, the overwhelming majority of external senior hires without competitive searches (target of opportunity appointments) went to men. For example, in the decade covered by the 2001 Pipeline Report, in natural science departments, eleven of eleven target of opportunity hires had been filled by male scholars. In an institution heavily dependent on renewing the faculty through senior appointments, this latter fact showed why the process of demographic change had been slow.

When the Commission attempted to use the report to promote institutional change, however, Commission members found few institutional leaders ready to address its challenges. While the Commission could usefully pinpoint problems, it was not positioned to transform information into action. It became clear to Professors Sturm and Kessler-Harris that data alone was insufficient to generate an institutional commitment to changing race and gender demographics at Columbia. Consequently, they convened a working group of influential faculty with a track record of commitment to gender and racial inclusion. This group evolved a new strategy that seized on the opportunity presented by the appointment of Lee Bollinger as the new President of Columbia. He had defended the University of Michigan’s affirmative action program before the Supreme Court in *Gratz v. Bollinger*, and his public commitment to diversity resonated with the goals of the core faculty group.

After a process of discussion that lasted a number of months, the core group decided to ask the President and the Provost to create an administrative position, but one

to be held by a distinguished faculty member and not by a career diversity officer, dedicated to overseeing a university diversity initiative aimed, in the first instance, at increasing the diversity of the faculty and the upper administration. The group making this request had itself a great deal of institutional credibility. Included were, among others, the past and present chairs of history, the chair of psychology, the chair of anthropology, the head of the Institute for Research on Women and Gender, the head of the Institute for Research on African-American Studies, the most senior woman in the biology department, the co-chair of the Commission on the Status of Women, and one prominent legal scholar well known for his work on law and sexuality and critical race theory. The initial composition of the group proved crucial. As one faculty member put it:

They knew us all. Everybody on the committee had a reputation for probity and working with the institution and for being sensible but everybody had a reputation for being tough. . . . I'm sure when we walked in they said, "Oh, I see, these are the most senior women on campus and they are united . . . whoops."

By assembling individuals with strong academic credentials as well as a history of institutional leadership across many domains, the core group leveraged the legitimacy of key individuals for a collective enterprise. It also established the precedent, so important for subsequent efforts, that faculty would lead the way in determining the shape and content of the initiative.

Armed with the data from the Pipeline Report, the group met several times with the President and Provost who, after some initial skepticism, assented to the creation of a new university post, a Vice Provost for Diversity Initiatives, and to the appointment of Jean Howard, the person nominated by the faculty group, to be the first holder of this office. They also agreed to create a Presidential Advisory Committee on Diversity

Initiatives composed of distinguished faculty members who would help the new Vice Provost in structuring and defining the work of the office, establishing priorities and keeping key administrators focused on how to transform ideas into programs and policies. In creating the position, the faculty group argued that the Vice Provost should have an all-university purview and so should report directly to the Provost and regularly to the President; that it should be located, physically, within Low Library, the key administrative hub at Columbia; that it should have an ongoing claim to the data-gathering capacities of the Office for Institutional Research; and that it would be supported by an Executive Assistant and draw as needed on the support of the University Counsel, the Office for Equal Opportunity and Affirmative Action, and other administrative units such as the Office of Human Resources.

Equally important was the choice of Jean Howard as the first person to hold the post. Howard had been a faculty member at Columbia for nearly twenty years. A noted scholar of Renaissance literature, she had been graduate director in her department, head of the Institute for Research on Women and Gender, and chair of the Commission on the Status of Women when it produced the Pipeline Report. She was known and trusted by the faculty, was familiar with the workings of the institution, and had a track record of accomplishment as an administrator as well as a deep commitment to the creation of a more inclusive academic community. In securing her agreement to hold the position for a three-year term, the group established the precedent that the office would be held by a respected faculty member nominated through a faculty process.

III. Building the Infrastructure

Once she assumed the office in September of 2004, Jean Howard moved swiftly to appoint the Presidential Diversity Committee composed jointly of those who had formed the core group that led to her appointment and others who represented key constituencies such as science faculty and faculty concerned with the study of race and ethnicity. Members were chosen with an eye to their institutional prominence, their experience with and often their research interests in issues of diversity, and their administrative sophistication. When the committee was first seated, it included a female member of the national Academy of Sciences, a member of the Brown University board of trustees, a past university vice president, three law professors, a trustee of Smith College, and three faculty members in leadership positions in Columbia's Institute for Research on Women and Gender, its Institute for Research in African-American Studies, and its Center for the Study of Race and Ethnicity. Each member of the group had his or her own informal network of faculty connections, and so the body was able to extend its reach deep into many quarters of the Arts and Sciences and the Law faculties, the two schools most involved in the proposal to create the office. This group, which meets three to four times each semester, has remained an essential advisory body for the office from its inception.

In year two, a second advisory board, The Professional Schools Diversity Council, was constituted. It was composed of faculty and administrators from each of Columbia's professional schools including Law, Business, Social Work, Architecture, Journalism, Medicine, Public Health, Dentistry, and Nursing. This board has overseen initiatives unique to the professional schools as well as increasingly cooperated with the Arts and Sciences Advisory Committee to co-author pan-university initiatives in areas

such as work-life enhancements and the creation of faculty development and mentoring programs.

In addition, Vice Provost Howard, not being a scientist but aware of the special need to increase the percentage of women and under-represented minorities on the science faculties at Columbia and to build pipelines to encourage their entrance into these disciplines, appointed an Ad Hoc Committee on Diversity in Science and Engineering chaired by a distinguished member of the Psychology faculty, Norma Graham. As a happy coincidence, the fall that Howard was appointed also coincided with Columbia's receipt of an NSF ADVANCE grant of \$4.2 million to promote the advancement of women in fields connected to Columbia's Earth Institute and the Lamont-Doherty Earth Observatory. From the beginning the Vice Provost and the leaders of the ADVANCE grant worked in partnership with Norma Graham's committee to institute innovative programs and policies that would realize the goals of the ADVANCE grant and that would be generalizable, with appropriate modifications, across the institution. These have included such things as the administration of a climate survey, the development of a lecture series on the Science of Diversity, focus groups for graduate students in the science departments, and targeted support for women scholars in the form of workshop leadership awards and research productivity grants.

These three committees have provided the primary vehicles for formal ongoing faculty input into the work of the Vice Provost's office. At times they have initiated major projects, such as planning training sessions for search committees on how to do inclusive searches; at other times they have requested information from other university offices, advised the Vice Provost on how to respond to particular problems, presented the

case for change to other members of the administration on behalf of diversity initiatives, been part of vetting committees assessing potential faculty recruitments, and taken an active role in a number of public events and programs including faculty development workshops, colloquia on research related to diversity topics, and meetings with funding agencies and potential donors. They have been, in short, policy making, advisory, and persuasive entities. They have given the office a reach into the faculty that the Vice Provost alone could never have achieved, and they have kept her accountable at all times to faculty concerns and priorities. Composed of distinguished members of the faculty, they have given the work of the office legitimacy.

In addition to these faculty committees, the office has been supported by an Executive Assistant, Andrea Thomas, and has worked in tandem with the Office of Institutional Research in the production of data ranging from salary equity reports to analyses concerning under-representation. The work of the office has at various times also been supported by Public Affairs, Development, the President's Special Events staff, the General Counsel's Office, Human Resources, and the Office of Equal Opportunity and Affirmative Action, each of which has played a leading role in bringing particular projects to completion. Human Resources, for example, worked closely with the office to prepare data for our Child Care Self-Evaluation; Special Events has helped the Vice Provost stage diversity-related lectures and conferences; Development has helped the office approach foundations for support for diversity initiatives; Public Affairs has publicized events and successes; and the General Counsel's office has vetted all of the office's programs to be sure they meet legal standards. The office has, in short, carefully made use of the many kinds of expertise to be found across a range of university offices

and has worked collaboratively with those offices to build programs that would be deeply embedded in the university's infrastructure.

At the same time, in order to be sure that the importance Columbia places on diversity is a central part of key university conversations, the Vice Provost has been a member of a number of standing university committees including the Provost's Committee on Housing, the Provost's Council of Deans, the Academic Review Committee for the Arts and Sciences, the Council of Chairs in Arts and Sciences, and the all-university Commission on the Status of Women. Informally, the Vice Provost meets regularly with faculty and with chairs and deans throughout the university who come to her with problems or with ideas for initiatives that would further the university's diversity mission. The office, as was intended by its faculty designers, is meant to be a physical and symbolic hub, a place to which ideas flow from many quarters of the university and from which a number of initiatives are undertaken, often in cooperation with a range of other university offices and decision makers, whether the Head of Human Resources or the Dean of the Columbia School of Public Health.

IV. Facets of the Initiative

So what has the office done? The problem facing a brand new office was that there was no blueprint for how to implement change. And, of course, there was widespread skepticism about how fundamentally the university meant to alter the ways it operates in order to create a more inclusive faculty and to foster a campus climate that values diversity as a means to achieving excellence. Since searches are the mechanism by which university faculty and administrators reproduce and renew themselves, thoughtfully re-examining the hiring process was identified by the Diversity Committee

as the most important task it faced. The question they asked was: what would have to change to get more women and under-represented minorities into recruitment pools and then into faculty and administrative positions?

A. Search Practices

Nothing is more important for the intellectual vitality of a university than the rigor and creativity with which searches are undertaken. They are the means by which the university expresses its commitment to excellence and diversity. Too often, however, searches are passive and routinized activities. Ads are posted; dossiers arrive; committees use certain often unarticulated criteria to winnow files. To produce better diversity outcomes, every aspect of the process—from where ads are placed to how recruiting visits are structured—had to be examined. A subcommittee of the larger Advisory Committee took on the task of deciding how best to engage faculty, especially search committee chairs, in a conversation about inclusive hiring practices. Drawing on a model developed at the University of Michigan, they urged that search and department chairs in each division of the Arts and Sciences (and later in all of the professional schools as well) should be invited to dinner meetings at which they would hear three brief presentations. One would deal with data on the racial and gender demographics of that division over the last fifteen years. The second would deal with all the barriers that prevent more inclusive recruitment and hiring. A third would detail the best practices that might help overcome those barriers and produce a more diverse pool of candidates and, eventually, a more diverse faculty. These presentations, all of which would be made by faculty members from the division under discussion, would be followed by an extended question and answer period.

As of the fall of 2007, these search and hiring dinners, as they have come to be known, have been extended across the entire university. Crucial to their success are, first, the fact that they are led by faculty from the departments under discussion since these faculty have credibility in their intellectual communities and understand the particular problems facing, for example, an engineering faculty in the recruitment of minority candidates. Second, it has been important that the presentations are data and research driven. As one of our interviewees said, “In dealing with scientists not only is the data element crucial but the visual element is crucial. They want the graphs and the charts and the arrow bars and that’s what prompts discussion, not a very eloquent report.” We found this sentiment to be frequently reiterated. When departments and divisions could see graphic pictures of how they had or had not changed over the course of the last fifteen years in their recruitment of women and under-represented minorities, and when they could compare their profiles to the hiring profiles of peer institutions and with national availability pool data—those were the situations in which the will to change was generated. Third, to be successful these dinner meetings must provide concrete tools to help faculty change their practices. Over time, those doing the presentations developed an array of materials to disseminate: standard evaluation instruments to rate candidates on agreed-upon criteria; suggestions for new places to announce openings that might attract diverse candidates; sheets outlining best practices for conducting searches and recruitment visits; names and locations of nearby child care facilities, many affiliated with Columbia; lists of the benefits the university makes available to new faculty; even a sheet outlining the key benefits of living in New York City. Aimed at changing the way the university community thinks about searches, these search and hiring dinners, while

labor intensive, have been one of the key tools the office has used to encourage new ways of doing the daily business of university life.

B. The Hiring Initiative

At the same time, the Presidential Advisory Committee felt that the university needed to make a public commitment of new money in order to signal the sincerity of its intention to create a more inclusive institution and in order to jumpstart the process of changing the demographics in Arts and Sciences, the symbolic heart of the university. Consequently, the committee worked with the Vice Provost to prepare a request to submit to the President, the Provost and the Trustees for \$15,000,000 to be used for the hiring of outstanding candidates who would further the university's diversity goals through their teaching, research, and mentoring activities or if they were members of groups under-represented in particular areas of the university. Positions were to be fully funded by the Vice Provost for five years.

The money was granted by the President in spring of 2005 and began to be used in academic year 2005-06. Several factors have proven central to the success of this initiative. First, nominations for these target-of-opportunity positions must come from departments and fully meet departmental criteria for excellence in research and teaching. Second, departments must commit future resources to obtain a line. After the initial five years of central support, going forward the lines are funded from departmental budgets as other faculty retire or leave the institution. In short, the departments must want and value the candidates they propose and not merely regard them as "freebees." Third, departments must compete for the lines, and not all proposals are accepted, priority being given to the intellectual excellence of the candidate and his or her potential impact across

disciplines and academic units, as well as the ways in which he or she would centrally support the diversity mission of the university. The result has been that those who have received such appointments have been intellectually outstanding and have been avidly wooed by the hiring departments, resulting in a very high percentage of successful recruitments.

Both of these initiatives were decided upon in the first year of the Vice Provost's term, and they have been ongoing since that time. Last spring the first results of these efforts became visible. Under-represented minorities made up 11% of the faculty hired in 2005 and 26.5% in 2006. Women made up 34% of those hired in 2005 and 38% in 2006. We believe these increases are due to a combination of more inclusive search practices and targeted recruitment efforts. One year is too short a time to determine trends, but we are pleased with these outcomes.

C. Outreach

The third priority of the Diversity Committee in the first year was a series of public events that would focus attention on diversity issues and would be seen to have the endorsement of the President and Provost. That year, and in every subsequent year, the Vice Provost's office has arranged at least two such events strategically designed to highlight issues of crucial importance to the diversity effort. In the first year, for example, in cooperation with ADVANCE, Shirley Tilghman, the first woman president of Princeton, was invited to Columbia to talk about how to build the pipeline of women choosing careers in academic science. In a rousing address that drew national attention, President Tilghman made, among other things, an impassioned plea for the importance of university supported child care to help young parents, especially but not only women

scientists, as they advanced from graduate students to postdocs and then to career scientists. Part of her address constitutes the introduction to the comprehensive report on child care that was subsequently developed by the Office of the Vice Provost for Diversity Initiatives as part of the creation of a more robust set of work-life supports at Columbia. Other lecturers have included Charles Vest, the former President of MIT, Ruth Simmons, the President of Brown University, and George Chauncey, Professor of History at Yale University, who spoke about the struggle for gay, lesbian, bisexual, and transgendered rights. These events provide ways of educating the Columbia community about key diversity issues and also put pressure on our institution to match the advances being made at comparable institutions.

D. The Professional Schools Diversity Fund

In the second year of its existence, the Office of the Vice Provost for Diversity Initiatives took on two major new initiatives. The first had to do with spreading the work begun in year one into the professional schools, and the second had to do with addressing a series of work life issues that impacted both the recruitment and also the retention of the increasingly diverse faculty Columbia hoped to attract. In regard to the professional schools, a second advisory council was formed, as detailed above, and it began to discuss how to adapt the search and hiring practices dinners to the culture of the professional schools. With some modifications, the model is now being used in most of those schools where presentations have been made to faculty in Law, Business, Dentistry, Public Health, Social Work and Engineering.

To create incentives for more robust diversity recruitment, the President, at the request of the Professional Schools Diversity Council, granted \$2,000,000 to be spread

over three years to enable schools to receive three kinds of financial support for their diversity efforts. They could request a short-term fellowship to underwrite recruitment visits stretching from two days to two weeks for a faculty candidate whose hiring would support the diversity goals of the university, or they could request a long-term (one semester) visit for the same purposes. In addition, departments could nominate candidates for research fellowships of up to \$25,000. These support the research agenda of new recruits or of untenured faculty who have the strong backing of their departments and have demonstrated the potential for long-term academic appointments. To date, five short-term visits have been authorized and fourteen research fellowships have been awarded. Though the amounts of money are relatively small (short-term visits typically are funded in amounts ranging from \$3000 to \$10,000), they encourage departments to consider diversity candidates for long-term appointments, and they ask departments to focus on the development for tenure of those diverse faculty they have already successfully recruited.

E. Work Life Initiatives

After year one, the Diversity Committee felt that attention to hiring and recruitment needed to be supplemented by equal attention to retention, both in terms of improving the work-life supports that would enable all new faculty to thrive at Columbia, including especially women and under-represented minorities, and in terms of improving faculty development issues across the board. Attention was devoted to three initiatives. The first was **Child Care**. There was a perceived lack of child care programs in the Columbia vicinity, and when it could be found, the price of such care was often prohibitive. This was seen as a serious barrier to the recruitment of young faculty, and of particular

importance to young women in the sciences whose long hours in the lab made proximate child care a major desideratum.

Working collaboratively with the Commission on the Status of Women, the Vice Provost hired Bright Horizons Consultancy Group to do an analysis of Columbia's child care policies and programs, the demand for such services among student, staff, and faculty, and the availability of child care in the vicinity of Columbia's Morningside Heights and Medical Campuses. Completed in spring of 2006, this comprehensive report was then considered by a small faculty working group who winnowed its recommendations and produced an action plan with seven major recommendations, five of which the President and Provost in fall of 2006 accepted for immediate implementation. These included the hiring of an Associate Provost to oversee all work life programs, including child care; the expansion of two of Columbia's affiliated child care centers to accommodate spots for infants and one year olds, the age groups for which demand is high and capacity low; the affiliation of four more area child care centers with the university to further expand capacity to accommodate infants and toddlers; the creation of a back-up care program for staff, faculty, postdocs and Ph.D. students; and the formulation of a university policy statement on the importance of supporting the work-life needs of employees. Deferred for consideration next year were a recommendation for an on-site child care center and for a plan to subsidize child care costs.

Two years in the making, the child care initiative is expected to have a major impact on recruiting faculty with young children and on the retention of those who have families while on staff. Interestingly, survey data indicated that older members of the faculty were nearly as likely to support the university's spending money on child care

services as were younger faculty, indicating how widespread is the perception that such services are essential for the long-term health of the faculty and its hiring ambitions. As with many of the initiatives undertaken by the Office of the Provost for Diversity, this one began with the intention of meeting the needs of women and under-represented minorities, but, in actuality, identified a need experienced by many other faculty as well. Targeted efforts can thus lead to wide-scale change and be the catalyst for much needed institutional innovation.

A second initiative involved **the Dual Career Problem**. Members of the science faculty early on pointed out that 62% of married female scientists have partners who hold Ph.D.s in science. Hiring such a woman often means finding a good academic position for her partner. While the dual career issue may be especially pressing for women scientists, it is not unique to them. Chairs throughout the university have said that the problem of placing partners is one of the main barriers to successful recruitments. Consequently, the Office of the Vice Provost appointed a committee to consider the Dual Career problem at Columbia, to investigate what other schools are doing to solve it, and to make recommendations. Learning from other institutions, the committee recommended that Columbia follow Cornell in creating a dual career office that would assist dual career couples making the transition to New York City. Partners of recruited faculty seeking non-faculty appointments within Columbia would be referred to a professional located in Human Resources for advice about possibilities for staff and administrative posts. For those seeking faculty employment the committee recommended following the lead of Stanford University and appointing a faculty “broker” whose job would be to arrange short-term appointments within Columbia for partners of recruited

candidates. The broker would be a respected faculty member familiar with Columbia's schools and departments and would have resources that would enable him or her to arrange temporary appointments. The proposal is awaiting implementation.

At the same time, the Vice Provost began conversations with New York University and with Yale University to set up an area academic job bank that would enable schools within a 100-mile radius of New York City to cooperate in solving the dual career problems that could not be resolved within any one institution. It was quickly discovered that there was already a national movement to create such regional job banks. HERCs, Higher Education Recruitment Consortia, exist in Northern and Southern California, in the northern New England region, in New Jersey, and were under development in Upstate New York. The HERCs use a web-based search engine that includes listings for all jobs at member schools, both faculty and staff positions. These postings are available at no charge to anyone seeking employment in higher education. The website prominently features a dual career function whereby two people can specify what each needs by way of an appointment and the distance each is willing to travel. Email alerts inform both parties about any two posts that fit their specifications. In February of 2007 the Metro New York and Southern Connecticut HERC launched with 43 founding members. Based at Columbia, this new tool can not only help to solve dual career problems; it also serves as an important resource for new graduates seeking regional employment, and it can be used to promote diversity outreach and to foster collaboration on a number of issues among member schools.

F. Faculty Development

In their third year of existence, the Diversity Committees and the Vice Provost extended their focus on retention to encompass faculty development efforts. Extensive interviews with untenured faculty suggested that many are not adequately informed about tenure standards at Columbia or about how the tenure process works; that they sometimes receive little official feedback on their scholarship, research, and teaching from senior colleagues except at the moment of the tenure decision; and that they are not all included in the informal mentoring networks that faculty “naturally” establish with some of their junior colleagues. This is of particular concern for young faculty who because of their race, ethnicity, or gender are in a minority in their immediate work environment. In addition, many untenured faculty are uncertain about what kind of university or department service is expected of an untenured faculty member and when they can say “no” to service requests. Others are never officially informed about parental leave or other policies that might be of assistance to them in their early years on the faculty. In some departments, untenured faculty feel isolated from peers since there may be no other untenured faculty in their unit and because traditions of departmental autonomy militate against forming ties with junior faculty in other departments who might be sources of information and support in the pre-tenure years.

As a result, the Office of the Vice Provost, working with faculty advisory committees, has undertaken three new efforts. One is to prepare a report on the state of faculty development programs at Columbia and to survey what peer institutions are doing in this regard, especially in the area of faculty mentoring programs. Another is to begin to hold a series of meetings for untenured faculty in each school to discuss the tenure process. A third is to create occasions for untenured faculty to meet one another to create their own

networks across fields and disciplines in order to combat the isolation some individuals may feel. Improving faculty development programs at Columbia is a long-term effort, but we have made a beginning.

V Lessons Learned: Strategies for Connecting Mobilization to Institutional Power

The Columbia Diversity Initiative is still in its early stages. It has, however, produced dramatic results within that relatively short time period. In its first three years, the diversity initiative has generated considerable financial and administrative support for faculty diversity and prompted the hiring of a significant number of new faculty women and people of color. It has motivated schools and departments to examine their search processes and outcomes. It has produced university-wide child care and partner placement programs that will benefit all faculty hiring and reduce significant barriers to attracting diverse faculty. It has opened up conversations about gender and racial inclusiveness across the university. It has made diversity part of the university's capital campaign. It has produced ongoing activist and intellectual collaborations dealing with issues of diversity, bringing together faculty and administrators from different disciplinary perspectives. It has created a sense of hope and belief in the possibility for change among the many participants in its work.

In this section, we present our assessment of the principles that account for the diversity initiative's success thus far. We have identified three key strategies that we believe have been instrumental in producing meaningful change at Columbia and that could be applied in other institutional settings. First, the development of new kind of change agent, which we call **organizational catalysts**, plays a crucial role in connecting mobilization to power and in sustaining change. Second, the initiative shows the value of

developing and communicating **information** so that it can mobilize effective action.

Finally, we illustrate the importance of building change networks through **distributing leadership** as a strategy for sustaining change in universities with highly decentralized power structures.

A. Organizational Catalysts as Effective Change Agents

Achieving change within universities is like herding cats. Power is widely dispersed and decision-making decentralized. Departments often lack information about each other and about central administrative priorities and initiatives; central administrators lack reliable information about departmental decisions and practices. Departments and disciplines do not regularly interact; they value different types of knowledge and communicate using different language and styles. In these situations, gender and racial underparticipation may not be noticed, or if noticed, may go unaddressed. It is often due to cultural and institutional patterns and practices that cut across these domains but are difficult to observe or change from any one location. Often there are no incentives or mechanisms to address problems that span many domains.

The Vice Provost for Diversity Initiatives offers a way of institutionalizing much-needed boundary-crossing efforts. It is an example of a role we call “organizational catalysts.” This role involves individuals with knowledge, influence, and credibility in positions where they can mobilize change within complex structures such as modern research universities. Organizational catalysts occupy a position at the convergence of different domains and levels of activity. They have the mandate to connect information, ideas, and individuals and thereby solve problems and enable change. The Diversity Provost exemplifies this role as a conceptualizer, planner, coordinator, convener, and

mobilizer of the institutional transformation process. She also reproduces this organizational catalyst role in many different locations within the university. This section explores the features of the role that seem crucial to its effectiveness.

(1) Institutional Position: The Importance of Boundary-Spanning

A key feature of the organizational catalyst role is its institutional location at the intersection of many different spheres of activity. The Diversity Provost works on the individual, group, and system level. Her office draws authority from faculty participation but is located inside the university's central administrative structure. The Vice Provost is thus accountable to both the faculty and to the Provost and President. She operates outside bureaucratic lines of authority but is strategically positioned within the Provost's office, the administrative office bearing responsibility and authority for faculty. Her office is centrally located, but collaborates with many departments and schools. This position enables the Diversity Provost to draw together the diverse expertise and knowledge of people in different locations within the university to solve common problems and to equip them to bring the results of this work back into their day-to-day environment. This role thus creates a new space for innovation and problem solving that can improve mainstream practices within departments and schools. The university-wide initiative to help departments conduct more effective and inclusive searches is a good example.

At Columbia, the organizational catalyst's location in the Provost's office affords her access to key points of power and knowledge within the university administration. Several design features of the Vice Provost's office facilitate the organizational catalyst's

performance of this boundary spanning function. The position does not itself have particular governance or organizational duties, but places the organizational catalyst at the table for important decisions affecting faculty. The Vice Provost has regular contact with people in very different positions throughout the university, from the Provost to department chairs to faculty to the Office of Institutional Research to Human Resources. Her work brings her in contact with people struggling with similar issues in different departments. The office's dynamism is also sustained by involving multiple constituencies in its work, from high-level administrative to faculty, staff and students committed to diversifying the university.

This boundary-spanning position enables the office to cut across the bureaucratic silos that typically constrain innovation. This position at the nodal point of multiple systems provides a vantage point for observing patterns and bringing that knowledge to bear on particular problems. The Diversity Provost's work as trouble shooter provides her with informal knowledge about the breakdowns or bottlenecks affecting women and people of color in particular departments. For example, a number of untenured faculty who lack senior mentors in their departments have come to the Vice Provost for help. Many from the professional schools in particular have reported that they have never received information about the tenure process or tenure standards. These reports have led the Vice Provost to initiate faculty development programs focused in the first instance on getting every school to disseminate accurate and complete information about tenure to all untenured faculty. She learns about problems stemming from ineffective managers, dysfunctional systems, or simple lack of awareness, and is in a position to intervene at the appropriate level within the university. This work produces cultural and institutional

knowledge that organizational catalysts draw on in spotting patterns, analyzing dynamics, and enlisting participation of relevant actors. Her work over time and across different departments also provides information about overarching problems that require coordinated or centralized interventions. All over the university, for example, those in charge of searches have reported to the Vice Provost that the inability to place partners causes searches to fail and creates enormous frustration.

In addressing the problems brought to her attention, the Vice Provost can bring together the individuals from different institutional locations who otherwise would not connect and whose participation is necessary to address cross-cutting problems, such as lack of childcare or partner placement challenges. She can also focus this interaction on recurring problems and effective strategies for addressing them. This insider/outsider status enables the organizational catalyst to capitalize on the opportunities for change, to inject diversity considerations into ongoing decision making and long-term planning, and to bring together the mix of people needed to produce concrete results.

(2) Leveraging Legitimacy

As an organizational catalyst, the Diversity Provost occupies a hybrid role, one that requires knowledge, legitimacy, and social capital to get powerful people to the table, include relevant constituencies in decisions, and to allow the diversity initiative to influence their practices. Organizational catalysts must also be able to instill hope and trust in groups that have become skeptical about the possibility of change. The legitimacy of diversity as a goal must itself be continually re-established as part of the change process, often by a spokesperson with sufficient credibility and status to be taken

seriously. The role requires a person of sufficient knowledge, expertise, skill, and gravitas to work effectively with a wide range of constituencies.

The background and qualifications possessed by the role's occupants play a critical role in equipping them to perform the position's multiple functions. It was crucial to the initial mobilizing group to appoint a highly respected academic with strong scholarly values, administrative ability *and* a demonstrated commitment to advancing women and people of color. The formal attributes of the position – title, level, reporting lines, staff, and resources – also play a role in defining its stature and influence. The credibility of the office was enhanced by Jean Howard's position as a senior member of the faculty, with the title of Vice Provost reporting directly to the Provost and President. Her ability to marshal substantial financial support (\$15 million) for the diversity hiring initiative further underscored the significance of the diversity initiative and the Vice-Provost's gravitas as a player in university decision making. The position's status and institutional support also play a signaling function; they communicate a view of the office's significance to the community within which it operates.

The Diversity Provost's continuing legitimacy depends on her ability to keep diversity on the agenda and to get things done. The success of the hiring initiative in its first year, for example, motivated more departments to work closely with the diversity office to identify and recruit outstanding candidates. The creation of the HERC, discussed above, has given departments hope that they will get genuine help with their dual career problems. The working group and Vice Provost maintain a focus on intellectual and empirical rigor in all of their proposals or recommendations. As one faculty member put it, scientists (and most people) are “people who are used to having

their minds changed by data.” The Vice Provost’s office based its presentations and proposals on current research from peer-reviewed articles and peer institutions. Many of those interviewed also linked the office’s legitimacy to its ability to cut through red tape and to solve problems that affect faculty generally as part of the process of advancing the participation of women and people of color. Howard has commented that if you can solve a “smaller problem” for a chair or other faculty member, you open up a line of communication that makes them amenable to your message. “Columbia has a [reputation] where everyone thinks it doesn’t work,” said one faculty member. When people see concrete results, they sit up and take notice.

3. *Organizing work around projects and problem solving*

The work of the Diversity Provost depends upon the willing participation of busy people who already spend considerable time in meetings. It also depends on the capacity to sustain a focus on diversity in many different arenas and to cut through bureaucratic barriers to produce effective outcomes. A project orientation has proven helpful in meeting both of these requirements. The Diversity Provost provides an overarching conceptual framework for the diversity initiative, one that connects an understanding of the culturally and institutionally rooted dimensions of the problem to programmatic intervention, system design and institutional change. This conceptual orientation prompts actors to think about their efforts in relation to each other and to larger goals and analyses. The office defines projects that respond to identified problems in order to achieve specified and measurable results.

The Diversity Provost thus organizes work around solving the problems that pose barriers to diversifying the faculty. Many barriers to diversity also affect a department's effectiveness in other core areas, including recruitment, hiring, promotion, retention, faculty mentoring, and interdisciplinary collaboration. The diversity initiative reveals how gender and racial equity connect to core institutional concerns and at the same time preserves diversity as a distinct analytical and normative category. This strategy explicitly links diversity goals to the broader normative frame of advancing academic inquiry and achievement. It encourages exploration of how advancing women and people of color can improve the quality and dynamism of the overall academic enterprise. For example, the emphasis on improving searches was in part motivated by a desire to bring more women and under-represented minorities into our recruitment pools, but it has infused the recruitment process more generally with energy, rigor, and creativity. A problem orientation enables the diversity work to address core faculty concerns. It focuses energy on addressing underlying institutional limitations that must be remedied to achieve diversity but that benefit a much broader constituency. Often, gender and racial inclusion cannot occur without changing governance structures generally, which in turn benefits the overall institution. As Jean Howard has put it, "Everything that is good for the faculty in general can come from the diversity effort." What is good for the careers of women and faculty of color ends up improving the broader academic community.

The Diversity Provost's problem orientation also leads her to focus her efforts where the energy and momentum for change exist. These successes provide evidence that change can happen, which then provides a new basis for mobilizing hope and

accountability in new locations. Success also puts pressure on other departments to follow suit. This project-oriented approach creates occasions and incentives for people in positions of responsibility to act and for people who care about diversity to press for change. It maintains the institution's focus on diversity as part of its core mission. The Diversity Provost thus keeps diversity issues on the front burner and puts together workable solutions, making it harder not to take action. As one faculty member has said, "Our job is to hold the institution's feet to the fire" and make sure that change gets institutionalized.

Organizational catalysts thus put issues affecting diversity and equity on the agenda. They help create multiple constituencies for change—constituencies who otherwise would not see their interests as overlapping. They frame issues so that faculty concerned about the quality of the graduate student experience and about faculty retention join with those concerned about the climate for women and people of color to push for change. They arrange meetings with high level administrators so that they can hear the arguments from influential faculty together with advocates for improving the institution's involvement of women and people of color. They use the evidence from the data to demonstrate the existence of the problem and construct a case for action. They use their social capital and that of others whom they have brought into the process to make it more costly to do nothing. Perhaps most importantly, the organizational catalysts help figure out what to do, and then they do the leg work to maintain the momentum so that these proposed changes actually occur.

4. Reproducing Organizational Catalysts

The Diversity Provost is not the only organizational catalyst at Columbia. In fact, a crucial part of the Columbia strategy involves identifying individuals with the capacity to act as organizational catalysts within their own domain, and then equipping them with the resources, access, and skills to perform this function. For example, in the School of Dentistry, Dennis Mitchell had been very effectively functioning as both a faculty member and Associate Dean in the Office of Diversity. He had markedly improved the Dental School's track record in recruiting minority students. Because of his effectiveness in this role, the Vice Provost invited him to co-chair the Professional Schools Diversity Council and to expand his purview to encompass faculty diversity initiatives. His knowledge of the medical sciences campus, which includes the Schools of Medicine, Dentistry, Nursing and Public Health, has enabled him to generate initiatives appropriate to those contexts, and to translate initiatives developed for arts and sciences into the professional school environment. Other members of the Diversity Councils were also selected because of their promise as organizational catalysts within their own domains. The organizational catalyst role has been developed at the local level through newly created diversity positions, such as in the Engineering School and the Medical School. These individuals exercise everyday leadership at key pivot points defining access and participation. The architecture of the diversity initiative increases the number of these pivot points and decreases the risk of taking action. These structural innovations sustain the conditions permitting activism to flourish and leadership to emerge. (Meyerson 2001; Katzenstein 1990)

B. Using Data to Mobilize Action

Data is crucial to an effective change process. Information can be used to signal that there is a problem, to document the problem, and to mobilize efforts to address the problem. However, experience has shown that information alone does not produce significant change. It must be connected to decision-makers and leverage points for it to produce meaningful change and accountability. Information's potential to solve problems depends on its integration into a larger practice of institutional transformation.

The diversity initiative's use of information grew out of an understanding of key challenges that must be met for data to promote effective change. One challenge involved getting the right information, rather than information that the university collected only for compliance purposes. It was important to understand not only the extent of problems, but also the reasons they persisted and the leverage points for change. A second challenge involved getting valid and reliable information. Studies relying on erroneous data would undermine the credibility of the office. Third, information had to be communicated in a form that would be persuasive to the relevant communities. This meant having the capacity to present information of different types and in different forms and through messengers who spoke the language of particular academic communities. Finally, effective use of information required communicating that information to those in a position to act at a point when it could actually influence decision making.

Three key strategies emerge from an analysis of the Initiative's response to these information challenges: mobilizing different forms of knowledge, connecting knowledge to power and context, and overcoming barriers to effective data-gathering.

(1) Mobilizing different forms of knowledge

Information gathering grows out of and informs the initiative's programmatic work. The diversity initiative develops the varied kinds of data needed to address particular problems and pursue programmatic goals, and then develops varied forms of knowledge calibrated to addressing those concerns. The role of information in reforming search and hiring processes is illustrative. The Provost's office now puts together data documenting recruitment, hiring, and promotion patterns within particular departments and schools. The office also gathers data on the pools from which particular departments recruit faculty, and comparability data with peer institutions. This kind of demographic data often initiates participation by faculty and administrators in a change process. Academics pay attention to quantitative data revealing patterns of under-participation in particular departments, comparing those patterns to the pool from which departments actually recruit, and providing comparability data with peer institutions. Indeed, this kind of information jumpstarted the diversity initiative itself; the President and Provost did not realize the extent of under-participation until they saw the Pipeline Report. This realization catalyzed an already sympathetic administration into taking action.

Understanding the scope of the problem is only the first step. Faculty and administrators often throw up their hands in frustration; they simply do not know why these patterns persist or, more importantly, what they can do to change them. The diversity initiative developed a strategy to bring the demographic data to the faculty's attention and simultaneously to respond to their "why" and "how" questions. The Diversity Provost first gathered the best available research on the dynamics producing under-participation. This research included studies linking underparticipation to cognitive bias, informal professional networks, poorly structured search, recruitment and

hiring practices, and inadequate mentoring practices. As described above, the Provost's office, working in collaboration with Columbia's NSF ADVANCE project, also gathered information about best practices for addressing these problems. Building on the approach used by the University of Michigan STRIDE program, Jean Howard then enlisted the efforts of highly respected faculty within particular schools to put together presentations tailored to the culture of their departments. (Stewart 2006, Sturm 2006).

These dinners illustrate a more general approach of combining self analysis, academic studies, and best-practices research to develop a comprehensive diagnosis and change strategy. The Diversity Provost often uses task forces chaired by faculty with appropriate expertise to perform this information-gathering role. The search committee task force, chaired by a faculty with expertise in university change initiatives, did so for search practices. The Partner Placement task force, chaired by a faculty member with expertise in gender and family law, conducted the research on dual career hiring. When outside researchers were better equipped to conduct this research, as in the area of child care, Jean Howard arranged for a consultant to conduct the necessary study. In each case, the resulting information guided the development of programmatic responses. It also enlisted the support of key allies, mobilized constituencies for change, and provided powerful persuasive tools for taking action.

Informal and cultural information also plays a significant role in the change process. Jean Howard's role as a trusted faculty member gives her access to informal interactions with faculty from which line administrators might be shut out. Perhaps the most important kind of informal information involves identifying the movers and shakers within any particular department. Her success depends upon developing successful

working relationships with those in a position to address specific kinds of problems in specific locations, and finding the right people to involve as partners. Sometimes the most obvious person, such as the one with the formal title, is not the person who has influence within his or her environment or who will actually get things done. Many of those interviewed commented on the importance of Jean Howard's skill in analyzing "who might be the people in different spaces of the university who were key."

2. Connecting Knowledge to Power and Context

Information has its maximum impact when it flows to those in a position to take action, at a time when they must act, and in a form that they respect. The diversity initiative thus targets pivot points of decision making and key decision makers as focal points for information sharing. Data on search processes is, where possible, shared with active search committees and their chairs. Influential departments with open slots receive considerable attention. Meetings with department leaders are used as opportunities to communicate information, discuss goals, and establish time frames for taking action. Where possible, information about search processes automatically goes to committee chairs as part of the hiring process. They are required to report on the outcome of searches. This strategy builds information accountability into the doing of the work.

Form and context also figure into the initiative's information strategy. The office now calibrates the style of presentation to the culture and currency of particular disciplines and departments. Where possible, the Diversity Provost mobilizes groups with power and commitment to communicate information effectively and create accountability. This strategy is evident in the diversity dinners, where influential faculty publicly present carefully researched information documenting problems and possible

solutions, and present them in the form most suited to their constituency. The Diversity Provost is continually leveraging the advisory committee members' intellectual, moral and personal authority in the locations where they can have maximum impact.

3. Overcoming Barriers to Effective Data-Gathering

The group mobilizing the diversity initiative recognized from the outset that long-term success required dramatic improvements in the capacity to generate reliable data in a timely fashion. One of their stated priorities in structuring the initiative was to design a process that would “assure that Columbia’s data systems, as a matter of routine, gather, update, and make available usable information needed to identify, analyze, and act on the gender and racial demographics and dynamics of the university.” Howard tackled this problem by connecting her office’s data-gathering efforts with those of the Office of Institutional Research and the Office of Equal Opportunity and Affirmative Action. Her office acquired dedicated time from the Office of Institutional Research and worked with an analyst with specific expertise in the data systems the University uses. All three offices are now working together to streamline the data gathering process, avoid redundancy, and increase the availability of information about recruitment, selection, hiring, promotion, and retention. For example, working together, the Vice Provost, the head of the Office of Institutional Research and the head of the Affirmative Action Office have begun systematic salary equity reports for all parts of the university.

The Diversity Provost now has the capability to respond to requests for information as they come in. These requests are both internally and externally generated; the office can respond to queries from department chairs and deans looking for information about their own departments or schools, and it can generate information

identified as necessary from inside the initiative. The Office has also learned how to use the process of assuring accuracy to mobilize action. For example, one department responded to her office's data about its hiring patterns with disbelief: "This can't be right." In response, Howard sent the department the name of every faculty member on the department's rosters for the last ten years so that any errors or omissions could be corrected. After checking the names, the department's leadership realized that the numbers were in fact accurate. At that point, the response mirrored that of the President when he learned about the Pipeline data: "Oh my God, it is right. Things are worse than I thought!"

C. Sustaining Change Networks through Distributing Leadership

Top-down strategies alone will not diversify faculties. Research has shown that under-participation results from everyday interactions across the entire spectrum of faculty life, involving decision makers at every level of the university (Valian 1999; Etzkowitz et al 2000). Universities are highly decentralized institutions; this fragmented authority structure limits the power of any one level or actor to achieve change (Sturm 2006). Sustained institutional change requires both bottom-up and top-down mobilization. The Columbia initiative has developed a strategy for achieving both by identifying and empowering formal and informal leaders who are part of larger networks and in a position to solve problems. The Diversity Provost's office uses central resources to strengthen the role of local leaders. It leverages its own committees and task forces to provide an infrastructure for the development of formal and informal diversity leadership distributed around the university. It works to sustain activism by enlisting existing networks, such as the institutes on gender and race, the Earth Institute's ADVANCE

program, and the Commission on the Status of Women. An institute leader described the synergies resulting from this collaboration:

I like to think our work feeds into Jean's work. Her work is definitely the umbrella to ours, and her work provides legitimacy for our work ... the departments quickly realize that we know what Jean thinks, and what she wants. And so to get this new hire that they're trying to finagle they'll come to us usually to try to help them write the proposal to Jean.

One form of this network and leadership development involves finding unlikely allies among people in positions of power who are persuaded by the data and willing to harness their intellectual and social capital to the effort. So, for example, the chair of the Economics Department has become an important ally and supporter of the initiative through his work with the Vice Provost. He participated in the team that presented to various departments at diversity dinners. He played a critical role in the Economics Department's success in hiring women, and has been a powerful spokesperson for diversity to other department chairs. The initiative's problem orientation has enabled the Vice Provost to enlist the leadership of faculty and administrators with more broadly defined concerns about improving faculty governance and achieving academic excellence.

The diversity office has also institutionalized informal leadership by including influential faculty on working committees with access to formal power, and by placing them in leadership positions on diversity task forces and committees. This diversity work has made it easier for participating faculty to assume an informal leadership role within their own departments and schools. Routine decisions become occasions for exercising situational leadership. In addition to building capacity and hope, the diversity initiative

has multiplied the occasions when people can understand themselves as part of a larger phenomenon and act in accordance with this realization.

As we have already discussed in the section on organizational catalysts, the office has also fostered the creation of local diversity leadership—respected faculty who are charged with formal responsibility for leading a diversity effort within their department or school. The Vice-Provost’s office operates as the “mother ship” creating and supporting home grown satellite offices. This dynamic interaction between the local and the center helps sustain the momentum in each location. It also maintains involvement in the face of the inevitable obstacles and failures that could easily derail isolated efforts. Through distributing leadership, the diversity initiative helps create multiple constituencies for change.

IV. Conclusion

The Diversity Provost role holds considerable promise as a strategy for developing organizational catalysts, connecting information to power, and mobilizing distributed leadership. Many universities have created new administrative positions with responsibilities similar to the Vice Provost for Diversity Initiatives at Columbia. Indeed, there is even a new national association of diversity provosts.

There are, however, risks attached to relying upon a permanent organizational position as a change strategy. First, there is the risk of role substitution: reliance on an institutional position in lieu of a institutional change process. Some institutions appear to have created a high-level position to spearhead a change process without supporting the institutional self-study, faculty mobilization, and strategic planning so crucial to the

role's effectiveness. These initiatives may also fail to incorporate monitoring and external accountability into the role's operation.

Second, there is the risk of over-centralization. The position could foster the expectation that the responsibility for change lies primarily with this administrative official. The role-occupant might also be tempted to use a top-down strategy relying on formal administrative authority and access to push through policy changes. This approach would undercut the development of shared responsibility for change and induce passivity by faculty and administrators whose active participation is necessary for cultural and systemic change. Over-centralization also encourages deference to administrative decisions and limits the capacity of faculty to hold the organizational catalyst accountable for her actions. Centralization of responsibility in a single individual also renders the change initiative vulnerable if the occupant of the position were to leave. The organizational catalyst role can be structured to minimize these risks by allocating responsibilities among different people, creating participatory oversight by groups in a position to evaluate the work of the office, and requiring ongoing public reporting on the office's activities and impact.

Finally, there is the risk of bureaucratization. Part of what makes the organizational catalyst role work is its fluidity and experimental character. The Diversity Provost at Columbia is constantly reinventing the office to respond to changes in the environment. If the position becomes too directly intertwined with the central administration, it risks losing its independence, its openness to adaptation, and ultimately its legitimacy. If the position's occupants become full-time administrators for too long, they might lose scholarly credibility and access to local knowledge and thus also lose the

social capital so crucial to the role's effectiveness. Over time, the role could become routinized and divorced from a change process with adequate resources and connections to constituencies for change, and at worse, devolve into a symbolic or toothless position. An unlimited term in an administrative position may also blunt the sense of urgency and drive that occupants bring to the role. The relentless questioning of the status quo, which seem so crucial to the position's impact, may be difficult for one person to sustain over the long run, especially without a break. For this reason, the Diversity Provost's position at Columbia carries a three year term limit.

The challenge is to define a long term role that institutionalizes the experimental qualities of the organizational catalyst. The role's effectiveness depends upon cultivating the qualities that make organizational catalysts effective: professional legitimacy, insider/outsider status, operation at the intersection of multiple systems, evidence-based decision making, deep knowledge of relevant contexts, and external accountability. This essentially poses an institutional design problem. The position can be structured to build in collaboration with diverse constituencies. Checks against cooptation and bureaucratization can be achieved by establishing rotating and shared positions, which might also make it easier to recruit high status faculty for these roles. It is also important that these roles maintain independence from the central administration as well as accountability to constituencies committed to gender and racial equity, including peer institutions involved in similar work.

We cannot know now whether the dynamism currently evident in the Columbia diversity initiative will survive the test of time. We do know that we have learned enduring lessons about the importance of linking mobilization to power.

Bibliography

- Ely, Robin and Meyerson, Debra (2000). *Theories of Gender in Organizations: A New Approach to Organizational Analysis and Change*, 22 RESEARCH IN ORGANIZATIONAL BEHAVIOR: 103.
- Etzkowitz, H., C. Kemelgor, M., B. Uzzi (2000). *Athena Unbound: The Advancement of Women in Science and Technology*. New York: Cambridge University Press.
- Fiske, S.T. "Intent and Ordinary Bias: Unintended Thought and Social Motivation Create Casual Prejudice." SOCIAL JUSTICE RESEARCH 17.2 (2004): 117-127.
- Katzenstein, Mary Fainsod (1990). Feminism within American Institutions: Unobtrusive Mobilization in the 1980's, 16 *Signs*: 27
- Meyerson, Debra E. (2001). *Tempered Radicals: How People Use Difference to Inspire Change at Work* 124.
- MIT (1999). A Study on the Status of Women Faculty in Science at MIT, [http://web/mit/edu/fn1/women/women.html](http://web.mit.edu/fn1/women/women.html) 10-11.
- Stewart, Abigail J., Malley, Janet E. and La Vaque-Manty, Danielle, (2007). Faculty Recruitment: Mobilizing Science and Engineering Faculty, in *Transforming Science and Engineering: Advancing Academic Women* (Abigail J. Stewart, Janet E. Malley, and Danielle La Vacque-Manty, eds)(forthcoming).
- Sturm, Susan (2007) *Gender Equity As Institutional Transformation: The Pivotal Role of "Organizational Catalysts"*, in *Transforming Science and Engineering: Advancing Academic Women* (Abigail J. Stewart, Janet E. Malley, and Danielle La Vacque-Manty, eds)(forthcoming).
- Susan Sturm, (2006). *The Architecture of Inclusion: Advancing Workplace Equity in Higher Education*, 29 *Harvard Journal of Law and Gender* 247.
- Sturm, Susan, Second Generation Employment Discrimination: A Structural Approach (2001). 101 *Columbia Law Review*: 458, 460.
- Trower, Cathy (2004), *Advancing and Evaluating Impact*, NSF ADVANCE National Conference, April 20, 2004, http://www.advance.gatech.edu/2004conf/3a_trower.ppt.
- Valian, V. (1999). *Why So Slow? The Advancement of Women*. Cambridge, Massachusetts: MIT Press.