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The use of a Mentoring-Based Conference as a Research Career Stimulation Strategy

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Abstract

Introduction—Across healthcare, US minority populations including Latinos face disparities in risk for disease, clinical outcomes, and quality of care. The discourse related to disparity problems has often highlighted the need to increase the number of minority scientists so that the productivity of research focusing on minority populations is expanded. As a result, a group of Latino mental health researchers collaborated to develop a national network of senior mentors that participated in annual mentoring-oriented conferences. A cost-effective program was developed to stimulate the entry of new investigators into the field and provide mentoring with a focus on Latino mental health issues.

Method—A conference-platform was used as the career stimulation strategy. Annual conferences were held (2002 – 2006) that emphasized the showcasing of new investigators' work, pairing new investigators with senior researchers, and a feedback-oriented environment. Quantitative data were used to track new investigator career progress (i.e., publications, research grants), while qualitative data were used to assess all attendees' feedback, which was provided via conference feedback questionnaires.

Results—The feedback questionnaires revealed high levels of satisfaction with the conference, noting most highly the interactive, friendly, and nurturing conference format. Career tracking data indicated that nearly half of the new investigators participants published their work in peer-reviewed journals, and that about one-third of were successful in obtaining research funding.

Conclusions—These mentoring conferences appear to be an effective tool for stimulating the research careers of new investigators engaged in Latino mental health research.

Introduction

Our nation's racial and ethnic minority groups continue to face significant disparities, relative to white non-Hispanic populations, ¹ that need to be taken into account when setting priorities for education and research. ^{2, 3} A key component underlying these disparities is the underrepresentation of racial and ethnic minorities among professionals serving these populations and particularly among researchers. The result is an adverse effect on the productivity of research that is relevant to these groups. This has prompted many researchers across several areas to articulate strategies for boosting the cultural diversity of scientists, particularly those from underrepresented racial and ethnic minorities. ⁴ As with many areas,

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suggestions have been made within the field of Latino mental health to boost the number of racial/ethnic minorities conducting research, particularly research focusing on minority populations.

We have used a conference platform that has gradually evolved over a period of several years with the major objective of stimulating and mentoring new investigators to enter the field. Given the growing need for career stimulation across a range of disciplines, this manuscript describes its development and current format, in order to help stimulate new ideas for mentoring-based approaches. Based on our experience, our tracking of new investigators career progress, and ample input from participants, we believe that the mentoring-oriented conference strategy outlined herein has some unique and effective ingredients for stimulating and empowering new investigators entering the field of Latino mental health research.

Background

A major impetus for the mentoring-oriented conference was data pointing to the embarrassingly low number of Latino investigators and the scant research data on Latino mental health issues. This prompted a handful of senior researchers interested in Latino mental health to collaborate in forming a consortium in the early 1990's. The existing disparities were further echoed by reports from the Institute of Medicine and the Surgeon General. ^{2, 5} These documents highlighted wide ranging health disparities. The Institute of Medicine outlined several disparities for African-American and Latino patients, relative to non-Latino Whites including disparities in cardiac care, risk for HIV infection and, within mental health, access to and quality of care issues. The surgeon general's report summarized randomized controlled trials (RCT's) conducted during a 10-year period since 1986 for four major psychiatric disorders. According to this report, of the nearly 10,000 patients who participated in RCT's for bipolar disorder, major depression, schizophrenia, and attention-deficit/hyperactivity disorder, the proportion of minority participants was extremely low. Furthermore, none of the studies conducted ethnicspecific analyses that generated specific data on treatment response as it related to racial or ethnic background.

Shortly about the publication of the Surgeon General's report, a subcommittee of the National Advisory Council to the Director of the National Institute of Mental Health (NIMH) highlighted the underrepresentation of racial/ethnic minority researchers among NIH/NIMH grant applicants. ⁶ The NIMH Advisory Council report noted that, in 1999, only about five percent of research applications submitted to and funded by NIMH, came from racial/ethnic minority applicants (African Americans, Latinos, Native Americans), even though these groups accounted for about one fourth of the total US population. This type of disparity was also found to exist in medical schools and other academic settings. For example, the report showed that 1997 graduate and professional school enrollment for Latinos was only 4.5%. Unfortunately, this pipeline problem still persists today. For example, the American Association of Medical Colleges reported that only about 6% of US medical school graduates in 2007 were Latino.⁷ A similarly low rate was found among psychology doctoral students matching for an internship (7%). ⁸ These rates contrast with US population rates showing that Latinos represent about 13% of the United States population. ⁹ The NIMH Advisory Council therefore outlined a strategy for addressing these disparities. ¹⁰ A major focus of their recommendations centered on stimulating research on minority mental health issues by increasing the pipeline of racially and ethnically diverse professionals who conduct research. The advisory group also encouraged NIMH to develop programs that would effectively prepare talented minorities for careers in biomedical research.

The National Advisory Mental Health Council report also provided information on barriers that new minority investigators faced during their career development. A notable one included the very limited access to qualified mentors and the lack of minority role models in their

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institutions. Aiming to improve the pipeline of professionals who enter research careers, the Advisory Council recommended that "a national mental health research mentorship program be devoted to training racial/ethnic minority investigators" (p. 44). ⁶

Quality Mentoring and Stimulation of New Research Careers—Mentoring is generally described as a personal and professional relationship between a senior and a junior professional, where the senior professional provides guidance on matters pertaining to developing skills and making career-advancing decisions. Many times the mentor is at a position to help match the mentee with career enhancing opportunities. In addition to assisting with skills, opportunities, and training, mentors also provide encouragement and support that stimulate new investigators' motivation for progressing through the challenges of establishing a research career.

The issue of insufficient mentoring is a critical deficiency in many settings, often cited as a barrier for entering a career in research, particularly among racial and ethnic minorities. ¹¹ In a qualitative study of junior faculty in academic medicine, lack of mentoring was often cited as one of the top two issues hindering academic career development. ¹² Little empirical data exists documenting the value of quality mentorship. One report showed that medical specialty fellows who had a mentor or advisor were more likely to complete a thesis and enter academic practice compared to those without mentoring. ¹³ Thus, the strategy of stimulating career development through active mentoring seems an important priority across specialty areas. Accordingly, a number of recommendations for research career stimulation emphasize the objective of enhanced mentorship. ⁴, 13-18

In this paper, we first describe the various steps in the development of a national network of mentors for Latino mental health researchers that led to the preparation and successful funding of an NIH conference grant (R13), which is now ongoing for more than 5 years. The primary aim of this event is to stimulate the pipeline of researchers whose work is focusing on Latino mental health, which is intended, in turn, to help reduce inequities in mental health care. We then provide preliminary results on outcomes using data obtained during the first 4 years of the R13 award.

Method

Development of the mentoring-oriented conference to stimulate career development in Latino mental health

A consortium of Latino and non-Latino investigators interested in Latino Mental Health research was formed in the early 1990's. One of us (JIE) took a leadership role in initiating the consortium. From the outset, NIMH administrators and many other NIH-funded Latino researchers warmly received the idea. The major goals of the consortium were to stimulate new research focused on Latino populations and to facilitate the entry of new investigators into the field. The closure by NIMH of the few existing minority mental health center grants relevant to Latinos in 1997 served to catalyze the formation of the consortium. Those of us forming the consortium felt that while this action may have been justified by the low research productivity of the centers, it led to further isolation of many of the few Latino mental health researchers from the mainstream of biomedical studies at NIMH.

Next, discussions with NIMH leadership resulted in support for a series of four yearly conferences as the platform to allow the emergence of intensive networking and the solidification of a group of mentors interested in Latino mental health. Towards this end, a list of Latino and non-Latino investigators interested on Latino mental health was created. It took a number of formal and informal contacts with leading investigators in the field to finally assemble an initial group to brainstorm on this problem. NIMH contributed funds for hold four

working conferences in different sites of the country. These conferences took place in Princeton, NJ in 1998 (approximately 60 participants), San Antonio, TX in 1999 (approximately 40 participants), Los Angeles, CA in 2000 (approximately 50 participants), and San Juan, PR in 2001 (approximately 70 participants). The organizers for the meetings were Dr. Javier Escobar (Princeton), Dr. William Vega (San Antonio), Dr. Steven Lopez (Los Angeles), and Dr. Margarita Alegria (San Juan). The first three meetings focused on reviewing the state of Latino mental health research. The serious problems and resource deficiencies highlighted made us aware of the urgent need to develop strategies for increasing the number of NIMH-funded research projects, translate research findings into policy, and stimulate new researchers to enter the field. Notably, these conferences also served as a platform to allow the emergence of intensive networking and the establishment of a solid network of senior Latino mental health research agenda forward. The first three meetings consisted of scholarly presentations and discussions led by senior researchers in the field, which helped solidify the objective of supporting a new generation of Latino mental health researchers.

The fourth conference, in San Juan, shifted the focus from the senior presenters to the new investigators and helped establish the model for the conference as it stands today. This model competitively selects new investigators to present at the meeting and relies on mentor/mentee dyads and ample feedback. According to this model, the mentor-mentee dyads are formed at the outset so that they start working on the preparation of the paper prior to the conference. At the meeting, a presenter-discussant format is followed with the mentor providing a scholarly discussion of the paper and constructive feedback to the presenter. To continue the momentum of the San Juan conference, it soon became clear after discussions with NIMH staff that a formal funding mechanism was necessary for more predictable planning and support for these gatherings. This led to preparation of a formal conference application using the R13 grant mechanism.

The NIMH conference mechanism (R13)

The R13 grant mechanism is available from the various institutes within NIH and is a grant mechanism used to support scientific meetings that address the respective research priorities of the various NIH institutes. While a formal application is needed and the process is competitive, the R13 application is much less involved than that required for RO1's and other traditional funding mechanisms. Our R13 application proposed a series of five annual conferences to mentor new investigators. The proposal included senior Latino mental health researchers with expertise in different research areas relevant to Latino Health research. All pledged to served as mentors. These conferences pursued a number of aims: 1) identify talented new investigators in the field of Latino mental health; 2) facilitate new investigator retention in Latino mental health research careers; 3) facilitate the publication of new investigators' manuscripts; and 4) stimulate applications for research funding among new investigator participants. The yearly meetings emphasized the forging of strong mentor-mentee relationships as key component. The conferences were organized around specific themes relevant to mental health and Latinos, such as "mood disorders" (2002), "culture and diagnosis" (2003), "mental health and addictions" (2004), "biological and psychosocial influences on mental disorders" (2005), and "special issues in Latino mental health-children, HIV, and comorbid medical disorders" (2006). These various themes were utilized in efforts to recruit additional new investigators from areas deemed critical and underrepresented, thereby using the conference to stimulate representation of these areas within the network. The data presented here have been gathered during the first five years of the conference.

Each year, 15-20 new investigators were competitively selected to participate in the meeting and were paired with individual mentors, all senior researchers. Keynote speakers also

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presented to highlight particular areas of research and mentoring. NIH program staff, chairs of academic departments of psychiatry, and members from relevant agencies (e.g., American Society of Hispanic Psychiatry, the Robert Wood Johnson Foundation, New Jersey Mental Health Institute, Latino Behavioral Health Institute) were also invited to participate. The presence of these representatives was critical to stimulate networking. Each year, NIH program staff presented a grant-writing workshop that discussed grant opportunities and mechanisms within NIH. These workshops also focused on grant-writing strategies. Program staff from other agencies networked with participants and informally discussed opportunities that their agencies made available. For example, the Robert Wood Johnson Foundation discussed funding opportunities for new investigators.

Recruitment of trainees—The recruitment process included yearly call-for-papers for the conference that invited new investigators to submit abstracts. The circulation of the call-for-papers occurred within the network, but also targeted various organizations/agencies. Examples included National Institute of Mental Health, American Society of Hispanic Psychiatry, and the Panamerican Health Organization. Abstract submissions were reviewed by senior researchers. Those with the highest ratings were chosen to present at the meeting and were paired with senior researchers with compatible areas of interest.

Mentors were typically chosen from within the network. Occasionally, senior researchers were selected from outside the network, if their area of expertise matched well with that of a new investigator. For practical reasons, we also recruited senior researchers who based in the region where the conference was being held in a particular year. This helped decrease travel expenditures and contributed to further expanding our network of mentors.

Conference format—The format of the conference was shaped in a way that maximized the type and quality of feedback that new investigators received, both from their mentors and the senior researchers in the audience. The mentor-mentee dyads formed prior to the conference, which lead to a greater amount of contact and exchange. In turn, this allowed mentors to help new investigators solidify the quality of their presentations. The mentors also served as formal discussants during the event. The typical format included 20-minute presentations by the new investigator, followed by a 15-minute discussion by the mentor/discussant, and 15 minutes for questions and comments from the audience. A similar format was chosen for the poster sessions, during which new investigators provided a brief oral presentation summarizing their poster. This was followed by a brief discussion from the mentor, as well as questions and comments from the audience. This format enhanced mentor-mentee interactions, as well as the exchange between the new investigator, their peers, and senior researchers in the audience.

Data—Attendance data, career tracking data, and data from conference feedback questionnaires were used to assess the conferences' effectiveness. Attendance data was used to describe the level of participation in the events. Career tracking data consisted of the number of peer-review publications and research grant applications submitted by new investigator who presented at the conferences. Career progress was tracked for a two-year period following participants' involvement in the conference. Each participant returned a questionnaire that inquired about these indicators, as well as the degree to which they attributed their publication or grant application to their having participated in the conference. Finally, all participants (new investigators, senior investigators, and funding agency staff) completed conference feedback questionnaires after each conference. Their feedback was qualitatively analyzed to summarize the strengths of the program. The reporting of these existing data received approval for exempt review by the Institutional Review Board of UMDNJ-Robert Wood Johnson Medical School.

Results

New investigators

Fifty-three new investigators participated in the program during the first four years of the R13 award and are the subject of this report. Of these, 44 were Latino-origin investigators and 9 were non-Latino investigators. With the exception of one Latino investigator, all new investigators presented work related to Latino mental Health. The new investigator participants represented a total 32 different universities, four of which were international institutions from Brazil, Colombia, and Mexico.

Senior investigators/mentors

A total of 41 senior researchers served as mentors during this four-year period. They were faculty members from 20 US Institutions. There were also mentors from two international research institutions and also from NIMH. All these mentors were quite active in research, particularly research related to Latino mental health. An absolute majority of these mentors (40 out of 41) have served as Principal Investigators of at least one NIH grant. Also, three of the mentors are members of the Institute of Medicine, three others have served on the National Advisory Mental Health Council for NIMH, five were chairs of academic departments, and five were directors of research institutes.

Feedback from conference participants

A sense of the conference's strengths and weaknesses can be gained from the feedback questionnaires completed immediately after each conference. During the first five years, 174 questionnaires were completed and analyzed. The questionnaires specifically asked participants to identify the greatest strengths and weaknesses of the conference. Table 1 summarizes the most frequently identified strengths and weaknesses, along with a sample of verbatim statements from participants.

The most frequently identified positive features of the conference were the networking, availability of strong, dedicated mentors and the formation of new investigator-senior investigator dyads. A number of new investigators communicated to us informally that these strengths occurred within an environment that was "friendly" and "supportive," thereby enhancing these strengths. This feedback bolsters the conference's main objectives Other positive features noted included the quality of the work/talent of presenters (22%), geographic and intellectual diversity of presenters (8%), and the dissemination of knowledge (8%).

Among the weaknesses of the event raised by participants, we should mention the "tight" scheduling of conference activities (22%), the lack of representation of certain research topics (11%), and some problems with logistics, such as date, location, facilities, etc. (10%). It is encouraging that weaknesses pertaining to the major objectives (e.g., mentoring) of the conference were very rarely if at all raised.

These evaluations led us to revise the number of presentations, duration of the event, length of presentations, and geographical location of the conference. What we have come to realize is that the optimum content of activities has to be carefully balanced between the range of insufficient and excessive. Furthermore, our conference participants had a wide variety of research interests within Latino mental health (e.g., treatment, epidemiology, biology, etc.). For both preferred length and representation of topics, there is likely a natural limit for sufficiently addressing the wide range of interests. This is illustrated by some of the feedback displayed in Table 1 under "scheduling." Due to the critical shortage of investigators, we feel it is critical to expose as many new investigators as possible to this experience. Therefore, we decided to invite more new investigators while limiting their presentation time.

Another important, though infrequent (5%), critique pertained to the uneven quality and quantity of the mentorship provided. These suggestions focused on optimizing mentors' feedback to mentees by having their discussions of new investigators' work be articulated in an objective, unambiguous fashion, including specific recommendations for improving the paper and the research. Since this was quite relevant to the conference's central aims, we responded by providing mentors with clear suggestions and models for their role as discussants. The guidelines encouraged the mentors to provide an initial evaluation of the work that was constructive and emphasized the strengths of the research (or paper), as well as highlighting the value of the work. As a next step, mentors were encouraged to provide specific suggestions for enhancing the scope of the paper and its chances of being published in a refereed journal. Finally, the mentor was asked to provide the new investigator with specific ideas about how to carry their research forward, with the ultimate goal of obtaining independent funding.

Tracking the progress of new investigators

There is complete data for the first four years of the conference grant. During this four year period, 53 new investigators participated in the program, worked with a mentor, and presented at the conferences. Of these 53 new investigators, we have been able to track the progress of 49 of them (92%) using annual questionnaires during a two-year period. A career progress update could not be obtained from four participants. Data collection for the fifth year participants is still occurring.

Publications Submitted and Accepted—Out of the 49 new investigators we tracked, 34 (69%) reported that they have submitted their conference papers to a journal and 28 of these (82%) reported that the conference played a significant or partial role in their manuscript submission. Twenty-one of these 34 publication submissions have been accepted for publication (62%). Among the new investigators who had not submitted a paper for publication, a good number of them reported that a paper was being prepared for submission. Also, a few of the investigators who had submitted their papers indicated that they were "under review" at the time of the last career progress update.

Research Applications and Research Funding—Our new investigators reported that they have submitted a total of 38 research grant applications thus far. In 25 of these applications (66%), new investigators rated the conference as playing a significant or at least partial role in the grant submission. Of the 38 grants submitted, 24 (63%) were NIH grants, while others were submitted to agencies such as NARSAD and the Robert Wood Johnson Foundation. A total of 16 grants were reported as funded (42%). As with the case of publication activity, numerous new investigators, who had not submitted a grant application or did not yet have funding, reported that their research grants are either in preparation or under review.

Discussion

This mentoring-based conference had the main objectives of increasing the pool of investigators in Latino mental health by increasing the number of publications and grant submissions produced by the next cadre of investigators and helping them form collaborations with senior researchers. These objectives are shared by other fields that are also seeking to increase their pool of researchers. A key component of our model is a strong mentor-mentee dyad and an event that is new investigator-centered. This model has coincided with successful outcomes such as new publications, grant applications, sharing data, and so on. Another key component of this model is a "culture of mentorship," which can be inferred from participants' description of the climate as "supportive," "nurturing," and "generous." Other key ingredients for the success of the conference are the "hands on" experience of the new investigators, the

availability of a large pool of dedicated senior researchers, and the presence of program officers from multiple funding agencies (e.g., NIMH, NIDA, Robert Wood Johnson Foundation, etc.).

While the conference has had a broad focus (e.g., biological, epidemiological) and has targeted various geographical areas relevant to Latino mental health, certain areas remain underrepresented. We have employed a number of strategies for diversifying the geographical representation of researchers, as well as the range of topics. A key tool for fine-tuning the representation of the conference is the careful selection of organizing committee members. Individual members of the organizing committee are in a position to use their own contacts to elicit new investigator submissions and mentor participation from specific research fields and geographical areas. The annual theme for the conference also facilitates recruitment from specific research areas. Using these approaches, a boost in representation was observed from some fields, such as biologically-oriented and HIV-AIDS research. Finally, varying the geographical location of the conferences (e.g., Northeast, Southwest) has also been helpful for recruiting researchers from different regions of the US.

Finally, while lack of mentoring has been a frequently implicated barrier, ¹¹⁻¹³ research career development is multifaceted. Accordingly, efforts for increasing the number of independent researchers are likely to require other approaches, such as skill enhancements and longitudinal support. Our program emphasizes a conference model that is brief and significantly helps new investigators expand their mentoring/collaborative network, showcase their work, and develop their work into a publication or grant proposal. A comprehensive career stimulation strategy should combine this model with other existing programs, which offer research skills training, intensive grant writing instruction, and structured long-term mentoring. ^{14, 19}

Conclusions

The task of increasing the number of researchers who focus on Latino mental health is complicated by "pipeline" issues. We have shown herein that by having a committed group of mentors and a very modest investment is associated with positive outcomes, as operationalized by publications and grant submissions/awards. As noted, the vast majority of participants attributed, at least partially, their publication and grant application activity to participation in the conference. These benefits would be extended if they are able to serve as a catalyst for opportunities and experiences that further support new investigators' research career trajectory. In addition, the combination of other approaches would likely enhance such support. ^{16, 20}

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References

1. National Center for Health Statistics. Health, United States, 2004. Hyattsville, MD: 2004.

Acad Med. Author manuscript; available in PMC 2010 October 1.

- Department of Health & Human Services. Mental Health: Culture, Race, and Ethnicity A Supplement to Mental Health: A Report of the Surgeon General. Rockville: MD: U.S. Department of Health and Human Services; 2001.
- Vega WA, Karno M, Alegria M, Alvidrez J, Bernal G, Escamilla M, et al. Research Issues for Improving Treatment of U.S. Hispanics with Persistent Mental Disorders. Psychiatric Services 2007;58(3):385– 394. [PubMed: 17325113]
- Fitzpatrick LK, Sutton M, Greenberg AE. Toward eliminating health disparities in HIV/AIDS: the importance of the minority investigator in addressing scientific gaps in Black and Latino communities. Journal of the National Medical Association 2006;98(12):1906–11. [PubMed: 17225832]
- 5. Smedley, BD.; Stith, AY.; Nelson, AR. Unequal treatment: Confronting racial and ethnic disparities in healthcare. Washington, DC: National Academies Press; 2003.
- 6. National Institute of Mental Health. A Report by the National Advisory Mental Health Council's Workgroup on Racial/Ethnic Diversity in Research Training and Health Disparities Research. Bethesda, MD: 2001. Racial/Ethnic Diversity in Mental Health Research Careers: An Investment in America's Future. May 2001.
- 7. Race and Ethnicity Responses of Applicants to U.S. Medical Schools, 2002-2007. [November 4, 2008]. Available at http://www.aamc.org/data/facts/2007/re1newdisp0207.htm
- 8. 2007 APPIC Match: Survey of Internship Applicants. [November 4, 2008]. Available at http://www.appic.org/match/5_2_2_4_9a_match_about_statistics_surveys_2007a.htm
- 9. Ramirez, RR.; de la Cruz, GP. The Hispanic Population in the United States Report No.: P20-545. Washington, DC: US Cenus Bureau; 2002.
- 10. National Research Council. Addressing the nation's changing needs for biomedical and behavioral scientists. Washington, DC: National Academy Press; 2000.
- Shavers VL, Fagan P, Lawrence D, McCaskill-Stevens W, McDonald P, Browne D, et al. Barriers to racial/ethnic minority application and competition for NIH research funding. Journal of the National Medical Association 2005;97(8):1063–77. [PubMed: 16173321]
- Jackson VA, Palepu A, Szalacha L, Caswell C, Carr PL, Inui T. "Having the right chemistry": a qualitative study of mentoring in academic medicine. Academic Medicine 2003;78(3):328–34. [PubMed: 12634219]
- Sciscione AC, Colmorgen GH, D'Alton ME. Factors affecting fellowship satisfaction, thesis completion, and career direction among maternal-fetal medicine fellows. Obstetrics & Gynecology 1998;91(6):1023–6. [PubMed: 9611018]
- Kupfer DJ, Hyman SE, Schatzberg AF, Pincus HA, Reynolds CF 3rd. Recruiting and retaining future generations of physician scientists in mental health. Archives of General Psychiatry 2002;59(7):657– 60. [PubMed: 12090819]
- Olin JT, Reynolds CF 3rd, Light E, Cuthbert BN. Career development and training in geriatric mental health: report of an NIMH workshop. American Journal of Geriatric Psychiatry 2003;11(3):275–9. [PubMed: 12724106]
- Waitzkin H, Yager J, Parker T, Duran B. Mentoring partnerships for minority faculty and graduate students in mental health services research. Academic Psychiatry 2006;30(3):205–17. [PubMed: 16728767]
- Rose GL, Rukstalis MR, Schuckit MA. Informal mentoring between faculty and medical students. Academic Medicine 2005;80(4):344–8. [PubMed: 15793017]
- Steiner JF, Curtis P, Lanphear BP, Vu KO, Main DS. Assessing the role of influential mentors in the research development of primary care fellows. Academic Medicine 2004;79(9):865–72. [PubMed: 15326013]
- Yager J, Waitzkin H, Parker T, Duran B. Educating, training, and mentoring minority faculty and other trainees in mental health services research. Academic Psychiatry 2007;31(2):146–51. [PubMed: 17344457]
- 20. National Institute of Mental Health Faculty Scholars Program. [May 15, 2007]. Available at http://www.hsrcenter.ucla.edu/training

Table 1

Summary of feedback obtained from conference questionnaires completed by all conference attendees between 2002 - 2005 (n = 174)

Content	% (n)	Examples
Networking	32% (51)	Strengths "The chance for junior and senior investigators to interact
Conference Format [*]	27% (44)	meaningfully" "The feeling of being a part of a very supportive network." "Greatest strength was the oral presentations followed by discussants and questions. Also in fact that everyone involved in conference was
		assigned [a mentor]." "Ability to really discuss the issues and give feedback to young investigators."
Work quality/talent of presenters	22% (35)	"The high caliber of presenters and discussants." "Quality of presenters, presentations and extensive experience and insight provided by discussants."
Mentoring	19% (31)	"The disposition of the mentors to make this a positive and constructive experience for young investigators. This is a high caliber group of mentors not only in regards to their respective research careers but also in their commitment to mentorship."
	220((27)	Weaknesses
Scheduling	22% (27)	"Limited time of presenter's work" "Fatigue from conference days"
Diversity of Researchers/Topics	14% (17)	"Perhaps too much emphasis on social studies and not very much on biological studies."
Conference Logistics	10% (13)	"Too much of a biological focus." "Location was problematic [due to travel logistics]." "Date of the conference."

* Conference format pertains to a new investigator-oriented event where new investigators were paired with senior investigators who served as discussants.