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## The Diversity Research Forum

*Successfully Evaluating Diversity Efforts in  
Medical Education*

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Convened by  
Diversity Policy and Programs  
at the Association of American Medical Colleges  
2007 Annual Meeting  
Washington, DC



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Association of  
American Medical Colleges

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2007 Diversity Research Forum: *Successfully Evaluating Diversity Efforts in Medical Education*

Published by the Association of American Medical Colleges,  
Diversity Policy and Programs. Summer 2008

Acknowledgements:

The production of this report could not have been accomplished without considerable support from staff in the Diversity Policy and Programs:

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## Executive Summary

The importance of evaluating the impact of programs, especially those programs designed to increase underrepresented minority student access to medical education, requires persistent attention. Evaluations (and applied research as evaluation) can be used to determine areas where a program may need to improve. Consequently, evaluation results that do not show immediate gains should spur program modifications. Given the importance of changing the face of medical education, research, and evaluation that focuses on diversity at academic medical institutions remains a core capacity emphasized by the Association of American Medical Colleges (AAMC) and the AAMC's Diversity Policy and Programs.

On November 6, 2007 the AAMC held its 3<sup>rd</sup> annual Diversity Research Forum (DRF) in Washington, DC. The forum focused on how to successfully evaluate diversity efforts in medical education and the importance of evaluation design, implementation, and data collection. The session featured three researchers from across the United States: Alma R. Clayton-Pedersen, Ph.D., from the Association of American Colleges & Universities; Martin M. Chemers, Ph.D., from the University of California, Santa Cruz; and Robert Hung, M.D., M.P.H., from the Rush University Medical Center.

Dr. Clayton-Pedersen, Vice President for Education and Institutional Renewal at the Association of American Colleges and Universities (AAC&U), presented on some of the outcomes of the evaluation of the Campus Diversity Initiative. In this evaluation conducted between 2000 and 2004, readily available data from various colleges and universities were used to examine their efforts to enhance faculty racial and ethnic diversity. Results of her analysis found, among other

things, evidence of a revolving door among faculty generally.

Dr. Chemers, professor of psychology at the University of California, Santa Cruz, focused on the distinctions between two types of evaluations (i.e., summative and formative) and offered strategies that increase the value of evaluation and research for educators who seek to enhance and sustain diversity on their campuses. For example, Dr. Chemers shared his “focus, theory, and competencies” research and evaluation mantra—an approach that can increase the validity and usefulness of an evaluation.

Lastly, Dr. Robert Hung, an internal medicine and psychiatry resident at Rush University Medical Center in Chicago, Illinois, highlighted the process by which he and three other medical students and two researchers evaluated the cultural climate around diversity at a medical school in the Pacific Northwest in the spring of 2003. Dr. Hung also presented on the development of the survey instrument used in this evaluation and discussed the collaborative process by which a group or institution might evaluate its cultural climate.

The following key themes emerged from the 2007 DRF:

**Disaggregation of institutional data related to diversity is important.** An institution is better able to tell its story of diversity if relevant data (e.g., demographics of faculty, staff, and students) are provided. Disaggregating institutional data related to diversity is an indicator of whether progress is being made toward achieving goals for diversity in medical education.

**Understanding various types of evaluation and when to use them are important.** The two types of evaluations highlighted during the DRF were formative

and summative evaluations.

Dr. Chemers explained that formative evaluation is process-oriented and aims to answer the following evaluation questions:

- Are we implementing the program as planned?
- What is or is not working in this program, and how can we enhance it?

Formative evaluation typically precedes summative evaluation, which focuses on a program's impact at its conclusion.

**Applied research can be used as formative evaluation.** The three tenets that can guide applied research as formative evaluation are: (1) Explaining the processes that underlie the effects observed in a program (e.g., leadership and teamwork self-efficacy); (2) Identifying the active ingredients (e.g., mentoring) that contribute to better outcomes for program participants (e.g., faculty); and (3) Combining the knowledge of the above-mentioned active ingredients and processes to provide a basis for program enhancement.

Chemers says these enable evaluators to use "research in support of a living, evolving process underlying a sustained commitment."

**Ensuring a clear focus and relevant theory and assembling a competent team of evaluators, relevant experts, and informants are essential.** First, maintaining a clear evaluation and research "focus" reminds the evaluator that a single evaluation cannot examine everything at once. Second, the use of "theory" provides clarity to the direction an evaluation is headed and presents the

processes that lead to expected observations and outcomes. Finally, ensuring that an evaluation team includes all relevant expertise or "competencies" (e.g., social scientists, natural scientists, students, faculty, administrators, etc.) is important.

**Defining key constructs is essential in questionnaire design.** Establishing working definitions of important constructs is essential in questionnaire design. In establishing construct validity, a rigorous review of the literature is conducted to help determine the constructs relevant for a questionnaire. For example, constructs such as cultural diversity, cultural climate, and cultural competency provide construct validity in assessing the campus climate at a medical school.

**Collaboration and strategic planning are critical.** Evaluation of diversity in medical education often requires support from the dean, other university administrators, and the student body in order to communicate or attribute specific reasons for a program's success or failure.

**Context is important.** Paying attention to context can provide additional information about potential sources of a project's success and/or areas in need of modification. For example, the level of departmental sharing or collaboration across an institution around what is working with regard to diversity in medical education may contribute to expected outcomes or can act as a stumbling block. Another example of a contextual factor is the impact California's Proposition 209 has had on campus diversity initiatives.

**Implementation procedures are dynamic**

**and multifaceted.** Procedures to implement evaluations should be carefully designed to maintain flexibility (e.g., allow for changes in methodology or implementation procedures). Provisions should also be made to share information about the evaluation's progress with stakeholders on an ongoing basis. Especially in the instance of formative evaluation, Clayton-Pederson says such provisions allow the institution being evaluated (or the "evaluand") to "make corrections or change their activities" during an ongoing evaluation.

Future efforts to evaluate diversity in medical education will require:

- Institutions to initiate and/or continue campus-wide efforts to take evaluation seriously (e.g., involve key individuals and competent evaluators) and
- Collaboration across various sectors of an institution (e.g., administrators, faculty, staff, students, community members and partners) to ensure evaluation implementation and usefulness.

The speakers and audience members emphasized programmatic needs related to evaluation:

- Continuation of efforts in the area of recruitment and retention, placing more emphasis on retention of a diverse administration, faculty, staff, and student body and
- Continuation or initiation of institutional efforts to create a safe and open forum for students, faculty, and staff to discuss issues of cultural competency, cultural diversity, race, racism, and discrimination.

## Speakers' Biographical Sketches

**Laura Castillo-Page, Ph.D.**, is director of research in Diversity Policy and Programs (DPP) at the Association of American Medical Colleges (AAMC). Dr. Castillo-Page leads the cluster's efforts to document the positive effects of diversity in medical education programs. She is also responsible for managing the development of the cluster's data publications and research projects and works with other DPP staff to enhance and expand faculty professional development programs. Previously, Dr. Castillo-Page worked as a research scientist at the American Institutes for Research (AIR), where she focused on examination and analysis of education practice and policy, and served as co-director of AIR's Bill and Melinda Gates Foundation Early College High School Initiative evaluation. Following receipt of her B.A. from Fordham University, Dr. Castillo-Page attended the University of Albany, SUNY, where she earned an M.A. in political science, as well as both an M.S. and a Ph.D. in educational administration and policy studies.

**Martin M. Chemers, Ph.D.**, is professor of psychology at the University of California, Santa Cruz. Dr. Chemers arrived at UC Santa Cruz in 1995 from Claremont McKenna College to accept an appointment as the Dean of Social Sciences and Professor of Psychology. At UC Santa Cruz, he also served as Interim Executive Vice-Chancellor and Provost (December, 2003-April, 2004) and as Acting Chancellor (April, 2004-February, 2005). Prior to his tenure at UC Santa Cruz, he was the Henry R. Kravis Professor of Leadership and Organizational Psychology and Director of the Kravis Leadership Institute at Claremont McKenna College. He was previously on the faculties of the Universities of Illinois, Delaware,

Washington, and Utah where he was chair of the Department of Psychology. Since receiving his Ph.D. in social psychology from the University of Illinois in 1968, he has been an active researcher and has published books and articles on leadership, culture and organizational diversity, and academic success and adjustment. His popular, practitioner-oriented book, *Improving Leadership Effectiveness: The Leader Match Concept* (written with Fred Fiedler), is widely used as a basis for leadership training. Dr. Chemers' books have been translated into German, Chinese, Japanese, Swedish, Spanish, and Portuguese. His most recent book, *An Integrative Theory of Leadership*, was published in 1997. The Japanese edition was published in 1999. His current research is focused on psychological factors that affect the academic success and adjustment of underrepresented minority students.

**Alma R. Clayton-Pedersen, Ph.D.**, is Vice President for Education and Institutional Renewal at the Association of American Colleges & Universities (AAC&U). She is a national leader on issues of institutional change, particularly sustainability, diversity and excellence, and collaborative leadership. Dr. Clayton-Pedersen has consulting expertise on diversity, success of underrepresented students, policy, organizational learning, and program development and evaluation. She is also director of AAC&U's Network for Academic Renewal, Greater Expectations Institute, and several projects linking academic excellence and diversity. She has 15 years of campus-based experience, including directing a significant number of studies on student engagement and campus services. Dr. Clayton-Pedersen received her B.S. in education from the University of Wisconsin-Milwaukee; and M.Ed. in

human development counseling and Ph.D. in education and human development from Vanderbilt University.

**Robert Hung, M.D., M.P.H.**, is an internal medicine and psychiatry resident at Rush University Medical Center in Chicago, Illinois. He attended medical and public health school at Oregon Health & Sciences University in Portland, Oregon. He will begin a pulmonary fellowship at the Memorial Sloan-Kettering Cancer Center in July 2008. Dr. Hung's current research focuses on the social and emotional factors that affect asthma patients. Most recently, Dr. Hung published an article in *Academic Medicine* entitled "Diversity and the Cultural Climate at a U.S. Medical School."

**Charles Terrell, Ed.D.**, is chief diversity officer at the AAMC. Dr. Terrell is a nationally recognized expert on issues of diversity in higher education and academic medicine, minority access to higher education programs, and student financial assistance. His career has been characterized by a strong commitment to achieving health care and education access for all, especially those from disadvantaged and underserved populations. His career in medical education began at Boston University's (BU's) School of Medicine, where he worked in the Office of Minority Affairs and served as director of the Office of Residency Planning and Practice Management. He held several positions at BU Medical Center, including director of student financial management, assistant dean for student affairs, and associate dean for student affairs. He holds a B.A. in American history from Colby College, an M.A. in African-American studies from BU, and an Ed.D. in higher education from Nova Southeastern University.

## A New Vision for Diversity in the 21<sup>st</sup> Century

Dr. Clayton-Pedersen presented key findings from The Campus Diversity Initiative's (CDI) Evaluation Project funded by the James Irvine Foundation. This evaluation was conducted with Dr. José F. Moreno, Dr. Daryl G. Smith, Dr. Sharon Parker, and Dr. Daniel Hiroyuki Teraguchi and is part of a multimillion dollar effort to help 28 independent colleges and universities in California strategically plan and implement diversity programming.<sup>1</sup> The CDI Evaluation Project was structured to help these institutions develop their own evaluation expertise and mechanisms to increase access and the success of historically underrepresented students in higher education.<sup>2</sup> In her presentation, Clayton-Pedersen focused primarily on the overall institutional progress toward recruitment and retention of diverse faculty, including:

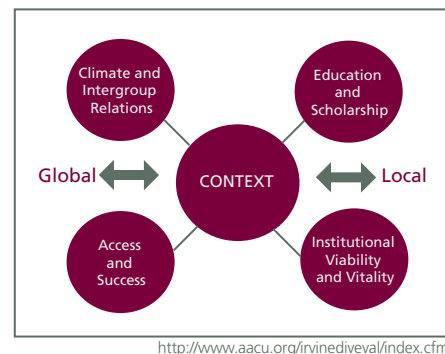
- A framework for evaluating diversity (i.e., institutional audit model);
- The CDI Evaluation Project data collection processes and analysis;
- The Turnover Quotient (TQ), a tool used to determine the degree of faculty turnover; and
- Recommendations for institutions seeking to recruit and retain diverse faculty.

### A Framework for Evaluating Diversity

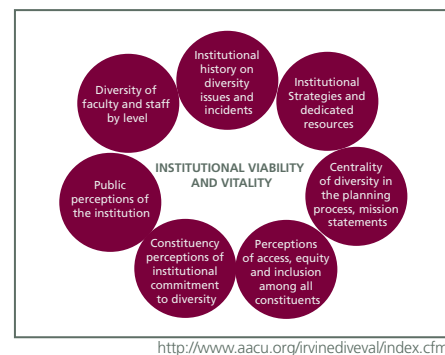
Dr. Clayton-Pedersen explained that the CDI Evaluation Project was grounded in the institutional audit model (a framework for evaluating diversity) developed by Smith at Claremont Graduate University. After pointing out the model's four

dimensions (see Figures 1 and 2), Clayton-Pedersen briefly focused on the institutional viability and vitality portion of the model and its relevance to faculty diversity.

**Figure 1: Institutional Audit**



**Figure 2: Institutional Viability and Vitality**



By definition, institutional viability and vitality characterizes an institution's capacity to plan, implement, and evaluate comprehensive diversity work. Further, this portion of the model encompasses the human (e.g., faculty), intellectual, physical, and fiscal resources needed to support such work.<sup>3</sup>

<sup>1</sup> Data from one of the 28 campuses was not included in the CDI Evaluation Project data analysis because the institution did not have a tenure track.

<sup>2</sup> Moreno, J., Smith, D. G., Clayton-Pedersen, A. R., Parker, S., & Teraguchi, D. H. (2006). *The revolving door for underrepresented minority faculty in higher education: An analysis from the Campus Diversity Initiative*. San Francisco, CA: The James Irvine Foundation.

The CDI Evaluation Project had several organizational learning goals:

1. Using institutional data to inform progress,
2. Interrupting the usual,
3. Interrogating myths that become self-fulfilling prophecies,
4. Maintaining the link between campus diversity efforts and institutional goals for effectiveness and excellence,
5. Keeping all campus constituents informed, and
6. Building synergy among many efforts on campus.

Throughout her presentation, Clayton-Pedersen focused on goals 1, 3, 5, and 6 and how they related to the data collection processes and data analysis and the development and application of the “turnover quotient.”

### CDI Evaluation Project Data Collection and Data Analysis

In her presentation, Clayton-Pedersen discussed elements of the CDI Evaluation Project’s data collection processes and analysis (data, methods, indicators, and overall results) and results about core faculty, new faculty hires, and an assessment of overall progress (i.e., “Questionable Progress”). She explained how institutional mission statements were recognized as an important catalyst for change in the CDI campus diversity efforts.

#### Data

Clayton-Pedersen explained that readily available institutional data (e.g., faculty demographics) were used to assess each institution’s progress toward recruitment

and retention of diverse faculty. Each of the campuses submitted annual data about the racial and ethnic demographics of their students, faculty, administrators, and governing boards between 2000 and 2004. By disaggregating the data across the 27 independent colleges and universities in California, Clayton-Pedersen et al. were able to estimate recruitment and retention rates for the study period.

#### Methods

Quantitative methods were used in the CDI Evaluation Project. Average percentages derived from overall and racial and ethnic demographics were used to ensure that institutions were weighted equally in the calculations.

#### Indicators

The three indicators of progress charted by Clayton-Pedersen et al. were the overall shift in the demographic profile of faculty, especially the percentage of American-Indian, African-American, Latino/a, Asian-American and other Pacific-Islander faculty; the demographic profile of new hires; and the percentage of American-Indian, African-American, Latino/a, Asian-American and other Pacific-Islander new hires replacing American-Indian, African-American, Latino/a, Asian-American and other Pacific-Islander faculty.

#### Overall results

The results of the analysis showed the following overall changes:

**Core faculty.** Based on the data that were disaggregated by race and ethnicity, Clayton-Pedersen et al.’s analysis showed a combined 1% increase in the American-Indian, African-American, Latino/a, Asian-American and other

Pacific-Islander core faculty population. A similar assessment that was conducted between 1999 and 2004 with the same groups and results of this analysis revealed a combined increase of 2% in the core faculty population. The overall percentage of white core faculty decreased by 3% during the same period. This decrease reflected a decline in the overall ratio of white faculty within the total population of core faculty. The number of white faculty also increased, however, because the campuses were increasing the size of their core faculty—that is, increasing the number of tenure lines. These findings dispel the myth that campuses were not hiring due to no new openings.

**New faculty hires.** Similar to the analysis conducted on core faculty, the researchers conducted an analysis pertaining to new faculty hires. This analysis aimed to determine whether campuses were hiring faculty and whether the level of hiring was enough to make an impact on overall racial and ethnic demographics. Results of their analysis indicated that campuses were hiring a substantial number of new core faculty (55 new hires per institution) relative to the size of their existing faculty in 2000. Of the 1,500 vacancies, 157 slots were filled by African-American, Latino/a, Asian-American and other Pacific-Islander faculty. The average percentage of African-American, Latino/a, Asian-American and other Pacific-Islander new faculty hires was 12%.

#### “Questionable progress”

The researchers were perplexed by the finding that the percentage of African-American, Latino/a, Asian-American

<sup>3</sup> Clayton-Pedersen, A. R., Parker, S., Smith, D. G., Moreno, J. F., & Teraguchi, D. H. (2007). *Making a real difference in diversity*. Washington, DC: Association of American Colleges and Universities.

and other Pacific-Islander new hires was equivalent to an unexpected net change of 2% between 2000 and 2004. To examine such findings further, Clayton-Pedersen et al. devised the Turnover Quotient (TQ) to determine the percentage of new faculty going toward replacement and the percentage determined by growth.

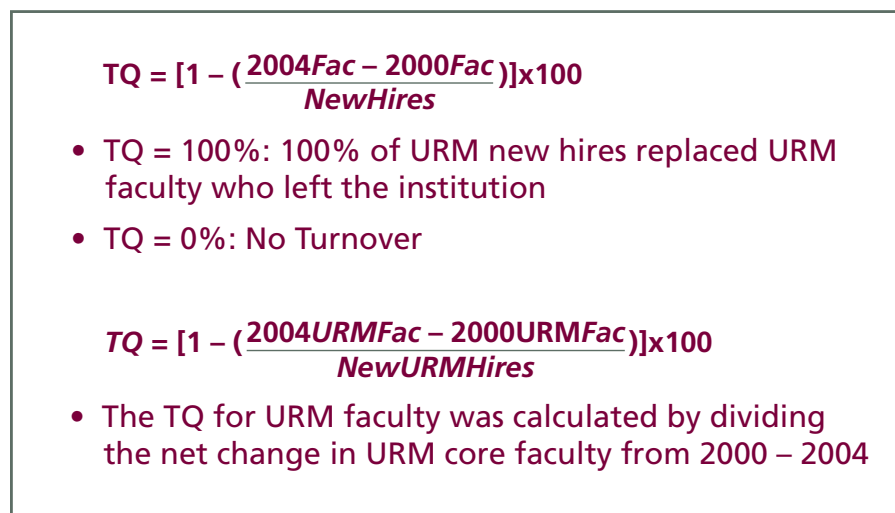
### The Turnover Quotient (TQ)

The TQ is a value derived by dividing the net change in core faculty by the total number of new hires during the period under study (see top equation in Figure 3).

In the bottom equation of Figure 3, values related to African-American, Latino/a, Asian-American and other Pacific-Islander faculty are used to determine the TQ value for this group. For example, the net change in a specific group (e.g., Asian/Pacific-Islander), is divided by the total number of African-American, Latino/a, Asian-American and other Pacific-Islander new hires during the period under study.

Values derived from the TQ vary and must be interpreted appropriately, explained Clayton-Pedersen. For example, values greater than 100% are an indication that an institution did not replace the faculty they already had. A TQ of 100% means that all new hires were replacements, and a TQ of zero percent is indicative of institutional gains or stability among new hires. In

Figure 3: The Turnover Quotient (TQ)



<http://www.aacu.org/insideval/index.cfm>

their analysis, Clayton-Pedersen et al. found that institutions with the highest TQ had the highest number of African-American, Latino/a, Asian-American and other Pacific-Islander faculty from the start.

### *A catalyst for change*

The researchers learned that an institution's mission statement and its ability to implement multiple strategies mattered greatly. They found that mission-driven schools were better able to address diversity. Clayton-Pedersen explained that institutions with specialized mission statements "see the world through the lens of that mission, and what we know in higher

education is that if you can live your mission it's much easier to use different types of initiatives as a catalyst for change."

### Recommendations for Institutions Seeking To Recruit and Retain Diverse Faculty

In closing, Clayton-Pedersen made the following recommendations for institutions seeking to recruit and retain diverse faculty:

**Collect institutional demographic data every year.** Each institution should collect their own data (e.g., demographic) every year. This allows individual institutions to conduct statistical comparisons over time.

**Determine the TQ for your institution, then monitor it, and share this information with constituents.** The TQ can be used to communicate progress to constituents and can indicate whether diversity efforts are working.

*Institutions with specialized mission statements "see the world through the lens of that mission, and what we know in higher education is that if you can live your mission, it's much easier to use different types of initiatives as a catalyst for change."*

Alma Clayton-Pedersen, Ph.D.  
The Association of American  
Colleges and Universities

**Collect qualitative data about faculty who leave.** It is important to gather information from faculty who leave their institutions. This qualitative data can provide insight into faculty experiences and the campus climate.

**Monitor the diversity of candidate pools and establish accountability measures.** Institutions should establish an institutional process that not only examines the diversity of candidate pools, but also implements incentives or sanctions based on the outcome.

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### **Recommendations for Institutions Seeking To Recruit and Retain Diverse Faculty**

- Collect institutional demographic data every year.
  - Determine the TQ for your institution, then monitor it, and share this information with constituents.
  - Collect qualitative data about faculty who leave.
  - Monitor the diversity of candidate pools and establish accountability measures.
-

## Research and Evaluation in the Development of Student Support Programs

Dr. Chemers presented the importance of understanding fundamental evaluation concepts when planning the evaluation of an intervention designed to increase the number of racial and ethnic minority students in academic medicine.

Throughout his presentation, Chemers provided concrete examples of evaluation concepts from his work on a biomedical research career support program that is part of an initiative funded by the National Institutes of Health (NIH), the National Institute of General Medical Sciences, and the UC Santa Cruz Educational Partnership Center. In his presentation, Chemers explained:

- The distinctions between formative and summative evaluation;
- The three tenets that create a mixture of evaluation and research: an explanation of the process, identification of active ingredients, and combining the knowledge of the processes and active ingredients to provide a basis for program enhancement;
- An evaluation and research mantra, “focus, theory, and competencies,” an approach that contributes to the validity and usefulness of an evaluation; and
- Recommendations on the broad themes that should guide evaluation.

In addition, Chemers shared the “Biomedical Research Career Support Programs’ Theory of Action,” the initiative’s methods and an example of a program timeline, and an illustration of the multidisciplinary nature of the

biomedical research career support Initiative’s evaluation team.

### Formative and Summative Evaluation

Chemers explained that funders sometimes use evaluation at the completion of a program to decide whether to give grantees additional funds. He stressed that for many dedicated leaders who head up diversity initiatives and/or their evaluations, using evaluation for this purpose is “useless because if you have a sustained moral commitment to diversity, and you find out your program isn’t working, you don’t stop doing it. You try to figure out what you could do better and for that we need formative evaluation.” Carefully choosing between formative evaluation and summative evaluation helps pinpoint areas of the program’s process that can be improved early on or during an evaluation. Formative evaluation is process oriented and aims to answer evaluation questions such as,

- Are we implementing the program as planned?
- What is or is not working in this program and how can we enhance it?

Summative evaluation, on the other hand, is outcome oriented and calls for the evaluator to determine if a program has achieved the desired effects on the programs’ participants or the broader target community. When someone says, “Did the program work?” they are asking for a summative or outcome evaluation.

### The Three Tenets That Create a Mixture of Evaluation and Research

Chemers believes there are three tenets that create a mixture of basic research (e.g., research intended to expand knowledge) and evaluation (e.g., the process of determining the effect of a program or social intervention):

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*“...if you have a sustained moral commitment to diversity, and you find out your program isn’t working, you don’t stop doing it. You try to figure out what you could do better and for that we need formative evaluation.”*

Martin M. Chemers, Ph.D.  
University of California

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1. Explain the processes that underlie the effects observed in a program (e.g., leadership and teamwork self-efficacy contributing to increased performance and commitment as a researcher). Chemers referred to two slides from the Biomedical Research Career Support Program that demonstrates how a “Theory of Action” provides the framework for explaining the processes that underlie the effects observed in a program. In Figure 4, the program’s interventions are depicted to connect directly with intermediate and long-term outcomes. Figure 5 illustrates the mediating processes or the core elements that underlie the Theory of Action.

Figure 5 also demonstrates how the program’s components align with the program’s target psychological processes to effect program outcomes. In other words, supports such as mentoring and research experience contribute to an individual’s ability to lead or be a part of a scientific research team (i.e., science inquiry self-efficacy). Combining these elements is expected to result in an individual continuing in the science education and research fields.

2. Identify the active ingredients (e.g., mentoring services) that contribute to better outcomes for program participants. Both applied research (e.g., research intended to have

some real-world effect) and formative evaluation approaches can produce rich contextual data about these ingredients.

3. Combine the knowledge of the active ingredients and processes to provide a basis for program enhancement (e.g., recommendations outlined in an evaluation report).

Chemers explained that these tenets enable evaluators to use “research in support of a living, evolving process underlying a sustained commitment.” He also stated that if formative evaluation is taken a step further it can become synonymous with applied research.

### An Evaluation and Research Mantra, “Focus, Theory and Competencies”

Chemers emphasized that there are three important elements that every evaluation and research plan should address: focus, theory, and competencies. Maintaining a clear evaluation and research “focus” reminds the evaluator that a single evaluation can not examine everything at once. To demonstrate, Chemers shared the five specific program interventions that are the focus of his ongoing evaluation work to increase the number of racial and ethnic minority students going into biomedical research careers:

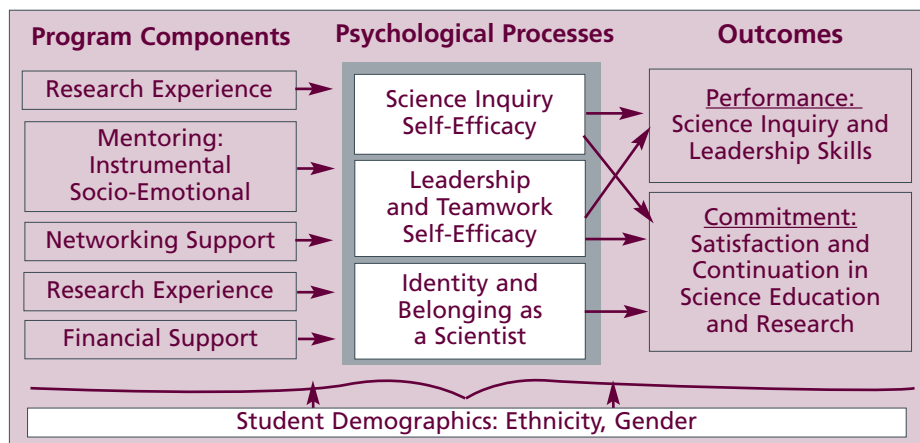
- Research experience,
- Mentoring (i.e., instrumental and socio-emotional),
- Networking support,
- Academic support, and
- Financial support.

Next, Chemers explained that the use of “theory” provides clarity to the direction an evaluation is headed and reveals the processes that lead to expected observa-

Figure 4: Biomedical Research Career Support Programs' Theory of Action

Program Interventions		Intermediate Outcomes	Long-Term Outcomes
Program Funding and Design	<u>Activities</u> Professional Experience (research, conferences, teaching, ect.)	Knowledge, Attitudes and Skills (science content, science inquiry process, research career issues, teamwork)	Retention and completion of BA/BS in science
Outreach			Interest in Biomedical Research Career
Recruitment	Academic Support (tutoring, etc.)	Progress in Courses	Graduate School (entry, completion, productivity)
Referral Linkages	Financial Support	Continuation in Major	Career Launch (postdoc, grants, teaching)
Evaluation	Other Psychological Support (peer cohorts, family, etc.)	Continuation in Research	Career longevity (patents, grants, mentoring)

Figure 5: Mediating Processes That Underlie the Theory of Action



**An Evaluation and Research Mantra, “Focus, Theory, and Competencies”**

**FOCUS**

“Focus” reminds the evaluator that a single evaluation can not examine everything at once. Select the major areas that will be the focus of evaluation.

**THEORY**

“Theory” provides clarity of the direction in which an evaluation is headed and presents the processes that lead to expected observations and outcomes.

**COMPETENCIES**

“Competencies” refer to ensuring that an evaluation team includes all relevant expertise (e.g., evaluators and clinicians).

tions and outcomes. Chemers referred back to the program’s Theory of Action (see Figure 4) as a concrete example.

**The multidisciplinary nature of the initiative’s evaluation team**

According to Chemers, “competencies,” refer to ensuring that an evaluation team includes all relevant expertise. Figure 6 depicts various research groups involved in the program’s evaluation.

Each of the groups meets once a week and all the groups come together once per month. These groups consist of various social scientists, natural scientists, students, faculty, and administrators who are representative of the competencies needed in the overall research and evaluation team.

**Figure 6: The Research Team**



**Overview of methods and timeline**

Chemers explained that over the course of the initiative both qualitative and quantitative methods were used at different stages. As Figure 7 shows, various qualitative assessments (including interviews, focus groups, longitudinal case studies of students, and analysis of personal narratives) were conducted between the first and last year.

A survey of participants from the Society for the Advancement of Chicanos and Native Americans (SACNAS) was conducted in the third and final year of the initiative. In this prospective longitudinal study, participants were assessed at the beginning and

**Figure 7: Overview of Methods and Timeline**

	04-05	05-06	06-07	07-08
Qualitative Assessment of Program Experience & Active Ingredients	→			
Retrospective Surveys of Past Participants' Perceptions	→	→		
Longitudinal Case Studies		→		
Develop Performance - Based Assessments		→		
Longitudinal Studies of HS and Undergraduate Students' Skills, Efficacy, & Identity Development		↔	↔	
Survey of SACNAS Participants			→	
Integration & Final Dissemination				→

at the end of their program. As part of the assessment a quasi-experimental design was used to build simulations and problems to test changes in students’ reasoning ability over the program period.

**Recommendations on the Broad Themes That Should Guide Evaluation**

Chemers concluded his presentation by emphasizing the importance of attention to various forms of evaluation and research as well as evaluation design strategies. He urged listeners to “Take evaluations seriously, involve key competencies from the very start, and use theory as a tool to increase the utility of evaluation and ultimately program success.”



## Evaluating the Cultural Climate at Your Institution

Dr. Hung's presentation focused on an evaluation of the cultural climate at a medical school in the Pacific Northwest. Implemented in 2003, the purpose of this evaluation was to inform stakeholders (e.g., faculty, students, administration, and the AAMC) about various aspects of cultural diversity, cultural climate, cultural competency, and racism present in the medical school setting. The evaluation assisted these stakeholders in developing a plan for a pilot survey to be adapted and administered to residents, faculty, staff, and employees. Hung focused on:

- A review of the campus demographics and the factors driving the evaluation's focus,
- The essentials of collaboration and strategic planning when evaluating campus cultural climate,
- The importance of defining key constructs (e.g., cultural diversity, cultural climate, cultural competency, and racism) when designing questionnaires,
- Obstacle and challenges, and
- Recommendations for the evaluation of institutional cultural climate.

### Campus Demographics and Factors Driving the Study's Focus

In 2003, the demographics at the medical school were 80% white and 20% from racial and ethnic minority groups (14% Asian, and 3% Latino/a, 2%

American Indian, and 1% African American). During the same period, various events and sentiments were perceived by some students as contributing to a decline in a favorable cultural climate on campus. Hung explained that these events and sentiments were factors driving him and his colleagues to conduct the evaluation, including:

- The Director of the Office of Multicultural Affairs leaving without students' knowledge;
- A growing sentiment among some racial and ethnic minority students that the institution did little to address the needs of racial and ethnic minority students;
- A perceived lack of racial and ethnic minority representation, social support, culturally relevant curriculum, culturally sensitive role models; and
- A feeling of isolation among racial and ethnic minority students.

The students initially involved in the evaluation also wrote personal reflections on why the evaluation was important to them. One student divulged, "I'm working on this survey because my views are often different from those here (institution name). I hold views more similar with people of color." A second student wrote, "I once saw an attending liken a non-English speaking patient to a dog." Although some students felt there was no need to examine the campus cultural climate, the study proceeded.

Institutionally, the medical school was also in the process of convening various student and faculty taskforces to search for a new Director of Multi-Cultural Affairs and to produce a statement of

*The questionnaire would address students' perceptions of "disharmony and disparate viewpoints" about the current campus climate and the institution's value of diversity.*

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institutional commitment to cultural diversity. By the time a new Dean of Minority Affairs was appointed, Hung and colleagues had already begun brainstorming about the campus climate questionnaire. They wanted the questionnaire to address students' perceptions of "disharmony and disparate viewpoints" about the current campus climate and the value the institution placed on diversity. Some time after the campus climate evaluation commenced, the Director of Multi-Cultural Affairs position was filled.

Hung and colleagues intended the medical student survey to measure students' perceptions and values on cultural diversity, cultural competency, and institutional racism. The results of the survey would be used for various purposes, including:

- The provision of data with recommendations to the medical school administration to improve the cultural climate in areas deemed necessary;
- The strengthening of medical students' collegiality directed at building up leadership and momentum for cultural change on campus; and
- The pilot of a cultural climate questionnaire that could be adapted and administered to residents, faculty, staff, and employees.

The researchers also projected that they would share their findings on whether

cultural diversity is perceived to contribute to medical student education with the AAMC and other national organizations.

### The Essentials of Collaboration and Strategic Planning When Evaluating Campus Climate

Over the course of the evaluation, Hung and colleagues worked together as a team and with various other stakeholders at the medical school. The evaluation team comprised three medical school students (who worked on the survey) who were later joined by two researchers (i.e., a physician and an educator with expertise in diversity curriculum and cultural competency). The team's knowledge, skills, and qualifications were essential for the successful implementation of the evaluation. For example, including the team members with professional degrees in medicine and the social sciences aided in the study's attaining of institutional review board (IRB) approval and the consent of the curriculum committee for the evaluation. The educator with expertise in cultural competency and who had worked with the Healing Racism Institute assisted with the questionnaire. Significant assistance was also provided by the medical school deans who assisted in the IRB process and in encouraging students to participate in the evaluation.

### The Importance of Defining Key Constructs When Designing a Questionnaire

A rigorous review of the literature was conducted to determine the constructs for the questionnaire, and to establish construct validity (i.e., considering the definition of a construct). Three previous assessments were identified from the literature that focused on campus climate.<sup>4-6</sup> Results from these assessments showed that most students valued diversity and cultural competency, but that minority and majority students often had differing perspectives.

The team used their knowledge to develop their own set of questions they found most appropriate for their institution. The questionnaire was broadly based on four constructs associated with evaluating campus climate:

- **Cultural diversity**, which refers to the qualities of differences in people including: race, ethnicity, age, gender, religion, physical or mental disabilities, and sexual orientation.<sup>7</sup> This definition suited the scope of the study because it was broad and included an emphasis on race and ethnicity.
- **Cultural climate**, which is used to describe the distinctive ways in which people work with and relate to each other within a culturally diverse environment. Hung and his colleagues selected Cross et al.'s definition of cultural climate for its general parameters.

<sup>4</sup> Beagan, B. (2003). Is this worth getting into a big fuss over? Everyday racism in medical school. *Medical Education*, 376, 852-860.

<sup>5</sup> Hafferty, F. W. (1998). Beyond curriculum reform: Confronting medicine's hidden curriculum. *Academic Medicine*, 73, 403-407.

<sup>6</sup> Lum, C. K., & Korenman S.G. (1994). Cultural-sensitivity training in U.S. medical schools. *Academic Medicine*, 69, 239-241.

<sup>7</sup> Cross, T., Bazron, B. J., Dennis, K., & Isaacs, M. R. (Eds.). (1989). Towards a culturally competent system of care: Vol. I. *A monograph on effective services for minority children who are severely emotionally disturbed*. Washington, DC: Georgetown University Child Development Center, National Technical Assistance Center for Children's Mental Health.

- **Cultural competency**, which is a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations.<sup>8</sup> This definition was not formally included in the campus climate survey, but guided some of the thinking behind the study highlighting the importance of individual behaviors, attitudes, and policy.
- **Racism**, which refers to racial prejudice and discrimination, supported by institutional power and authority, used to the advantage of race and the disadvantage of one or more races.<sup>9</sup> In this study, the researchers measured both perceived and experienced racism in various instructional settings (e.g., classroom, clinical, etc.)

In addition to describing the process of defining the key constructs, Hung also discussed the questionnaire's items, data collection, data analysis, and findings.

### **Questionnaire items**

A 30-item questionnaire was drafted and included both quantitative and qualitative items (e.g., Likert scale, yes or no, and open-ended). Response options also included, "check all that apply." Four focus groups (an average of ten participants per group) were conducted to clarify and determine the relevance of the questionnaire items. The focus-group participants were from each academic year and all ethnicities represented on campus. Half were from racial and ethnic minority groups. The information gathered from the focus groups resulted in the rewording of specific items and the inclusion of additional ethnicity categories (e.g., Indian, Pakistan, and Eastern European).

Due to time constraints the questionnaire was not validated. The final questionnaire had six major categories:

- The value of racial and ethnic diversity
- Student perceptions of the reasons for the lack of campus diversity
- Institutional commitment to diversity
- Cultural competence
- Institutional environment of inclusiveness
- Experiencing racism

### **Data collection**

In 2003, all 398 medical students were invited to participate in the survey. The questionnaire was administered in hardcopy to each class of students prior to their regularly scheduled lectures. The institution's associate dean for medical education announced the evaluation to each class and distributed the self-administered survey forms. As an incentive to participate, all respondents were entered into a lottery to receive bookstore and restaurant gift certificates. The medical school's registration data were used to compare responder versus non-responder demographic characteristics.

### **Data analysis**

Data analysis was conducted over a period of time. First a preliminary report of the descriptive statistics was developed by the evaluation team. Each team member coded a portion of the data. The open-ended responses were transcribed, summarized, and delivered in a PowerPoint presentation to which all students were invited to attend. The second analysis was more extensive and was conducted by Hung and additional

contributing researchers.<sup>10</sup> Descriptive statistics including percentages were used on both occasions to analyze the data. The percentages reported were for three groups: all students, non-white, and white. Chi-square ( $X^2$ ) tests were conducted to determine the statistical difference between non-white and white respondents. To account for the potential loss of statistical power stemming from dichotomizing the scaled responses, the original scaled responses were analyzed across comparison groups using the Kruskal-Wallis test.

### **Findings**

Responses were received from 216 (54.3%) of the 398 students at the school. Hung and colleagues centered the results of their analysis on the six major themes covered in the questionnaire:

1. **The value of racial and ethnic diversity.** When respondents were asked whether "emphasizing cultural diversity leads to acceptance and overall campus unity," about 73% overall, 82% non-white, and 70% of white students agreed with this statement. Fewer students agreed that "being in a student body that is not ethnically diverse compromises the quality of my medical school education." Overall, 121 (56%) of the 216 students agreed with this statement, 31 were non-white and 90 were white.
2. **Students' perceptions of the reasons for the lack of campus diversity.** Students were asked the degree to which they agreed with various statements about the reasons for the level of diversity on campus. Statements were posed to students about making the choice to go to culturally diverse

<sup>8</sup> Health Resources and Services Administration Bureau of Primary Health Care Office of Women and Minority Health. (n.d.). Other definitions of cultural competence. Retrieved July 30, 2008, from <http://bhpr.hrsa.gov/diversity/cultcomp.htm>

<sup>9</sup> National Resource Center for the Healing of Racism. (n.d.). Definitions. Retrieved July 30, 2008 from the Student Environmental Action Coalition's Web site: <http://www.seac.org/files/Caucus%20explanation.doc>

schools; the belief that there are only a few qualified minority applicants; and their belief that efforts to recruit and retain minority students are inadequate. A statistically significant difference was found between the non-white (52%) and white (35%) students (n = 84) who responded that “efforts to recruit and retain racial and ethnic minority students are inadequate.” Similarly, there was a statistically significant difference between the percentage of non-white (22%) and white (7%) students who agreed “the university does not provide minority student with enough academic support.” Students also responded to statements about the availability of financial aid resources and adequacy of representation among racial and ethnic minority students on

campus (see Tables 1 and 2).

- 3. Institutional commitment to diversity.** Two items were geared toward assessing students’ perceptions of the institution’s commitment to diversity. First, 69% of non-white (n = 37) and 66% of white students (n = 107) agreed with the statement, “The university adequately values cultural diversity as reflected in the mission statement and established diversity programs and offices.” Second, 95 students responded to the statement, “The university values having a culturally diverse faculty and administration as reflected by the current faculty and administrative core,” and of these respondents, 33% of non-white and 48% of white students agreed that this was true.

- 4. Cultural competence.** Over 50% of the students who responded to the two statements on the importance of the importance of cultural competency agreed that this topic is important. Eighty percent of non-white (n = 43) and 78% of white students (n = 126) agreed that information about working effectively with diverse patients and colleagues should be integrated into the curriculum at the medical school. Almost 95% of non-white and 96% of white students agreed that “It is important to know the social and economic conditions and cultural beliefs and values of the patient population being served.”

- 5. Institutional environment of inclusiveness.** Students were asked the extent to which they agreed that the university created a safe and open forum for all members of the institution to discuss issues related to the cultural climate. Seventy-one percent of the students agreed that the university achieved a positive and accepting climate for cultural differences among students, faculty, and staff. On the other hand, fewer students (54% of non-white and 55% of white students) agreed that “The university created a safe and open forum for students, faculty, and staff to discuss issues of cultural diversity, cultural competency, race, and perceived racism.”

- 6. Experiencing racism.** When students were asked the extent to which they experienced racism in the classroom, clinical, social, or any other setting, students’ responses varied. A statistically significant difference was found between the percentage of non-white and white students who reported having experienced racism in the classroom (11.1% non-white and 0.6% white) or “any” setting (22.2% non-white and 5.6% white) (see Table 3).

**Table 1: Students’ perceptions about the lack of racial and ethnic minorities on campus**

Statements about the topic	All Students (n=216)	Nonwhite (n=54)	White (n=162)
They choose to go to more culturally diverse schools	136 (63%)	37 (69%)	99 (61%)
There are only a few qualified minority applicants	52 (24%)	10 (19%)	42 (26%)
Efforts to recruit and retain minority students are inadequate	84 (39%)	28 (52%)*	56 (35%)*
* = p < 0.05 for comparison between white and nonwhite			

**Table 2: Students’ perceptions about the lack of racial and ethnic minorities on campus**

Statements about the topic	All Students (n=216)	Nonwhite (n=54)	White (n=162)
The university does not provide minority students with enough academic support	23 (11%)	12 (22%)	11 (7%)
The financial resources/scholarships opportunities for minority students are limited	51 (24%)	18 (33%)	33 (20%)
Efforts to recruit and retain minority students are inadequate	52 (24%)	16 (30%)*	36 (22%)*
* = p < 0.05 for comparison between white and nonwhite			

<sup>10</sup> Hung, R., McClendon, J., Henderson, A., Evans, Y., Colquitt, R., & Saha, S. (2007). Student perspectives on diversity and the cultural climate at a U.S. medical school. *Academic Medicine*, 82, 184-192.

A **statistically significant difference** was found between the percentage of non-white and white students who reported having experienced racism in the classroom (11.1% non-white and 0.6% white) or “any” setting (22.2% non-white and 5.6% white).

**Table 3: Students’ perceptions about experiencing racism**

Setting	All Students (n=216)	Nonwhite (n=54)	White (n=162)
Classroom	7 (3.2%)	6 (11.1%)	1 (0.6%)*
Clinical	8 (3.7%)	4 (7.4%)	4 (2.5%)
Social	4 (1.9%)	2 (3.7%)*	2 (1.2%)
Any	21 (9.7%)	12 (22.2%)	9 (5.6%)*
* = p < 0.05 for comparison between white and nonwhite			

### Obstacles and Challenges

In planning the medical student survey, the researchers encountered several obstacles. Though a new Director of Multi-Cultural Affairs was appointed, this individual did not find the evaluation necessary. Second, some students were not open to discussions or questionnaires that focused on race because they did not view it as important. Third, the evaluation team that initially consisted of medical students had minimal experience with research and survey design. And finally, the medical students leading the effort had demanding schedules leaving limited free-time to commit to the evaluation.

### Recommendations for the Evaluation of Institutional Cultural Climate

Hung concluded his presentation with a list of recommendations to use to evaluate institutional cultural climate:

- Conduct a preliminary scan of campus demographics and assess the needs and purposes of a campus cultural climate evaluation;
- Assemble an evaluation team that has the knowledge, skills, and credentials to successfully implement the evaluation;
- Collaborate with various stakeholders across all levels of the institution (e.g., students and deans);
- Establish clear objectives and goals for the evaluation;
- Maintain an open and transparent evaluation process;
- Gather participant feedback; and
- Establish and follow through with measures to ensure future institutional support and memory to perpetuate future campus climate evaluations.

*To evaluate the cultural climate at your institution you need team collaboration.*

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## Facilitated Discussion

In the facilitated discussion, Clayton-Pedersen restated the major themes presented by each presenter and emphasized the need to place more emphasis on the evaluation of programs and institutions who seek to retain a diverse administration, faculty, staff, and student body. These goals are realized only in the presence of sound evaluation design, practice, and collaboration. Continuing and/or initiating institutional efforts to create a safe and open forum for students, faculty, and staff to discuss issues of cultural competency, cultural diversity, race, and perceived racism was also encouraged.

Lastly, it was shared that institutions should initiate and/or continue campus-wide efforts to take evaluation seriously (e.g., involve key individuals and competent evaluators). Additionally, collaboration must occur across various sectors of an institution (e.g., administrators, faculty, staff, students, community members and partners) to ensure evaluations are implemented and useful.



## Appendix I:

### Current and Classic Evaluation Resources

#### Background information about evaluation

Fink, A., & Kosecoff, J. (1978). *An evaluation primer*. Beverly Hills, CA: Sage.

Government Accountability Office. (2005, May 2). *Performance measurement and evaluation: Definitions and relationships*. Retrieved May 7, 2008, from <http://www.gao.gov/new.items/d05739sp.pdf>

National Science Foundation. (2002). *The 2002 user-friendly handbook for program evaluation*. Retrieved May 7, 2008, from <http://www.nsf.gov/pubs/2002/nsf02057/start.htm>

Rossi, P. H., & Freeman, H. E. (1997). *Evaluation: A systematic approach*. (5th ed.) Newbury Park, CA: Sage.

Rossi, P. H., Lipsey, M.W., & Freeman, H. E. (2003). *Evaluation: A systematic approach (7th ed.)*. Thousand Oaks, CA: Sage.

Shadish, W. R., Cook, T. D., & Leviton L. C. (1995). *Foundations of program evaluation: Theories of practice*. Newbury Park, CA: Sage.

W. K. Kellogg Foundation. (1998). *Evaluation handbook*. Retrieved May 7, 2008, from <http://www.wkkf.org/Pubs/Tools/Evaluation/Pub770.pdf>

#### Evaluation design

Campbell, D. F., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. Chicago, IL: Rand McNally College Publishing.

Campbell, D. F., & Cook, T. (1979). *Quasi-experimentation: Design and analysis issues for field settings*. Boston, MA: Houghton Mifflin.

Cole, G. E. (1999). Advancing the development and application of theory-based evaluation in the practice of public health. *American Journal of Evaluation*, 20, 3, 453-470.

Government Accountability Office. (1991, May 1). *Designing evaluations*. Retrieved May 7, 2008, from <http://archive.gao.gov/t2pbat7/144040.pdf>

Patton, M. Q. (1997). *Utilization-focused evaluation: The new century text (3rd ed.)*. Thousand Oaks, CA: Sage Publications.

Pawson, R., & Nick, T. (1997). *Realistic evaluation*. Thousand Oaks, CA: Sage.

Weiss, C. H. (1995). Nothing as practical as good theory: Exploring theory-based evaluation for comprehensive community initiatives for children and families. In Connell, James P., et.al. (Eds.). *New approaches to evaluating community initiatives: Concepts, methods, and contexts*. Washington, DC: The Aspen Institute.

## Appendix I:

(continued)

### Evaluation methods

Creswell, J.W., & Clark, V.L.P. (2006). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.

Government Accountability Office. (1990, November 1). *Case study evaluations*. Retrieved May 7, 2008, from <http://archive.gao.gov/f0202/143145.pdf>

Government Accountability Office. (2000, August 1). *Determining performance and accountability challenges and high risks (Exposure Draft)*. Retrieved May 7, 2008, from <http://www.gao.gov/archive/2000/cg00012.pdf>

Government Accountability Office. (1990, November). *Prospective evaluation methods: The prospective evaluation synthesis*. Retrieved May 7, 2008, from <http://www.gao.gov/special.pubs/pe10110.pdf>

Government Accountability Office. (1991, July 1). *Using structured interviewing techniques*. Retrieved May 7, 2008, from <http://archive.gao.gov/t2pbat7/144388.pdf>

Posavac, E., & Raymond, C. (1997). *Program evaluation methods and case studies* (5th ed.). Englewood Cliffs, NJ: Prentice Hall.

### Data collection and analysis

Government Accountability Office. (2002, October 1). *Assessing the reliability of computer-processed data*. Retrieved May 7, 2008, from <http://www.gao.gov/new.items/d03273g.pdf>

Government Accountability Office. (1991, April 1). *Preparing, documenting, and referencing microcomputer data base applications*. Retrieved May 7, 2008, from <http://archive.gao.gov/t2pbat7/144001.pdf>

### Evaluation planning and implementation

Government Accountability Office. (1992, June 1). *Quantitative data analysis: An introduction*. Retrieved May 7, 2008, from <http://archive.gao.gov/t2pbat6/146957.pdf>

Bamberger, M., Rugh, J. & Mabry, L. (2006). *Real world evaluation: Working under budget, time, data, and political constraints*. Thousand Oaks, CA: Sage.

Chen, H-T. (2005). *Practical program evaluation: Assessing and improving planning, implementation, and effectiveness*. Thousands Oaks, CA: Sage.

Government Accountability Office. (1992, August 1). *Planning, preparing, documenting, and referencing SAS products*. Retrieved May 7, 2008, from <http://archive.gao.gov/t2pbat6/147465.pdf>

Government Accountability Office. (1998, April 1). *The Results Act evaluator's guide to assessing agency annual performance plans*. Retrieved May 7, 2008, from <http://www.gao.gov/special.pubs/gg10120.pdf>

## Appendix I:

(continued)

### Evaluation planning and implementation, continued:

Hatry, H. (2007). *Performance measurement: Getting results (2nd ed.)*. Washington, DC: Urban Institute.

Kane, M., & Trochim, W. M. (2006). *Concept mapping for planning and evaluation*. Thousand Oaks, CA: Sage.

McDavid, J.C., & Hawthorn, L. (2006). *Program evaluation and performance measurement: An introduction to practice*. Thousand Oaks, CA: Sage.

Morrissey, E., Wandersman, A., Seybolt, D., Nation, M., Crusto, C., & Davino, K. (1997). Toward a framework for bridging the gap between science and practice in prevention: A focus on evaluator and practitioner perspectives. *Evaluation and Program Planning*, 20, 367-377.

O'Sullivan, R.G. (2004). *Practicing evaluation: A collaborative approach*. Thousand Oaks, CA: Sage.

Shaw, I.F., Greene, J.C., & Mark, M. (Eds.). (2006). *The Sage handbook of evaluation*. Thousand Oaks, CA: Sage.

United Way of America. (1996). *Measuring program outcomes: A practical approach*. Alexandria, VA: United Way.

### Logic models

McLaughlin, J. A., & Gretchen B. J. (1998). Logic models: A tool for telling your program's performance story. *Evaluation and Program Planning*, 22, 65-72.

### Culturally responsive evaluation

Association for the Study and Development of Community. (2001). *Principles for evaluating comprehensive community Initiatives*. Gaithersburg, MD: ASDC.

Greene, J. (2006). Evaluation, democracy, and social change. In Shaw, I.F., Greene, J.C., & Mark, M. *Handbook of Evaluation: Policies, programs, and practice*. Thousand Oaks, CA: Sage.

Greene, J., Millet, R., & Hopson, R. (2004). Evaluation as democratizing practice. In M. Braverman, N. Constantine, & J.K. Slater, (Eds.). *Putting evaluation to work for foundations and grantees* (pp. 96-118). San Francisco, CA: Jossey-Bass.

Guzmán, B. (2003). Examining the role of cultural competency in program evaluation: Visions for new millennium evaluators. In S. Donaldson & M. Scriven (Eds.), *Evaluating social programs and problems: Visions for the new millennium*. Mahwah, NJ: Lawrence Erlbaum.

Hood, S., Hopson, R., & Frierson, H. (2005). *The role of culture and cultural context in evaluation: A mandate for inclusion, the discovery of truth, and understanding in evaluative theory and practice*. Greenwich, CT: Information Age.

## Appendix I:

(continued)

### Culturally responsive evaluation, continued:

Hood, S. (2001). Nobody knows my name: In praise of African American evaluators who were responsive. *New Directions in Evaluation*, 92, 31-44. San Francisco, CA: Jossey-Bass.

Hopson, R. (2001). Global and local conversations on culture, diversity, and social justice in evaluation: Issues to consider in a 9/11 era. *American Journal of Evaluation*, 20, 3, 375-380.

Hopson, R. (2003). *Overview of multicultural and culturally competent program evaluation: Issues, challenges & opportunities*. Oakland, CA: California Endowment.

House, R. E. (2001). Responsive evaluation and its influence on deliberative democratic evaluation. *New Directions for Evaluation*, 92, 23-30.

House, E.R. (1993). Evaluation in multicultural societies. In House, E.R. *Professional evaluation: Social impact and political consequences*, 141-162. Newbury Park, CA: Sage.

Kirkhart, K. E. (1995). Seeking multicultural validity: A postcard from the road. *Evaluation Practice*, 16, 1, 1-12.

Madison, A-M. (1992). Minority issues in program evaluation. *New Directions for Evaluation*, 53.

Sengupta S., Hopson, R., & Thompson-Robinson, M. (2004). Cultural context in evaluation: An overview. *New Directions for Evaluation*, 102, 5-21.

Thomas, V. G. & Stevens, F. (2004). Co-constructing a contextually responsive evaluation framework: The talent development model of school reform. *New Directions for Evaluation*, 101.

Thompson-Robinson, M., Hopson, R., & SenGupta, S. (2004). In search of cultural competence in evaluation: Toward principles and practices. *New Directions for Evaluation*, 102.

### Specific topics

Fink, A. (1993). *Evaluation fundamentals: Guiding health programs, research, and policy*. Newbury Park, CA: Sage.

Government Accountability Office. (2002, March 1). *A model of strategic human capital management*. Retrieved May 7, 2008, from <http://www.gao.gov/new.items/d02373sp.pdf>

Government Accountability Office. (1994, May 1). *Executive guide: Improving mission performance through strategic information management and technology*. Retrieved May 7, 2008, from <http://archive.gao.gov/t2pbat3/151707.pdf>

Government Accountability Office. (2000, September 1). *Human capital: A self-assessment checklist for agency leaders*. Retrieved May 7, 2008, from <http://www.gao.gov/special.pubs/cg00014g.pdf>

## Appendix I:

(continued)

### Specific topics, continued:

Kirchner, R. A., Przybylski R. K., & Cardella, R. A. (1994). *Assessing the effectiveness of criminal justice programs*. Washington, DC: Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice.

Ott, J. S., Hyde, A. C., & Shafritz, J. M. (Eds.). (1992). *Public management: The essential readings*. Chicago, IL: Nelson-Hall.

Pawson, R. (2006). *Evidence-based policy: A realist perspective*. Thousand Oaks, CA: Sage.

United Way of America. (1966). *Focusing on program outcomes: A guide for United Ways*. Alexandria, VA: United Way.

White, H. (2006). Impact evaluation: *The experience of the Independent Evaluation Group of the World Bank*. Retrieved May 28, 2008, from [http://mpa.ub.uni-muenchen.de/1111/1/MPRA\\_paper\\_1111.pdf](http://mpa.ub.uni-muenchen.de/1111/1/MPRA_paper_1111.pdf)

### Guiding principles for evaluators

American Evaluation Association. (2004). *American Evaluation Association guiding principles for evaluators*. Retrieved June 12, 2008, from <http://www.eval.org/GPTraining/GP%20Training%20Final/gp.principles.pdf>

### Evaluation Web sites

American Evaluation Association  
<http://www.eval.org/>

Government Accountability Office  
<http://www.gao.gov/special.pubs/erm.html>

Urban Institute  
[www.urban.org](http://www.urban.org)



## Appendix II:

### List of Foundations That Fund Diversity Research

Aetna Foundation  
[www.aetna.com/foundation/grant\\_programs.htm#diversity](http://www.aetna.com/foundation/grant_programs.htm#diversity)

Bill and Melinda Gates Foundation  
[www.gatesfoundation.org/default.htm](http://www.gatesfoundation.org/default.htm)

California Endowment  
[www.calendow.org/program\\_areas/index.stm](http://www.calendow.org/program_areas/index.stm)

Josiah Macy, Jr. Foundation  
[www.josiahmacyfoundation.org](http://www.josiahmacyfoundation.org)

National Board of Medical Examiners (Edward J. Stemmler, M.D., Medical Education Research Fund)  
[www.nbme.org/research/stemmler/index.html](http://www.nbme.org/research/stemmler/index.html)

Pew Charitable Trusts  
[www.pewtrusts.com/ideas/area\\_index.cfm?area=2](http://www.pewtrusts.com/ideas/area_index.cfm?area=2)

Robert Wood Johnson Foundation  
[www.rwjf.org/portfolios/index.jsp](http://www.rwjf.org/portfolios/index.jsp)

The Annie E. Casey Foundation  
<http://www.aecf.org/>

The Commonwealth Fund  
<http://www.commonwealthfund.org/>

The Henry J. Kaiser Family Foundation  
[www.kff.org](http://www.kff.org)

W.K. Kellogg Foundation  
[www.wkkf.org](http://www.wkkf.org)

## Appendix III:

### Federal Agencies

Agency for Health Care Research and Quality  
[www.ahrq.gov](http://www.ahrq.gov)

Centers for Disease Control and Prevention  
[www.cdc.gov](http://www.cdc.gov)

Health Resources and Services Administration (Bureau of Health Professions)  
[www.bhpr.hrsa.gov](http://www.bhpr.hrsa.gov)

National Center on Minority Health and Health Disparities, National Institutes of Health  
<http://ncmhd.nih.gov/>

## Appendix IV:

### Potential Venues for Publishing Research on Diversity

Academic Medicine  
[www.academicmedicine.org/](http://www.academicmedicine.org/)

American Educational Research Journal  
[www.jstor.org/journals/00028312.html](http://www.jstor.org/journals/00028312.html)

American Journal of Evaluation  
[www.aje.sagepub.com](http://www.aje.sagepub.com)

Anthropology and Education  
[www.aaanet.org/cae/AEQ.html](http://www.aaanet.org/cae/AEQ.html)

Chronicle of Higher Education  
[www.chronicle.com](http://www.chronicle.com)

Diversity Web (A site of the American Association of Colleges and Universities)  
[www.diversityweb.org](http://www.diversityweb.org)

Educational Evaluation and Policy Analysis  
[www.jstor.org/journals/01623737.html](http://www.jstor.org/journals/01623737.html)

Evaluation: The International Journal of Theory, Research and Practice  
<http://evi.sagepub.com>

Evaluation and Program Planning  
<http://ees.elsevier.com/epp/>

Evaluation Review: A Journal of Applied Social Research  
<http://evalreview.sagepub.com>

Harvard Educational Review  
[www.gse.harvard.edu/~hepg/her.html](http://www.gse.harvard.edu/~hepg/her.html)

Health Affairs  
[www.healthaffairs.org](http://www.healthaffairs.org)

JAMA: The Journal of the American  
Medical Association  
[www.jama.ama-assn.org](http://www.jama.ama-assn.org)

Journal of College Student Development  
[www.jcsdonline.org/](http://www.jcsdonline.org/)

Journal of Diversity in Higher Education  
[www.apa.org/journals/dhe/](http://www.apa.org/journals/dhe/)

Journal of Mixed Methods Research  
<http://jmmr.sagepub.com>

New Directions for Evaluation  
[www.eval.org/Publications/NDE.asp](http://www.eval.org/Publications/NDE.asp)

## Appendix IV:

(continued)

Qualitative Inquiry  
<http://qualitativeinquiry.sagepub.com>

Research in Higher Education  
[www.airweb.org/page.asp?page=89](http://www.airweb.org/page.asp?page=89)

## Appendix V:

### Agenda

#### **AAMC Annual Meeting, 2007** *Diversity Research Forum: Successfully Evaluating Diversity Efforts in Medical Education*

Tuesday, November 6, 2007  
10:00 a.m. – 12:00 p.m.

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**Welcome and Introductions**     **Laura Castillo-Page, Ph.D.**  
*Assistant Vice President and Director of Research*  
Division of Diversity Policy and Programs  
Association of American Medical Colleges

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#### **Panelist Presentations:**

**A New Vision for Diversity  
in the Twenty-First Century**     **Alma R. Clayton-Pedersen, Ph.D.**  
*Vice President for Education and Institutional Renewal*  
Association of American Colleges and Universities

**Research and Evaluation in  
the Development of Student  
Support Programs**     **Martin M. Chemers, Ph.D.**  
*Professor of Psychology*  
University of California, Santa Cruz

**Evaluating the Cultural  
Climate at Your Institution**     **Robert Hung, M.D., M.P.H.**  
*Internal Medicine & Psychiatry Resident*  
Rush University Medical Center

**Facilitated Discussion**     **Alma R. Clayton-Pedersen, Ph.D.**  
*Vice President for Education and Institutional Renewal*  
Association of American Colleges and Universities

## Appendix VI:

### Session Description

#### **AAMC Annual Meeting, 2007** *Diversity Research Forum: Successfully Evaluating Diversity Efforts in Medical Education*

##### Successfully Evaluating Diversity Efforts in Medical Education *Session Description*

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The purpose of this year's Diversity Research Forum is to underscore the importance of documenting the effects of diversity in medical education. Conducting evaluations of medical education programs and institutional climate, methodological approaches, and implications of results will be discussed.

Diversity enhances the educational experience for all students.<sup>1,2</sup> For medical education, the benefits of diversity branch out to increase the diversity of the physician workforce, which in turn improves access to health care for underserved populations,<sup>3-7</sup> makes health care systems more responsive to the needs of racial and ethnic minority populations,<sup>8,9</sup> and increases the diversity of the research workforce, which can accelerate advances in medical and public health research.<sup>10-14</sup> Many medical schools and academic institutions have answered the call and implemented various diversity efforts. However, the true value and effect of these efforts cannot be understood unless evaluation takes place.

When evaluation is successfully implemented it can:

- indicate whether diversity strategies produce the difference they intend;
- help target quality improvement efforts;
- identify the nature and extent of disparities;
- be used to improve the educational quality of all students' experiences;
- help an institution know if it is meeting its mission;
- reveal how students across different groups are responding to the academic climate; and
- help communicate the benefits of diversity to a variety of audiences and address some of the concerns and questions of the general public.<sup>15,16</sup>

To address these issues, researchers at the Diversity Research Forum will offer brief presentations that explore the following questions:

- What are important strategies for designing evaluations?
- What innovative evaluation strategies are currently used?
- What are the processes in which these evaluations are created and implemented?
- What are some of the challenges in conducting evaluations in this area?
- How can we evaluate the institutional climate around diversity, and what can we learn from doing so?

## Appendix VII:

### Session Description's References

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