



**National Science Foundation Workshop:
Evaluation of Efforts to Broaden
Participation in STEM**

April 17-18, 2008
Arlington Hilton Hotel, Arlington, Virginia

We express our grateful appreciation to the Conference Planning Committee.

Planning Committee

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Elmima Johnson

Beatriz (Toni) Clewell

Norman Fortenberry

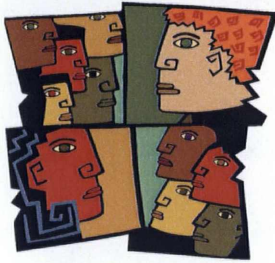
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Workshop on Evaluation of Efforts to Broaden Participation in STEM

April 17-18, 2008 ~ Arlington Hilton Hotel ~ Gallery II ~
950 North Stafford Street, Arlington, VA 22203



Thursday, April 17, 2008

Location

7:30 – 8:00 a.m.	Registration & Light Refreshments	Gallery II
8:00–10:00 a.m.	Welcome and Opening Keynote Bernice Anderson , <i>Senior Advisor, EHR/OAD</i> Beatriz Clewell , <i>Director, Program for Evaluation and Equity Research (PEER), The Urban Institute</i> Norman Fortenberry , <i>Director, Center for the Advancement of Scholarship on Engineering Education, National Academy of Engineering</i> “NSF Perspective on the Importance of Broadening Participation” Margaret E.M. Tolbert , <i>Senior Advisor, OIA and CEOSE Executive Liaison National Science Foundation</i>	
10:00 – 10:30 a.m.	Break	
10:30 – 12:00 a.m.	Parallel Sessions <i>Break outs meet to discuss the topics a) metrics for project monitoring, and b) program evaluation design and indicators</i>	Gallery I, II, & III
12:00 – 1:00 p.m.	Report Outs and Discussion	Gallery II
1:00 – 2:30 p.m.	Working Lunch <i>Guest Speaker, Joel Parriot, Office of Management and Budget</i> <i>“A View from the Office of Management and Budget”</i>	Gallery II
2:30 – 4:30 p.m.	Parallel Sessions <i>Draft written recommendations on metrics and evaluation design</i>	Gallery I, II, & III
4:30 – 5:30 p.m.	Report Outs <i>Beatriz Clewell and Norman Fortenberry</i>	Gallery II
5:30 p.m.	Adjourn for Day <i>Beatriz Clewell and Norman Fortenberry</i>	



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Friday, April 18, 2008

		Location
8:00 – 8:30 a.m.	Light Refreshments	Gallery I
8:30 – 8:45 a.m.	Workshop Reconvenes	Gallery I
8:45 – 9:15 a.m.	Synthesis of Thursday's Results <i>Beatriz Clewell and Norman Fortenberry</i>	Gallery I
9:15 - 9:30 a.m.	NSF Perspective on Importance of Workshop <i>Celeste Rolfing, MPS/CHE, Co-Chair, NSF Working Group on Broadening Participation</i>	Gallery I
9:30 -10:00 a.m.	Break	Gallery I
10:00 a.m. - 12:30 p.m.	Parallel Sessions <i>Groups look at implementation issues – brainstorm on possible objections/concerns and how to address same. Draft recommendations.</i>	Gallery I DaVinci Picasso Matisse
12:30p.m.	Closing Remarks, Workshop Adjourns <i>Elmima Johnson</i>	Gallery I
1:30 – 5:30 p.m.	Expert Panel Members Reconvene <i>Breatriz Clewell and Norman Fortenberry</i> <i>Work on outlining and writing final document</i>	Gallery I
5:30 p.m.	Expert Panel Adjourns	

Executive Panel

Fitzgerald B. Bramwell earned his B.A. degree in 1966 at Columbia University with Dr. Harry Gray, and his M.S. and Ph. D. degrees in physical chemistry at the University of Michigan with Dr. Julien Gendell and Dr. Thomas Dunn. Following graduate school in 1970, he joined ESSO Research and Engineering as a Research Scientist. The following year he accepted a faculty position at Brooklyn College of the City University of New York. He held a visiting professorship at the University of West Indies, served as a Member of Technical Staff and as a consultant at AT&T Bell Laboratories, and as a consultant to the American Cyanamid Corporation. He returned to the faculty as a professor of chemistry after serving for six years as the University of Kentucky Vice President for Research and Graduate Studies. In that role he was the principal administrator for research and for the graduate school at the University of Kentucky. Prior to that appointment he was Dean of Graduate Studies and Research at Brooklyn College of the City University of New York, where he joined the faculty as an assistant professor of chemistry in 1971. He was promoted to professor of chemistry in 1980. From 1995 through June, 2001 he served as a Trustee for the Southeastern Universities Research Association, as a member of the Executive Committee for the Council of Research Policy and Graduate Education of the National Association of State Universities and Land Grant Colleges, and on the Board of Directors of the Oak Ridge Associated Universities. He was honored for his career achievements as a research scientist in 2003 in *African Americans in Science and Invention* and in 1996 in *Distinguished African American Scientists of the 20th Century*. He has worked extensively with numerous historically black and minority serving colleges and universities to assist them in obtaining federal grants and contracts. Phillips Academy honored him in 2000 with the Claude M. Feuss Award for distinguished public service.

Patricia B. Campbell, PhD, President of Campbell-Kibler Associates, Inc, has been involved in educational research and evaluation with a focus on formal and informal science, technology, engineering and mathematics (STEM) education and issues of race/ethnicity, gender and disability since the mid 1970's. Her BS, from LeMoyne College, is in Mathematics, her MS, from Syracuse University, is in Instructional Technology and her PhD, also from Syracuse University, is in Teacher Education. Dr. Campbell, formerly a professor of research, measurement and statistics at Georgia State University, has authored more than 100 publications including co-authoring *Engagement, Capacity and Continuity: A Trilogy for Student Success; What Do We Know?: Seeking Effective Math and Science Education* and *Good Schools in Poor Neighborhoods: Defying Demographics, Achieving Success*. Dr. Campbell was a member of the US Department of Education's Impact Review Panel and was part of the team involved in the development of the National Science Foundation publication *Infusing Equity in Systemic Reform: An Implementation Scheme*. She received the Betty Vetter Research Award from Women and Engineering Program Advocates Network (WEPAN) and the Willystine Goodsell Award from the American Educational Research Association.

Beatriz Chu Clewell is a Principal Research Associate and Director of Program Evaluation and Equity Research (PEER) in the Education Policy Center of the Urban Institute, where she has worked since 1994. As an education policy researcher, her work has focused on factors that influence the educational attainment of underrepresented groups, especially in science, technology, engineering and mathematics (STEM) fields. Her undergraduate degree was in English Literature, with Master's and Ph.D. degrees in Educational Policy, Planning, and Analysis. All three degrees are from Florida State University. From 1981 to 1994, Dr. Clewell was a senior research scientist at the Educational Testing Service. She also taught at the Universidad Simon Bolivar in Caracas, Venezuela as well as middle school in Tegucigalpa, Honduras. From November 1999 to July 2000, on leave from the Urban Institute, she was Executive Director of the Commission on the Advancement of Women and Minorities in Science, Engineering and Technology Development (CAWMSET), a bipartisan Congressional commission based at the National Science Foundation (NSF). She has conducted over sixty evaluations, many of them large-scale, multi-site, multi-method in scope, including evaluations of many of NSF's Broadening Participation programs. Dr. Clewell was a member of the U.S. Department of Education's Impact Review Panel and currently serves on the National Academies' Congressionally-mandated Committee on Underrepresented Groups and the Expansion of the Science and Engineering Workforce Pipeline. She is also the author or co-author of several publications and a recipient of the Distinguished Scholar Award from the American Educational Research Association.

Dr. Norman L. Fortenberry is the founding Director of the Center for the Advancement of Scholarship on Engineering Education (CASEE) at the National Academy of Engineering (NAE). CASEE facilitates research on and deployment of, innovative policies, practices, and tools designed to enhance the effectiveness and efficiency of systems for the formal, informal, and lifelong education of engineers. He previously served in various executive positions within the National Science Foundation's Directorate for Education and Human Resources. He has also served as executive director of the National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (The GEM Consortium) and as a faculty member in the department of mechanical engineering at the Florida A&M University – Florida State University College of Engineering. Dr. Fortenberry was awarded the S.B., S.M., and Sc.D. degrees (all in mechanical engineering) by the Massachusetts Institute of Technology.

Dr. Donna Nelson, associate professor of chemistry at Oklahoma University, obtained her PhD in chemistry at UT-Austin with MJS Dewar, did her postdoctorate at Purdue with HC Brown, and joined OU in 1983. She researches three global challenges – energy, environment, and scientific workforce development, and frequently speaks on their interrelationship. She has over 90 publications and several honors, including Fulbright Scholar, NSF ADVANCE Leadership Award, SACNAS Distinguished Scientist, Women's eNews "21 Leaders for the 21st Century", AAAS Fellow, Guggenheim Award, NOW "Woman of Courage", Ford Fellow, Sigma Xi Faculty Research Award, NSF Creativity Extension, and many keynote talks. Her chemical research involves functionalizing single walled carbon nanotubes (SWNTs), with

applications in energy research and technology development, and yielded the first COSY NMR spectrum of covalently functionalized SWNTs. Her scientific workforce surveys, of faculty race/ethnicity, gender, and rank in science and engineering at research universities, revealed that women and minorities are much less represented among professors than degree recipients. The Nelson Diversity Surveys final report is at <http://cheminfo.chem.ou.edu/~djn/diversity/briefings/Diversity%20Report%20Final.pdf>.

More information is at <http://cheminfo.chem.ou.edu/faculty/djn/djn.html>

Adam Stoll has been with the Congressional Research Service (CRS) since November, 1999. Currently he is the Section Head of the Education and Labor Section in the Domestic Social Policy Division at CRS. He leads a group of twelve analysts in the development of research and policy analysis to support the needs of the Congress on issues pertaining to education, workforce development and the workforce. During most of his tenure at CRS, Adam has served as lead analyst on all issues pertaining to the federal student loan programs. He also worked as a senior analyst on projects examining the federal need analysis system (which is used to determine student eligibility for various sources of financial aid), and on projects examining the relationship between higher education tax credits and traditional student aid. Immediately prior to joining CRS, Adam worked as an evaluation officer at the Lila & DeWitt Wallace Reader's Digest Funds. In that position, he designed evaluations for large national demonstration projects dealing with an array of issues, including: teacher recruitment, teacher professional development, comprehensive school reform, adult literacy, and urban park creation and revitalization. In earlier career stops Adam worked for the American Educational Research Association and for the Center for Education and the American Economy at Teachers College Columbia University. Adam has a Ph.D. in Social Policy from the Heller School, Brandeis University.

Veronica G. Thomas is a Professor in the Department of Human Development and Psychoeducational Studies at Howard University. She is also a Senior Research Associate with the Capstone Institute, Howard University. Dr. Thomas was the Principal Investigator of the Howard University Evaluation Training Institute, a National Science Foundation (NSF) funded project, and the former Co-Principal Investigator of the Secondary School Project at Howard University's Center for Research on the Education of Students Placed At Risk (CRESPAR). Her research interests include the academic and socio-emotional development of youths placed at risk, well-being of Black women and girls, and culturally responsive evaluations. Dr. Thomas has authored or co-authored work in venues such as *New Directions for Evaluation*, *Adolescence*, *Educational Leadership*, *Journal of Adult Development*, *Review of Research in Education*, *Journal of Negro Education*, *Family Relations*, *Journal of Black Psychology*, *Sex Roles*, *Journal of Social Psychology*, *Women and Health*, and the *Journal of the National Medical Association*. Her major professional associations include the American Psychological Association (APA), the American Evaluation Association (AEA), American Educational Research Association (AERA), and the Eastern Evaluation Research Society (EERS). Dr. Thomas has served as an evaluation consultant or trainer for various

projects/organizations, including the National Council on Community and Education Partnerships (NCCEP), Northern Virginia Resource Mothers' Program, Council of Graduate Schools' Preparing Future Faculty (PFF) Program, District of Columbia Public Schools' HIV/AIDS Education Program, Urban Family Institute's Kids House Program, Minority Graduate Education Program, Center for Substance Abuse Treatment (CSAT), and the Center for Substance Abuse Prevention (CSAP).

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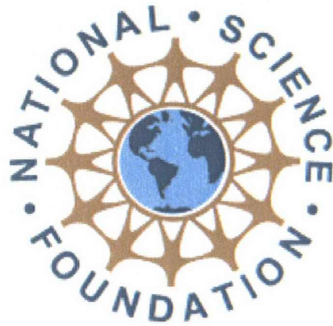
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