

# Virtual Mentor

American Medical Association Journal of Ethics  
February 2011, Volume 13, Number 2: 118-123.

## POLICY FORUM

### Community-Based Participatory Research and the Academic System of Rewards

Nicolette I. Teufel-Shone, PhD

*Science...seems an attempt to force nature into the preformed and relatively inflexible box that the paradigm supplies. No part of the aim of normal science is to call forth new sorts of phenomena; indeed those that will not fit the box are often not seen at all. Nor do scientists normally aim to invent new theories, and they are often intolerant of those invented by others.*

*Thomas S. Kuhn [1]*

The National Institute of Health (NIH), the Centers for Disease Control and Prevention (CDC), the Robert Wood Johnson Foundation (RWJF), and other primary funders of health-related research have identified community-based participatory research (CBPR) as essential to deepening our scientific knowledge of health promotion and disease prevention and reducing racial and ethnic health disparities [2-5]. The Institute of Medicine (IOM) has named CBPR as one of eight competencies for all health professional students [6]. Yet, as an expanding cohort of junior university-based CBP researchers proceed through the academic system—specifically through the promotion and tenure process—many continue to be reviewed using the standards developed for non-CBP researchers. As stated in Calleson et al.’s seminal article recommending change, “If we want faculty to be involved in communities but reward them for other activities, we are our own worst enemies” [7].

### The Nature of CBPR

CBPR’s guiding principle of engaging community and university partners equitably in all stages of research yields a process quite distinct from traditional research led by one or a team of university-based principal investigators (PIs). Table 1 offers a brief look at how CBPR differs from traditional research.

Table 1: Comparison of CBPR and traditional research

	<b>Traditional Research</b>	<b>CBPR</b>
<b>Research ideas and hypotheses</b>	Generated by university-based researchers	Generated by community-university research team
<b>Goal</b>	Knowledge	Social change
<b>Research focus</b>	Disease and health outcomes	Interplay of socio-cultural context and health behaviors
<b>Background research</b>	Peer-reviewed sources	Combination of information from community experiences

		and peer-reviewed sources
<b>Recipient of external funding</b>	University	Community and university share funding
<b>Guiding framework</b>	Logical model	Iterative collaborative process
<b>Leadership</b>	University-based PI or co-PIs	Community-university co-PIs
<b>Length of research</b>	Length of funding periods	During and between funding periods
<b>Indirect cost rate, reflecting primary research site</b>	University rate	Community rate or off-campus university rate
<b>Essential skills for PIs</b>	Leadership and management	Collaboration and relationship building
<b>Decision-making method</b>	Hierarchical	Consensus
<b>Definition of success</b>	Assessed by academic peers and measured through peer-reviewed publications, papers presented, and grants received	Assessed by the community and measured through sustained change in social behaviors and policies that impact health

### **The Nature of the Academic System of Rewards**

Weiser et al. point out that “a university’s values are most clearly described by its promotion and tenure policy and by the criteria used to evaluate faculty members” [8]. Calleson et al. conclude that “most academic health centers and health professions schools do not truly value community partnerships and the community involvement of their faculty as central to achieving their institutional missions” [7]. These statements refer to conventional institutions that base success upon three criteria: (1) evidence of peer recognition of excellence in research/scholarly activity; (2) documentation that teaching is of high quality; and (3) documentation of significant service [9-11]. The parameters of the first criterion, designed to reflect independent scholarship, are perhaps the most incongruous with CBPR. By tradition, acceptable evidence of the first criterion has been peer-reviewed publications, extramural funding, and letters of evaluation from peers at other institutions.

In evaluating a faculty member’s publication record, the number of publications per year, position of authorship (with first or last carrying the greatest weight), and journal type influence the review. The ranking of journals is based on a system internal to academia. Journals are ranked by the Healthcare and Science division of Thomson Reuters, an information firm, using a systematic appraisal of research influence as measured by an Impact Factor and Immediacy Index [12]. Impact and immediacy refer to frequency with which an article is cited in other academic contexts and how close to the time of its publication those citations occurred. The “real world” effect of the research findings or dissemination in nonacademic arenas has no effect on the article’s “impact and immediacy” in the index. First-tier

journals, the most valued, publish articles that are cited often and soon after publication by the greatest number of academic researchers in a field [12].

In the evaluation of external funding and outside letters of support, the review is again somewhat internal to the academic system. Source of funding, amount and period of support, and, in some cases, the amount of support provided for the PI and other university personnel are assessed. Outside letters of recommendation from national and international leaders based in research-intensive institutions are collected to “speak directly to the quality and impact of a candidate’s work” [13]. Letters from community leaders and policy makers who may use the candidate’s work to guide decision making and allocate funds are not solicited for inclusion in a traditional promotion and tenure package.

### **Are the Two Systems Compatible?**

In the current, traditional environment, these approaches are not compatible. Independent scholarship and recognition by the academic community are not the primary goals of CBPR. Its emphasis is less on individual leadership and more on facilitation and synergy. Successful CBPR effectively weaves together the knowledge and skills of all partners in the interest of understanding the production of health and instituting a new way of behaving socially, politically, or economically to reduce health disparity. Lessons learned by a specific partnership may be relevant to others but are not intended to be directly transferable. The initial value of research activity is reflected in the community partner’s experience with the institutional, policy, or social changes. Regional, national, and even international dissemination is important for advancing the science of CBPR and health equity, but is not the initial measure of success.

Accomplishments of a CBP researcher do not lend themselves to clear reporting within a traditional promotion and tenure framework. Documentation guidelines do not ask the candidate to report the years that a partnership has been active, only the years of funded research; they do not ask for a description of the invitations extended by other communities impressed with change in a community that partnered with the CBP researcher, only the number of peer-reviewed publications that emerged from the research; they do not solicit input from community leaders or health care professionals who worked with the candidate, but invite evaluation from academic leaders who have no familiarity with the community’s experience.

The paucity of tenured CBP researchers in academic institutions creates a lack of senior leadership to advocate for administrative and policy change, suggest faculty development activities commensurate with successful CBPR, and serve as role models and appropriate mentors for junior CBPR faculty. Junior researchers are often advised by well-meaning, non-CBPR senior faculty to reserve their CBPR aspirations until they have received tenure. This advice is driven by the observation that CBPR does not produce peer-reviewed publications at the rate expected by most academic institutions and can negatively affect the tenure and promotion process [14].

CBP researchers are challenged to think strategically about ways to convey their accomplishments and simultaneously educate their non-CBPR peers about the nature of their research. This process is not required of traditional researchers and seems particularly arduous for junior faculty already engaged in research that is recognized as time-intensive [3, 5, 7].

But the tide is changing. Some research-intensive institutions have changed “business as usual” and supported new tenure and promotion standards for the review of community-engaged scholars [9, 14-18]. Several articles describe activities that CBPR-supportive institutions weigh as comparable to more traditional criteria and provide additional suggestions for review [15-18]. In this vein, documentation from communities and academic peers is weighed equally. After all, are not health professionals accountable to their constituents and partners as well as their academic peers?

Some institutions have established a two-track system that allows a different set of criteria to be used in the evaluation of CBP researchers [16]. Given the entrenchment of the traditional approach, will a new path defined by the undervalued process of community engagement truly be viewed as equivalent to the more traditional road? Will CBP researchers who proceed successfully through this second track be considered leaders worthy to assume positions such as regents’ professors, deans, provosts, and even university presidents in the later stages of their careers, or will they always be viewed as a less rigorously evaluated pool of faculty, i.e., “not real scientists”?

Progress is slow. Promising researchers are choosing not to remain on a tenure track and in some cases are leaving the academic system [19]. CBPR is coming of age. To stay on the edge of discovery and retain innovative researchers, academia must accept the challenge of dramatically revising the system of rewards involving all feeder and seminal processes, e.g., mentoring, promotion and tenure requirements, and composition of review committees. The individual, often junior, CBP researcher cannot effect these changes. As increasing numbers of universities offer CBPR courses and the impact of CBPR is recognized, the academic system of rewards needs to adapt to encourage an impassioned generation of scientists to make a difference.

## References

1. Kuhn T. *The Structure of Scientific Revolutions*. 1st ed. Chicago: University of Chicago Press; 1962: 23-24.
2. Office of Behavioral and Social Sciences Research, National Institutes of Health. Community based participatory research. [http://obssr.od.nih.gov/scientific\\_areas/methodology/community\\_based\\_participatory\\_research/index.aspx](http://obssr.od.nih.gov/scientific_areas/methodology/community_based_participatory_research/index.aspx). Accessed December 29, 2010.
3. Mercer S, Green L. Federal funding and support for participatory research in public health and health care. In: Minkler M, Wallerstein N, eds. *Community*

- Based Participatory Research for Health: Process to Outcomes*. 2nd ed. San Francisco, CA: Jossey-Bass; 2008: 399-406.
4. Robert Wood Johnson Foundation. Grants. <http://www.rwjf.org/grants/>. Accessed December 29, 2010.
  5. Minkler M, Blackwell AG, Thompson M, Tamir H. Community-based participatory research: implications for public health funding. *Am J Public Health*. 2003;93(8):1210-1213.
  6. Gebbie K, Rosenstock L, Hernandez LM; Institute of Medicine. *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century*. Washington, DC: National Academies Press; 2003.
  7. Calleson DC, Jordan C, Seifer SD. Community-engaged scholarship: Is faculty work in communities a true academic enterprise? *Acad Med*. 2005;80(4):317-321.
  8. Weiser CJ, Houglum L. Scholarship unbound for the 21st century. *J Extension*. 1998;36(4):1-5.
  9. Jordan C. Developing criteria for review of community-engaged scholars for promotion or tenure; 2006. Community-Engaged Scholarship for Health Collaborative, University of Washington. [http://depts.washington.edu/ccph/pdf\\_files/Developing%20Criteria%20for%20Review%20of%20CES.pdf](http://depts.washington.edu/ccph/pdf_files/Developing%20Criteria%20for%20Review%20of%20CES.pdf). Accessed December 29, 2010.
  10. The University of Arizona, College of Medicine. Guidelines for promotion and tenure; 2010. <http://www.medicine.arizona.edu/sites/medicine.arizona.edu/files/pdf/COM%20PT%20Guidelines.FINAL%20051410.pdf>. Accessed January 19, 2011.
  11. University of South Florida, College of Medicine. Appointment, promotion and tenure guidelines 2009. <http://health.usf.edu/facultyaffairs/COMAPTGuidelines.htm>. Accessed January 19, 2011.
  12. Thomson Reuters, Healthcare and Science Division. Journal Citation Reports. [http://thomsonreuters.com/products\\_services/science/science\\_products/a-z/journal\\_citation\\_reports/](http://thomsonreuters.com/products_services/science/science_products/a-z/journal_citation_reports/). Accessed December 30, 2010.
  13. The University of Arizona, College of Medicine. Promotion and tenure for dummies. 2003. [http://www.diversity.medicine.arizona.edu/sites/diversity.medicine.arizona.edu/documents/promo\\_tenure.pdf](http://www.diversity.medicine.arizona.edu/sites/diversity.medicine.arizona.edu/documents/promo_tenure.pdf). Accessed January 19, 2011.
  14. Ahmed SA, Beck B, Maurana CA, Newton G. Overcoming barriers to effective community-based participatory research in US medical schools. *Educ Health (Abingdon)*. 2004;17(2):141-151.
  15. Nyden P. Academic incentives for faculty participation in community-based participatory research. *J Gen Inter Med*. 2003;18(7):576-585.
  16. Mikkelsen M, Gelmon SB, Seifer SD, Kauper-Brown J; Community-Engaged Scholarship for Health Collaborative: Review, Tenure and Promotion Analysis Protocol. Community-Engaged Scholarship for Health Collaborative review, promotion and tenure analysis protocol; 2005. Community-Engaged Scholarship for Health Collaborative, University of Washington.

[http://depts.washington.edu/ccph/pdf\\_files/RPT%20Analysis%20Protocol.pdf](http://depts.washington.edu/ccph/pdf_files/RPT%20Analysis%20Protocol.pdf). Accessed January 19, 2011.

17. Bilodeau R, Gilmore J, Jones L, et al. Putting the “community” into community-based participatory research: a commentary. *Am J Prev Med*. 2009;37(6 Suppl 1):S192-S194.
18. Wallerstein N, Duran B. Community-based participatory research contributions to intervention research: the intersection of science and practice to improve health equity. *Am J Public Health*. 2010;100 Suppl 1:S40-S46.
19. Hikel S. Leaving Academia. <http://www.leavingacademia.com>. Accessed January 5, 2011.

Nicolette I. Teufel-Shone, PhD, is an associate professor of public health at the Mel and Enid Zuckerman College of Public Health at the University of Arizona in Tucson. She is a community-based participatory researcher who works primarily with American Indian communities. She and her tribal colleagues were recently recognized with the John Pipe Voices for Change Award, an honor bestowed by the American Diabetes Association.

#### **Related in VM**

[The Physician-Researcher’s Dilemma](#), March 2010

*The viewpoints expressed on this site are those of the authors and do not necessarily reflect the views and policies of the AMA.*

Copyright 2011 American Medical Association. All rights reserved.