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Lessons Learned from Three Models that Use Small Grants for Building Academic-Community Partnerships for Research

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Abstract

Despite the direct contribution of community-engaged research towards effective translation, establishing strong and sustained community academic research partnerships remains a challenge. The Atlanta Clinical and Translational Science Institute's Community Engagement Research Program (CERP) has developed and implemented three models for using small grants to seed new community academic partnerships for research: 1) community-initiated health projects with faculty partners, 2) dissemination of discoveries to community partners, and 3) building collaborative research capacity. In this paper, we describe each model in terms of its purpose, funding level, funding period, proposal requirements, selection criteria and faculty involvement. Resulting partnerships are described, along with benefits and challenges from faculty and community perspectives, and lessons learned in using these mechanisms to promote community-engaged research. These models may aid others attempting to promote community-engaged research for the purpose of narrowing the gap between research, practice and ultimately, impact on community health.

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Keywords

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To achieve significant impact on population health, basic and clinical science discoveries must be translated to community practice.[1–5] Community-engaged research attempts to accelerate this translation by actively integrating community perspectives into the research process.[6–8] With an emphasis on power sharing and action, community-engaged research has the potential to overcome issues of cultural insensitivity, mistrust, low external validity, and limited partner investments in sustainability.[9,10] Improved cultural sensitivity can enhance reliability and validity of data collection tools and methods, as well as intervention strategies.[11] By building community trust and ownership, community-engaged research increases the likelihood that research findings will be acted upon and sustained.[12,13] Community-engaged research, when characterized by meaningful community involvement, can also lead to a deeper and more nuanced understanding of health problems, and therefore solutions, due to lay knowledge and a better fit of research activities into local context.[11,13] Each of these benefits can contribute directly to improved translation of research into community practice, and is especially important in efforts to achieve health equity in poor and underserved communities.

The term “community-engaged research” covers a number of related approaches, including community-based participatory research (CBPR) and participatory action research.[14–17] Community-engaged research can be viewed as a continuum.[18,19] At one end, the community is primarily a setting for research; community-based organizations (CBOs) serve as recruitment sites and residents are limited to the role of study participant. The middle of the continuum is characterized by active community input, often through a community advisory board, but sharing of power is modest. CBPR is at the other end of the continuum and is discussed most commonly in the literature. It calls for the community to be a full partner in every phase of the research: identifying the research topic and research question, planning and executing the project, interpreting and disseminating the results.[20–24]

Given the potential importance of community-engaged research in closing the translation gap, interest in creating academic-community research partnerships is currently strong. Until recently, most of the literature describes specific academic-community partnerships rather than focusing on the underlying model for building such partnerships. A small, but growing, literature exists on models for building academic-community partnerships and collaborative research capacity in both academic and community partners.[9,10,25–27] One approach to encouraging community engagement in research is the awarding of small grants directly to community-based organizations. Several variations on this general approach have recently appeared in the literature.[28–30] For example, Thompson and colleagues used a community grants programs that directly funded CBOs to plan, implement, and evaluate cancer prevention programs.[28] The funded sites received training tailored to their projects. Over three years, ten funded projects created academic-community partnerships and increased capacity to conduct future research in cancer prevention and control among disparate

populations. Tendulkar et al. used a similar model to fund CBOs through seed grants with a focus on initiating partnerships between an academic program and local communities.[29] Academic partners provided technical assistance, research capacity-building trainings that covered Institutional Review Boards (IRBs) and research ethics among other topics, and consultation to CBOs. Community-based organizations offered a view of research from the community perspective and access to participants.

The purpose of this paper is to describe our experiences with three models for using small grants to stimulate academic-community partnerships and to strengthen translational research. For each model, we will describe its purpose, typical grantee activities, faculty partner roles, benefits from both faculty and community perspectives, and areas for improvement as identified in our process evaluation. The first model is to fund CBOs to conduct projects that address a community-identified health need and require a faculty partner. The second model is to fund CBOs to disseminate a scientific discovery in collaboration with the faculty member who conducted the original research. The third model is to build capacity for collaborative research among community-based organizations and faculty through engagement in a structured process of training, planning and conducting a pilot study, and submitting a research-oriented grant proposal. Each of these models involves awarding a small grant to a CBO, selected through a competitive request for applications.

Methods

Description of ACTSI-CERP

The NIH-funded Clinical and Translational Science Award (CTSA) program was launched in 2006 and has expanded to over 50 academic medical institutions across the country. The CTSA program includes a community engagement component, thus recognizing the important role it plays in translational research that leads to population health.[31] ACTSI is an inter-institutional collaboration between Emory University and two of its close academic partners in metropolitan Atlanta–Morehouse School of Medicine and Georgia Institute of Technology.

ACTSI's Community Engagement Research Program (CERP) aims to support community-university research partnerships, to facilitate community input into university research, and to increase health research in community settings that is both responsive and relevant to the health needs of the community. CERP builds on two Prevention Research Centers (PRCs) at Emory University and Morehouse School of Medicine, both of which have a strong track record in developing community-based research initiatives that are responsive to the needs and priorities of the communities served by each center. The two PRCs provide strong models of academic-community partnerships through which academic scientists, in collaboration with community members, are able to conduct community-engaged research, build community capacity, and train students and junior investigators in community-engaged research approaches. CERP unites academic-community research partnerships at the three institutions, develops new bi-directional collaborations, and interfaces with other ACTSI functions. The ACTSI-CERP is guided by a Steering Board with a majority of its members from the community, as opposed to academic institutions. Community members are

recruited from a variety of CBOs that are actively engaged in academic-community partnerships.

Description of three small grants programs

Boxes 1–3 present the purpose of each model, funding level, funding period, proposal elements, selection criteria, and expectations for faculty involvement.

Community-Identified Health Promotion Project (Model 1)—Our first model is described in Box 1. Briefly, in this model, CBOs were funded ($4,000 per grant) to conduct a project that addressed a community-identified health need. The proposal completed by applicants in response to the Request for Applications (RFA) had five major sections common to many community health programs: project and community description, experience and capacity, strategies and activities, evaluation, and budget. In the first round of this initiative, applicants were asked to describe their partnership with an academic organization or a faculty member for planning, implementation, or evaluation of a health-related project. We strengthened this requirement in the second round of funding by requiring a letter of commitment from a faculty member affiliated with one of the ACTSI universities. Technical Assistance (TA) from CERP was limited and focused largely on administrative issues (e.g., invoicing, reporting). Over a two year period, eight CBOs were funded through this program.

Discovery to Community Grants Program (Model 2)—The second model is outlined in Box 2. This model differs markedly from the first model on two dimensions. First, the focus of the mini-grant originates in the university rather than the community. Second, the emphasis is on dissemination of research findings by the CBO to their community members or constituents rather than CBO implementation of health promotion projects. This initiative involves a “call for discoveries” among researchers at the partner universities. Researchers submit brief abstracts on the research findings they believe are ready for dissemination to the community. The CERP Steering Board then reviews the list of discoveries and decides which are most appropriate to include in the initiative, considering likely community relevance and feasibility of dissemination with modest resources. The final list of “discoveries” is then included in an RFA that invites CBO's to apply for funds to disseminate one of the discoveries in collaboration with the researcher who conducted the research. Dissemination activities range from workshops to educational materials to media spots. Thus, the funding goes to CBOs as in the first model ($4,000), but the focus of the initiative is to translate research findings into practice or at least disseminate findings to the community. In addition to administrative issues, TA focused on clarifying that the funding was for dissemination of research results and not for new health projects. Over a two-year period, seven grantees were funded through this program.

Building Capacity for Collaborative Research (Model 3)—This model is described in Box 3. It differs from the first two models in that it provides a more structured process for building collaborative relationships, provides resources for designing and conducting a pilot project to provide data for a grant proposal, and sets the expectation for submission of a research grant proposal.[32] Originally funded through the American Reinvestment and

Recovery Act, funding was at a higher level than for our other small grants program at $30,000 per grantee. During the first few months of the initiative, CBOs attended CERP-sponsored trainings on community assessment, program planning, evaluation and grant writing. The purpose of these four trainings was to provide skills and language to the CBOs to "level the playing field" in terms of a research partnership. Providing the funding to the CBO also helped to maintain equity in the relationship. CERP staff used an informal process to identify faculty partners, selecting faculty we were acquainted with and who had an active research agenda and/or a strong interest in the health topic identified by the CBO. The intent was to create new partnerships rather than strengthen existing partnerships. Three of the four recruited faculty did not have experience in CBPR. Faculty and CBO representatives were introduced to each other at the last training session. On this same day, prior to meeting their CBO partners, faculty participated in a brief orientation on CBPR. The relationship was structured through a series of deliverables: IRB approval, description of pilot study findings, and preparation of a research grant proposal. Although not in the original plan, due to availability of funds, CERP was able to cover a small percentage of faculty salary (5% for six months) or offer graduate research assistant support to the partnerships. TA involved monthly check-ins on progress toward meeting deliverables and technical support in specific research methods. Four CBOs were funded through this initiative; a scaled down version is currently underway.

Evaluation methods

Model 1 and Model 2—Evaluation of mini-grants (N=15) awarded through The Community-Identified Health Promotion Projects (Model 1) and The Discovery to Community Grants Program (Model 2) were assessed through qualitative methods, including document review and interviews. First, each CBO was required to submit a final report through which they documented 1) outcomes or outputs associated with their originally proposed objectives, 2) modifications to their plans, as well as challenges, 3) ways in which their faculty partner supported their plans, 4) the short-term community impact of their program, 5) plans for sustainability of their projects, and 6) recommendations for improving the mini-grant program. In order to identify trends across grantees, content analysis was conducted by the CERP evaluation team to identify emerging themes for each response category. Key informant interviews were conducted with the majority (11 of 15) of faculty partners to identify experiences, perceptions, and recommendations for the grant program. Interviews were conducted by telephone within two months following completion of the grants using a standardized discussion guide. Interviews averaged about 45 minutes, were audio recorded and transcribed verbatim. Each transcript was coded manually by at least two analysts. Discrepancies in coding were resolved through consensus. Analysts met to review and consolidate findings toward thematic analysis, with saturation achieved across key themes.

Model 3—Due to the increased intensity and duration of the Building Capacity for Collaborative Research Program (Model 3), evaluation approaches were augmented. A pre-, post-, and follow-up survey was developed to assess the impact of the training and TA on the CBO representatives' knowledge, skills, and abilities to plan, implement, and evaluate initiatives addressing health disparities. Questions were also asked about the expected

drawbacks and facilitators that may occur during the community-researcher partnership at baseline and, subsequently, what barriers and facilitators were actually experienced at the end of the project. Academic partners were also surveyed about the expected and experienced barriers and facilitators of community-campus partnerships. In addition, we conducted a review of TA documentation to create timelines for each group's progress, including barriers and facilitators, in fulfilling grant deliverables. Lastly, key informant interviews were conducted with five academic partners and three CBO representatives to identify experiences, perceptions, and recommendations related to this model for facilitating CBO-researcher partnerships. Interviews were conducted using a standardized guide. Analysis was similar to the qualitative analysis described above. Survey data are not reported here and were limited by small sample size. Evaluation for the scaled-down version of this grants program mirrored methods in Models 1 and 2. Evaluation study protocols were reviewed and approved by the Morehouse School of Medicine's Institutional Review Board.

Results

Model 1: Community Identified Health Promotion Projects

Box 4 describes the partnerships funded through Model 1 which focused on community-identified health needs. Over a two-year period, eight grants were awarded through this mechanism.

Activities—Grantee activities fell into five general categories: (1) training on a range of topics, including HIV testing and counseling; (2) African American youth mental health awareness; (3) physical fitness; (4) asthma awareness; (5) clinical and developmental services for parents and children affected by Down Syndrome, and related community outreach, communication, and education. Examples of specific activities included training preventive medicine residents to conduct smoking cessation classes, testing and counseling African American women on HIV, sponsoring conferences for families with a Down Syndrome child, and programming for an online television show focused on HIV prevention, testing and treatment. Selected outputs are listed in Box 4.

Faculty roles—The most common faculty roles were to provide input on program design and implementation, to provide guidance on evaluation issues, such as the development of project goals and outcomes, and to make key connections to university resources such as speakers for events, graduate research assistants, and medical residents. Assistance with data analysis and speaking at conferences were also mentioned. Faculty most commonly described their role as TA providers.

Benefits of the model—CBO representatives discussed how the grant increased the visibility of their agency, helped them expand their program to new populations, and created new partnerships for the organization. Other benefits from the CBO perspective included a new pool of individuals to help with program implementation, concrete suggestions for program improvement from faculty, and an emerging consensus around the importance of a particular health issue (e.g., mental health for African American men). From the faculty member perspective, benefits derived from satisfaction in working with a CBO and were

described as personal and relationship-oriented, more than professional or academic-oriented.

Suggestions for improvement—When CBOs were asked for suggestions on how to improve the program several recommendations were given. Grantees mentioned increased funding to allow for larger and more comprehensive projects, which would better position them for competitive funding at project conclusion (Model 1 and 2). The opportunity for multi-year funding was also requested for longer project implementation periods, particularly because of unanticipated university delays in executing contracts which shortened already brief implementation periods to four-to-eight months. Additional suggestions included provision of project funds upfront to reduce interruptions in implementation due to institutional delays in issuing funds. CBOs also requested a compilation of available university resources such as faculty and student groups interested in working with community groups. CBOs were very interested in the range of ways they could partner with universities and desired information on how to make initial contacts with service-learning classes, potential thesis projects, and faculty interested in community-engaged research.

Faculty also provided suggestions on how to improve the program. Themes included more structured group meetings across all grantees and mentors to share experiences regarding the partnerships developed or extended through CERP. While faculty were supportive of CBOs as awardees, they suggested building in incentives for faculty such as visible faculty recognition. Suggestions included recognition on the ACTSI website or awards at ACTSI-CERP events. When asked how CERP could improve faculty recruitment, financial support for faculty time was the prominent theme. Other suggestions were to align grant requirements with priority research areas at their academic institutions and being clear about the time commitment required of faculty in order for partnerships to be successful. A central theme discussed was ensuring that the CERP model and grant requirements were aligned with institutional currency connected to faculty tenure and promotion, including publishable data or relationships key to future grant proposals. As with CBOs, extended time for projects was recommended but, for faculty, this would allow for more time to develop joint publications and presentations to academic and community audiences.

Model 2: Discovery to Community

Box 5 lists partnerships funded through the second model which focuses on dissemination of research discoveries to relevant communities. Seven of these grants were awarded over a two year period.

Activities—ACTSI-CERP staff met with each team early in the project to explain the purpose and expectations associated with the grant. The discoveries selected for dissemination focused on Alzheimer's Disease, Parkinson's Disease, colorectal cancer, the significance of community health worker engagement in community-based health promotion, cigar smoking cessation, and educating formerly incarcerated women regarding responsible health care and nutritional habits, among other general health topics.

Dissemination activities included dramatic presentations, a slide set for presentations, podcasts, a community forum, and an outreach event.

Faculty role—Faculty were involved in developing content for dissemination activities. Most faculty described their role as partner, citing frequent and on-going engagement with their assigned CBO. However, given the new focus of the grant program on dissemination, rather than health or research project planning and implementation, some faculty felt that they also served as TA provider and even trainer, as they navigated this new model with their CBO partner.

Benefits of the model—Representatives of CBOs felt that dissemination of valuable information to people who could benefit from it was useful and that the formation of connections with new sectors such as businesses and health care providers was also beneficial. The main benefit for faculty was to reach a new target population. In one case this involved a new and hard-to-reach segment of the Atlanta community, for another it facilitated dissemination of their work beyond scientific journals.

Suggestions for improvement—Although the purpose of the funding in Model 2 differed from that in Model 1, the suggestions for improvement of the grants program were very similar. Suggestions for improvement centered on grants administration, funding levels, and the very short timeframe for implementation of activities. CBOs suggested some funds upfront, increased levels of funding, and a longer timeframe for the project. By the time the contracts were in place, the funding period was only four months long.

Faculty suggestions for improving the experience focused on communication and time. One faculty partner talked about how regular communication from the beginning would have helped clarify expectations about how the funding could be used and the purpose of the grant. Another spoke about how more time would have been helpful. Along these same lines, faculty suggested CERP should be more proactive in communication about the time commitment required from faculty. Specific challenges included confusion over what could be changed or not from the original research (e.g., how significantly could interventions be adapted and/or much could the CBO broaden the message beyond a specific research finding), and a long delay in receiving the first check. Also associated with communication were faculty requests for increased communication from CERP staff, at the onset of the facilitated partnership, to clarify the intent of the funding mechanism. As a new grant model focusing on dissemination, rather than development of a health project, some found it difficult to navigate this shift in real time, with some CBOs still expecting faculty to help them develop a health project. Faculty recommended setting realistic expectations for new faculty partners in terms of the time required for the projects to be successful. They suggested that faculty partners experienced with this model could share their lessons learned with the newly involved faculty. They also recommended highlighting the success of past partnerships, with a particular emphasis on how the program was leveraged to garner additional funds.

Model 3: Collaborative Research Capacity Grants

Box 6 details partnerships funded through the third model which represented a more structured process for building capacity toward a collaboration for research. Specific deliverables included conducting a pilot study and submitting a grant proposal.[32] Four partnerships were formed through the initial round of this grants program.

Activities—These four grantees successfully completed three pilot projects including a survey of the Vietnamese community on Hepatitis B vaccine, focus groups with masculine-identifying African American lesbians on breast cancer screening, a survey of cancer-related clinical trial participants on informed consent issues. The fourth grantee completed a number of interviews with HIV positive African American men who stopped seeking services and were identified as under-served. Two of these partnerships resulted in NIH grant proposals and manuscripts on the pilot study results are in progress.

Faculty roles—Faculty were actively involved in designing the research and navigating the IRB process, and gave input on data collection. In the more successful partnerships, faculty were also actively involved in data collection. Key informant interviews demonstrated that academic researchers brought concrete research skills to the partnership. One faculty member described her role as fourfold: partner in helping the CBO determine its research objectives, TA provider in helping it to develop measures, grant writer through support to write at least one additional grant, and research lead in the IRB process and data analysis. Some academic partners gained research insights into how to tailor data collection to reach new populations and others gained new research skills (e.g., cognitive interviewing).

Suggestions for improvement—From the CBO perspective, the major theme for how to improve the model was to build in more practical application of the training materials. All of those interviewed felt that the training was good, but that it would have been more helpful if it had been directly relevant to their pilot projects. Other suggestions made by just one respondent included: a more thoughtful faculty-CBO matching process, more information on funding opportunities, and requiring that priority research questions be identified prior to the training series.

Faculty made several recommendations for improvement. First, less supervision by CERP staff was requested to allow for partnerships to set their own pace or request targeted TA as needed rather than to fit each of the partnerships into a structured relationship with TA providers. Other suggestions included more financial support for faculty given the time required to develop new relationship and design and implement a community-based project. While most faculty had previous relationships with CBOs, most were also first-time partners with the CBO funded by CERP and needed time to develop trusting relationships. Faculty also recommended that CERP connect them with their partner CBOs earlier in the process. The current model facilitated the partners meeting after the CBOs had undergone a series of training workshops to build research capacity. Other suggestions included improved communication between CERP staff and faculty, increased formal communication mechanisms between faculty and CBOs, and the need to more carefully screen out CBOs not truly interested in research partnerships. Similar to faculty recommendations for Models 1

and 2, adding an expectation that a publication result from the pilot studies was important to encourage future faculty participation.

Discussion

Given the importance of community engagement in the translational research process, the sharing of models for how best to do so is valuable. The current paper describes three models for using small grants to initiate community academic research partnerships. Each of these models puts the CBO in control of the funding, with the role of the faculty member varying by model. In the community-initiated health project model (Model 1), faculty members generally served as consultants. In the discovery to community model (Model 2), faculty shared their research findings with an interested CBO, gave guidance on content to be delivered through dissemination strategies conducted by the CBO with CBOs identifying the best modes of dissemination to their community members or constituents. In the third model (Model 3), faculty and CBOs partnered on research projects of mutual interest using a CBPR approach.

From the community perspective, all three models were valuable, in terms of much appreciated financial assistance and more intangible benefits including increased visibility and opportunities for new programming and expanded reach. The opportunity to collaborate with academic partners on projects that expanded programs and services was valued (Model 1), as was information on research discoveries of direct relevance to community members (Model 2). Communities were cognizant of the common pattern of faculty collecting data from them and never returning to share what they learned.[13,19] Given this history, the discovery to communities grants program (Model 2), despite being researcher-driven in terms of the research questions, was well-received by grantees. CBOs appreciated learning about relevant research findings from local universities, a view facilitated by our attempt to match the research results to be disseminated with CBO-prioritized health issues. Additional benefits of the grants programs from a community perspective were the building of trust between CBOs and academic partners and increased understanding of the research process.

The models developed by ACTSI-CERP have similarities with other small grants programs initiated by universities to build community academic partnerships.[28–30] Thompson and colleagues implemented a competitive grants program to engage communities in cancer prevention research.[28] This initiative was similar to ours in that grants were $2,500-$3,500, ideas were developed by local CBOs, and outcomes included unique programs for hard-to-reach communities. Challenges arose from lack of familiarity with IRB among CBOs and significant time spent by faculty to develop protocols that were sufficiently detailed to gain IRB approval, as well as different expectations for evaluating projects. From a faculty perspective, projects were generally too small or not sufficiently rigorous to be published. Although not stated explicitly, faculty in our projects, particularly those engaged in Model 1, described benefits in terms of personal relationships rather than academic outputs, thus suggesting similar views. The Thompson et al. project differed from ours in that the researchers initiating the grants program were also the research partners. In the ACTSI-CERP projects, we were trying to “seed” new relationships between non-CERP faculty with

less experience in community-engaged research and CBOs, thus building research capacity among both faculty and CBOs.

Harvard's CTSA initiated a small grants program designed to stimulate community academic partnerships for research.[29] Grants were similar in size to ours ($2,000 to $8,000), with relatively short time frames (4 to 8 months). The purpose was to build capacity for CBPR to better position CBOs for larger translational research projects. Similar to our intent, Tendulkar et al. directed funds to CBOs to address the unequal power dynamics.[29] Challenges included the need for a longer timeframe, difficulty in engaging academic partners due to insufficient resources to cover faculty time, difficulty aligning faculty expertise and research agendas with community priorities (i.e., community academic matching), and lack of faculty with CBPR expertise. We identified these same challenges in our grants program.

The lessons to be learned from each of our models, plus those implemented elsewhere, are similar.[28–30] The first relates to finances: only modest results can be expected from very small grants. A “mini-grant” may help build a partnership between an academic institution and a CBO (and this is certainly important), but the funded project may not produce other outcomes (e.g., manuscripts, grant proposals, salary coverage) typically valued by academics. It is notable that it was only when we were able to offer larger grants ($30,000) that the project led to manuscripts, grant proposals, and demonstrable increases in community capacity. Because our small grants provided little (Model 3 covered 5% faculty time for six months and/or a graduate research assistant) or no (Models 1–2) funding for faculty partners, those who engaged with CBOs through these models were likely a highly motivated cohort of investigators interested in community-engaged research and who understood the benefits of translational research. Their recommendations for increased incentives for faculty to engage in this form of research are worth highlighting as a second lesson learned. In brief, they recommended institutional recognition throughout the ACTSI network, a forum through which results could be formally presented (CERP did this once), and requiring manuscript generation as a product of the partnership. Some also noted the need for a broader structural shift towards their institutions rewarding community-academic research partnerships through an expanded faculty reward system (e.g., in promotion and tenure guidelines).

Expanding faculty involvement in these grants programs to include those who are completely new to community engagement would require a broadened training program. Grant makers at the academic institution, in our case ACTSI-CERP, typically focus on training community representatives about basic research methods. However, training academics on CBPR and/or mentoring them on this model may be useful. Too much mentoring, however, can be perceived as interference in the relationships as was noted in our implementation of Model 3. Our third lesson learned is to be more attentive to the faculty side of the partnership.

Our fourth lesson learned stems from administrative roadblocks which generally arose on the academic side of the partnerships. One of these was the inability of universities to process contracts or issue checks on a timely basis. Large institutions such as academic

health centers, once promised a grant, can carry on while awaiting the arrival of the funds. This is often not true of small CBOs. Moreover, the complaint from both the CBOs and the faculty about short timelines often stemmed from delays in getting funds to the CBOs; by the time this had been accomplished, only a few months remained in which to conduct the project. Obtaining IRB approval, particularly for Model 3, created additional administrative hurdles in terms of the time it took to develop detailed protocols, training key CBO staff in human subjects protection, and the need for CBOs to obtain federal-wide assurance.

An additional challenge in using competitive grants from the community perspective, is the tendency to typically fund higher capacity organizations. Review criteria tend to favor CBOs with higher levels of capacity. From a university perspective, this is appealing since investing time and resources in a small, fragile CBO that may not survive is risky. Indeed this happened with one of the grantees funded through Model 3. From a CBO perspective, however, selecting smaller CBOs can help to build their capacity and increase their chances for sustainability.

Conclusion

Overall, our experience suggests that using small grants to stimulate academic community partnerships for research is promising, but challenging. Specific recommendations include longer funding periods, larger grants, clear communication of expectations, including the necessity of IRB approval and associated delays, and tangible support and recognition for faculty partners. With more attention to administrative roadblocks and faculty incentives, and additional mentoring from experienced CBPR researchers, this approach can make an important contribution to our efforts to bridge the gap between research and practice, and ultimately increase the likelihood and speed with which our research makes a difference in underserved communities.

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References

1. Wells KB, Staunton A, Norris KC, et al. Building an academic-community partnered network for clinical services research: the Community Health Improvement Collaborative (CHIC). Ethn Dis. 2006 Winter;16(1 Suppl 1):S3–17.
2. Hacker K, Bhuiya N, Pernice J, et al. Assessing research interest and capacity in community health centers. Clin Transl Sci. 2013 Oct; 6(5):391–7. Epub 2013 Apr 19. http://dx.doi.org/10.1111/cts.12046. [PubMed: 24127928]
3. Yarborough M, Edwards K, Espinoza P, et al. Relationships hold the key to trustworthy and productive translational science: recommendations for expanding community engagement in biomedical research. Clin Transl Sci. 2013 Aug; 6(4):310–3. Epub 2013 Jan 14. http://dx.doi.org/10.1111/cts.12022. [PubMed: 23919367]
4. Westfall JM, Ingram B, Navarro D, et al. Engaging communities in education and research: PBRNs, AHEC, and CTSA. Clin Transl Sci. 2012 Jun; 5(3):250–8. http://dx.doi.org/10.1111/j.1752-8062.2011.00389.x. [PubMed: 22686202]

5. Miller AL, Krusky AM, Franzen S, et al. Partnering to translate evidence-based programs to community settings: bridging the gap between research and practice. Health Promot Pract. 2012 Jul; 13(4):559–66. Epub 2012 Jun 8. http://dx.doi.org/10.1177/1524839912438749. [PubMed: 22684264]
6. Michener L, Cook J, Ahmed SM, et al. Aligning the goals of community-engaged research: why and how academic health centers can successfully engage with communities to improve health. Acad Med. 2012 Mar; 87(3):285–91. http://dx.doi.org/10.1097/ACM.0b013e3182441680. [PubMed: 22373619]
7. Hood NE, Brewer T, Jackson R, et al. Survey of community engagement in NIH-funded research. Clin Transl Sci. 2010 Feb; 3(1):19–22. http://dx.doi.org/10.1111/j.1752-8062.2010.00179.x. [PubMed: 20443949]
8. Dankwa-Mullan I, Rhee KB, Stof DM, et al. Moving toward paradigm-shifing research in health disparities through translational, transformational, and transdisciplinary approaches. Am J Public Health. 2010 Apr 1; 100(1):S19–24. Epub 2010 Feb 10. http://dx.doi.org/10.2105/AJPH.2009.189167. [PubMed: 20147662]
9. Allen ML, Culhane-Pera KA, Pergament S, et al. A capacity building program to promote CBPR partnerships between academic researchers and community members. Clin Transl Sci. 2011 Dec; 4(6):428–33. Epub 2011 Nov 22.http://dx.doi.org/10.1111/j.1752-8062.2011.00362.x. [PubMed: 22212224]
10. Allen ML, Culhane-Pera KA, Pergament SL, et al. Facilitating research faculty participation in CBPR: development of a model based on key informant interviews. Clin Transl Sci. 2010 Oct; 3(5):233–8. http://dx.doi.org/10.1111/j.1752-8062.2010.00231.x. [PubMed: 21500397]
11. Minkler M. Community-based research partnerships: challenges and opportunities. J Urban Health. 2005 Jun; 82(2Suppl 2):ii3–12. Epub 2005 May 11. http://dx.doi.org/10.1093/jurban/jti034. [PubMed: 15888635]
12. Jagosh J, Macaulay AC, Pluye P, et al. Uncovering the benefits of participatory research: implications of a realist review for health research and practice. Milbank Q. 2012 Jun; 90(2):311–46. http://dx.doi.org/10.1111/j.1468-0009.2012.00665.x. [PubMed: 22709390]
13. Cargo M, Mercer SL. The value and challenges of participatory research: strengthening its practice. Ann Rev Public Health. 2008; 29:325–50. http://dx.doi.org/10.1146/annurev.publhealth.29.091307.08382414. [PubMed: 18173388]
14. Viswanathan M, Ammerman A, Eng E, et al. Community-based participatory research:assessing the evidence. Evid Rep Technol Assess (Summ). 2004 Aug.(99):1–8.
15. Wells K, Jones L. “Research” in community-partnered, participatory research. JAMA. 2009 Jul 15; 302(3):320–1. http://dx.doi.org/10.1001/jama.2009.1033. [PubMed: 19602693]
16. Baum F, MacDougall C, Smith D. Participatory action research. J Epidemiol Community Health. 2006 Oct; 60(10):854–7. http://dx.doi.org/10.1136/jech.2004.028662. [PubMed: 16973531]
17. Senge, P., Scharmer, O. Community action research. In: Reason, P., Bradbury-Huang, H., editors. Handbook of action research. Thousand Oaks, CA: Sage Publications, Inc; 2001. p. 238-50.
18. Glanz, K., Kegler, MC., Rimer, BK. Ethical issues in the design and conduct of community-based intervention studies. In: Coughlin, SS.Beachamp, TL., Weed, DL., editors. Ethics in epidemiology. New York: Oxford University Press; 2009. http://dx.doi.org/10.1093/acprof:oso/9780195322934.003.0006
19. Brenner BL, Manice MP. Community engagement in children's environmental health research. Mt Sinai J Med. 2011 Jan-Feb;78(1):85–97. http://dx.doi.org/10.1002/msj.20231. [PubMed: 21259265]
20. Minkler, M., Wallerstein, N. Community-based participatory research for health: from process to outcome. San Francisco, CA: Jossey-Bass, Inc; 2008.
21. O'Fallon LR, Dearry A. Community-based participatory research as a tool to advance environmental health sciences. Environ Health Perspect. 2002 Apr; 110(2):155–9. http://dx.doi.org/10.1289/ehp.02110s2155. [PubMed: 11929724]
22. Hatch J, Moss N, Saran A, et al. Community research: partnership in black communities. Am J Prev Med. 1993 Nov-Dec;9(6 Suppl):27–31. discussion 32-24.

23. Blumenthal DS. Is community-based participatory research possible? Am J Prev Med. 2011 Mar; 40(3):386–9. http://dx.doi.org/10.1016/j.amepre.2010.11.011. [PubMed: 21335275]
24. Israel BA, Coombe CM, Cheezum RR, et al. Community-based participatory research: a capacity-building approach for policy advocacy aimed at eliminating health disparities. Am J Public Health. 2010 Nov; 100(11):2094–102. Epub 2010 Sep 23. http://dx.doi.org/10.2105/AJPH.2009.170506. [PubMed: 20864728]
25. Dobransky-Fasiska D, Brown C, Pincus HA, et al. Developing a community-academic partnership to improve recognition and treatment of depression in underserved African American and white elders. Am J Geriatr Psychiatry. 2009 Nov; 17(11):953–64. http://dx.doi.org/10.1097/JGP.0b013e31818f3a7e. [PubMed: 20104053]
26. Crosby LE, Parr W, Smith T, et al. The community leaders institute: an innovative program to train community leaders in health research. Acad Med. 2013 Mar; 88(3):335–42. http://dx.doi.org/10.1097/ACM.0b013e318280d8de. [PubMed: 23348087]
27. Andrews JO, Cox MJ, Newman SD, et al. Training partnership dyads for community-based participatory research: strategies and lessons learned from the Community-Engaged Scholars Program. Health Promot Pract. 2013 Jul; 14(4):524–33. Epub 2012 Oct 22. http://dx.doi.org/10.1177/1524839912461273. [PubMed: 23091303]
28. Thompson B, Ondelacy S, Godina R, et al. A small grants program to involve communities in research. J Community Health. 2010 Jun; 35(3):294–301. http://dx.doi.org/10.1007/s10900-010-9235-8. [PubMed: 20146091]
29. Tendulkar SA, Chu J, Opp J, et al. A funding initiative for community-based participatory research: lessons from the Harvard Catalyst Seed Grants. Prog Community Health Partnersh. 2011 Spring; 5(1):35–44. http://dx.doi.org/10.1353/cpr.2011.0005. [PubMed: 21441667]
30. Main DS, Felzien MC, Magid DJ, et al. A community translational research pilot grants program to facilitate community—academic partnerships: lessons from Colorado's clinical translational science awards. Prog Community Health Partnersh. 2012 Fall;6(3):381–7. http://dx.doi.org/10.1353/cpr.2012.0036. [PubMed: 22982851]
31. Institute of Medicine. Washington DC: National Academies Press; 2013. The CTSA program at NIH: opportunities for advancing clinical and translational research. Available at: http://iom.nationalacademies.org/Reports/2013/The-CTSA-Program-at-NIH-Opportunities-for-Advancing-Clinical-and-Translational-Research.aspx
32. Rodgers KC, Akintobi T, Thompson WW, et al. A model for strengthening collaborative research capacity: illustrations from the Atlanta Clinical Translational Science Institute. Health Educ Behav. 2014 Jun; 41(3):267–74. Epub 2013 Dec 5. http://dx.doi.org/10.1177/1090198113511815. [PubMed: 24311741]

Description of Model for Building Academic-Community Partnerships through Community-Initiated Health Projects

Component	Description
Purpose as Stated in RFA	To fund community organizations for small pilot projects, community health activities and other collaborative efforts that focus on addressing community health needs or disparities.
Funding	$4,000
Funding Period	Seven months
Proposal Elements	Project and Community Description
	Experience and Capacity
	Strategies and Activities
	Evaluation
	Budget and Justification
Selection Criteria	Extent to which the community-specific need warrants the proposed project
	Organizational history, leadership needed to conduct project. Community-academic partnership
	Rationale for proposed approaches and realistic timeline for completion Realistic objectives that are connected to strategies and activities with specific ways to measure progress towards achievement
Faculty Involvement	Negotiated between CBO and faculty member

Description of Model for Discovery to Community Small Grants Program

Component	Description
Purpose as Stated in RFA	To provide funding to CBOs to foster partnerships with researchers and disseminate research findings that are of interest and relevant to communities. Researchers from BLINDED partner institutions have identified recent scientific discoveries that may make a difference in the health of communities. CERP is making mini-grants available to CBOs to collaborate with researchers and implement activities to disseminate these findings.
Funding	$4,000
Funding Period	Four to eight months
Proposal Elements	Research Findings/Discoveries to Disseminate
	Relevance of the Findings
	Community Background
	Experience, Organizational Capacity and History
	Interest in Research
	Proposed Dissemination Activities
Faculty Involvement	Faculty submitted abstracts of their discoveries for possible inclusion in the RFA. If a funded CBO selected their discovery, they were responsible for ensuring the CBO understood the research finding and they provided guidance in dissemination strategies. Some faculty were actively involved in dissemination activities (e.g., speakers at events).
Process for Selecting Discoveries	CERP Steering Board selects discoveries that are most rele vant to the community and feasible for dissemination or implementation.

Description of Model for Building Collaborative Research Capacity

Component	Description
Purpose Stated in RFA	To build capacity and skills to conduct research in collaboration with academic researchers among CBOs interested in forming a research partnership with academic researchers affiliated with one of the BLINDED universities.
Funding	$30,000
Funding Period	Seventeen months
Proposal Elements	Background
	Experience and History
	Interest in Research
	Staff Capacity
	Job Creation/Retention
	Budget
Selection Criteria	Extent to which the community-specific need warrants the proposed project
	Organizational history, leadership needed to conduct project.
	Rationale for proposed approaches and realistic timeline for completion
	Realistic objectives that are connected to strategies and activities with specific ways to measure progress towards achievement
Faculty Involvement	Guidance on development and implementation of pilot project; Partner on writing grant proposal that builds on the pilot project.

Mini-Grants for Community-Identified Health Promotion Projects with Faculty Partners

Topic/Community	CBO Mission	Faculty Affiliation/Training	Project Description	Selected Outputs
Positive youth development/ Adolescent African American males	Promote healthy life outcomes and opportunities to restore the lives of hurting African American men by age 25 yrs.	Preventive Medicine/Psychology	Provide health promotion activities to high school males enrolled in southwest Atlanta.	Trained 20 youth to educate over 200 students through group sessions, seminars and one on one.
HIV/African American women	Serves individuals vulnerable to the HIV epidemic, conducts outreach efforts.	Preventive Medicine	HIV/AIDS prevention education program to include 35 African-American women 14-21 years of age.	Conducted 2 sessions with a total of 36 women between the ages of 16 -25 years to discuss use of condoms as protection against STDs.
Physical Activity/South Georgia youth	Program targeting obesity in children in Southwest Georgia.	Psychology/Public Health	Conduct fitness testing on all 6th grade students at a middle school.	Provided health examinations and fitness counseling to 75 6th grade students.
Asthma/Atlanta youth	Asthma coalition that addresses the growing disparity in health outcomes between black and white children.	Internal Medicine	Share information on the effects of smoking and environmental tobacco smoke on children and adults. Target audience Hispanic/Latino.	Conducted 2 weekend smoking cessation workshops with 21 persons in attendance.
Mental Health/Adolescent African American youth	Promote healthy life outcomes and opportunities to restore the lives of hurting African American men by age 25 yrs.	Preventive Medicine	Provide health promotion activities to high school males in southwest Atlanta.	Identified materials to discuss mental health with 30 male student health promoters during weekly sessions. Held a forum for an audience of 200 males.
Down Syndrome/Atlanta families affected by Down Syndrome	Ensure that individuals with Down syndrome have access to comprehensive medical services and interventional therapies to optimize their potential.	Pediatrics	Sponsor educational workshops on Down syndrome to families-design and distribute brochures.	Sponsored 4 educational workshops for families, professionals, and community programs that were designed to distribute up-to-date educational materials on Down syndrome. Co-sponsored 2 awareness activities in the Metro Atlanta area.
HIV/African Americans	Online television show to	Community Psychology	Facilitate a weekly HIV/AIDS workgroup.	Produced 10 weeks of programming for

Topic/Community	CBO Mission	Faculty Affiliation/Training	Project Description	Selected Outputs
	discuss HIV health related issues in African American Community			an online television show, focused on HIV prevention, testing and treatment, as well as wellness, awareness and recovery.
Physical Activity/Church members	Exercise program located in a church.	Preventive Medicine/Family Practice	Promote physical activity among members of the church to decrease obesity.	Recruited two walking club coordinators. Recruited 150 people to join walking clubs after church services and identify safe places to walk in their neighborhood or around workplace during the week. Planned a series of three monthly exercise classes, 20-25 participated in exercise classes.

Description of Discovery to Community Grants Program

Research Topic/Community	CBO Mission	Faculty Affiliation/Training	Project Description	Selected Outputs
Alzheimer's disease/Youth in metro Atlanta	Provide opportunities for youth and adults to serve in the community.	Clinical Research/Sociology	Engage students in giving presentations on latest research findings on Alzheimer's disease.	Conducted several awareness activities, including a radio interview, a prayer breakfast, an awareness program; distributed magnets. Over 600 attendees/ listeners.
Community Health Workers/ Formerly incarcerated women in Atlanta	Outreach ministry to formerly incarcerated women.	Preventive Medicine/Biochemistry-Molecular Biology	Identify 50 formerly incarcerated women and government and local community leaders to discuss transition and welcome women back to community.	Held a lunch event for 12 women to talk about individual empowerment and their transition back into the community.
Community Health Workers/ Metro Atlanta	Educate and train communities in workforce development and health & wellness.	Preventive Medicine/Biochemistry-Molecular Biology	Galvanize 50 faith health, government and local community leaders to participate in a lunch in increase knowledge of CHWs.	Held a lunch event attended by 40 representatives from public, private and community organizations to discuss the importance of CHWs.
Violence & PTSD/Prison returnees in southwest Georgia	Provide comprehensive pre and post release judicial and community restorative services to prison returnees as well as citizens.	Psychiatry/Neurophysics	Address high rates of community violence that result in significant levels of Post-Traumatic Stress Disorder and depression.	Formed a community task force to develop a local action plan for continued dissemination of the research information. Conducted two workshops with the researcher for the project presenting the findings as well as stakeholders leading the group in the development of post-conference action plans for ongoing dissemination (e.g., policy brief, website links, video of workshop).
Colorectal Cancer/Metro Atlanta	Fight health disparities in the community.	Preventive Medicine/Pediatrics	Conduct education program to increase colorectal screening.	Recruited 13 new members.
Cigar use/Metro Atlanta	Educate and train communities in Workforce development and Health & Wellness.	Preventive Medicine/Dentistry	Disseminate health risks associated with cigar use.	Conducted 6 sessions on cigar use. Surveyed 350 participants to identify a slogan for social media campaign

Research Topic/Community	CBO Mission	Faculty Affiliation/Training	Project Description	Selected Outputs
				on cigar risks at the Atlanta University Center.
Parkinson's Disease/Parkinson's Disease patients and caregivers	Share scientific knowledge about Parkinson's Disease (PD) with PD patients and their caregiver.	Environmental Health/Psychology	Share scientific knowledge about Parkinson's Disease (PD) with PD patients and their caregiver.	Developed and distributed 5 Podcasts on Parkinson's Disease.

Description of Partnerships in the Collaborative Research Capacity Grants Program

CBO Community	Academic Partner(s) Discipline	Shared Research Interest	Pilot Project	Selected Outputs
Lesbian community in Atlanta	Cancer epidemiology; health behavior	Cancer prevention in high-risk populations	Breast and cervical screening behavior and messaging in the LGBT population, particularly African American, masculine-identifying lesbians.	Pilot completed—2 focus groups with African American masculine identifying lesbians and 2 with African American feminine-identifying lesbians. Service grant received; R21 submitted; Presentation at scientific conference.
Vietnamese community in Atlanta	Health behavior	Vaccine uptake	Identifying motivational and prohibitive factors that shape Hepatitis B screening, vaccination, and treatment behaviors in the Vietnamese community.	Pilot project completed—581 surveys on Hepatitis B; Service grant received; R21 submitted; Paper submitted.
Cancer patients in southwest Georgia	Preventive medicine	Informed consent	Exploring cancer patients' level of understanding of informed consent for clinical cancer studies.	Pilot project completed—23 surveys of patients in clinical trials.
HIV+ individuals in Atlanta	Psychology/health behavior	Quality of life of persons with HIV	Investigating re-engagement of clients into services and exploring outreach efforts to those who refuse treatment or are unaware of HIV status.	Pilot project not completed. Some interviews were done before the CBO disbanded.