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## **Submitting for Dollars: Playing the Funding Game to Promote Transcultural Nursing**

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### **Abstract**

Research requires funding, and every researcher understands the crucial role that money plays in implementing a research study. Research in the nursing field is no different. In the current economic environment, funding sources have become limited and researchers need to be prepared to submit grant proposals which will give them a competitive edge over other grant proposals. This paper will describe the development of a grant proposal for National Institutes of Health funding and provide suggestions to novice researchers about how to write a proposal that has the potential to receive a fundable score. The team of early stage investigators in this study submitted a proposal which received a fundable score, but was not selected for funding. The proposal was revised and resubmitted, and received a highly competitive score that did result in funding. The lessons that the researchers learned from this process can be useful for other nurses seeking to secure funding for their research projects.

### **Keywords**

grant proposals, Guatemala, National Institutes of Health, research proposal, transcultural nursing

Transcultural nurses are encouraged to engage in research, yet they face the same funding challenges to support their research efforts as other specialties within the field of nursing. The recent downturn in the economy has limited the financial resources that are currently available. Submitting grant proposals for funding can feel like a game in which the players are unsure of the rules that will allow them to be successful in securing financial resources to implement a research study. According to the U.S. Department of Health and Human Services National Institutes of Health (NIH, 2013a), the success rate for research grants in 2011 was 19%, which is defined as the number of reviewed grant proposals that actually receive funding. The low percentage of funded grants demonstrates the highly competitive nature of the process to secure research funding. Many colleagues seem to view the process as being almost unattainable for a novice researcher with no history of procuring significant funding. Their comments commonly focus on the difficulty of getting an NIH grant, a lack of previous funding, and inexperience in writing external grant proposals. While these comments hold some credence, determination and hard work have proved other-

wise. The purpose of this article is to describe the development of a grant proposal to obtain NIH funding and to provide suggestions to novice researchers about how to write a proposal that has the potential to receive a fundable score. Exemplars will be provided using information from a grant recently funded by NIH.

### Researching the Topic – Understanding the Rules of the Game

Writing a grant proposal requires a researcher to understand the rules of the game. In other words, it is important for researchers to know the requirements for a grant proposal, and how a writer begins the process. A successful grant proposal begins with a clearly defined problem and the statistics to demonstrate the impact of the problem. The following exemplar demonstrates the connection between the identified problem and the supporting statistics from the text of a grant proposal that was recently funded:

*Infant and child mortality related to diarrheal disease is a significant health problem in many lesser-developed countries. Globally, an estimated 2.4 million deaths in children less than 5 years of age could be prevented annually with effective case management of diarrhea (Forsberg, Petzold, Tomson, & Allebeck, 2007). In Guatemala, 20% of the deaths that occur in children under 5 years old are a result of diarrhea (World Health Organization, 2008). In the Department of Sololá, eight cases of infant mortality were attributed to diarrhea in 2010 (SIGSA, 2010).*

It is important for the writer to present the impact of the problem in a manner that establishes how the research can affect change that will have an impact beyond just the selected community or aggregate. While this grant project will be implemented in a rural area of Guatemala, the successful implementation of the project will have implications for a diarrhe-

al management globally. Using statistics that demonstrate the problem from a global, regional, and local level provides clear evidence that the magnitude of the problem is significant. Reviewing the literature and locating the supporting statistics of the problem are crucial steps in the beginning stages of developing a grant proposal. In this example, the lead investigator spent approximately 40-50 hours conducting the initial review of literature.

A second crucial step in researching the problem is to identify other relevant researchers in the area of interest. It is important not to limit a search to within one's own institution. Searching the NIH RePORTER database (2013b) is highly beneficial in locating researchers that have received NIH funding for similar projects. The RePORTER is a searchable database that allows researchers to explore previously funded projects, identify who the primary investigator was, view the amounts of funding that was received, and determine the funding agency, among other things. In our case, we were able to identify several researchers who had received NIH funding for promotoras (community health workers) programs in the past. Because our proposal would use promotoras as a method for educating people in our community, it was essential for the researchers to collaborate and seek input from these individuals. After identifying two relevant researchers, the lead investigator contacted the first researcher by email to request a phone conference. The first researcher referred the lead investigator to the second researcher, whose information was located in the NIH RePORTER database. After establishing contact with the second researcher, the lead investigator scheduled a conference call. This conference allowed the investigator to ask questions and obtain advice from the researcher about how to implement a promotora program. At this time, the researcher offered their services as a consultant to the project if the grant proposal was funded. The involvement of a consultant who had previously received sig-

nificant NIH funding as part of the current project helped to lend support and was important to the proposal, and also assured NIH reviewers that an experienced NIH grantee would be involved in the project.

During the initial review of literature, the lead investigator located the dissertation of a medical anthropologist who had conducted recent research in Guatemala with a specific focus on diarrhea and oral rehydration (Hall-Clifford, 2009). After contacting this researcher by email, the lead investigator and the medical anthropologist developed a close, collaborative relationship that ultimately led to the anthropologist becoming the second primary investigator for the grant. Taking full advantage of technology, the investigators utilized Skype, conference calls, email, and Google documents to communicate during the grant proposal writing phase. Additionally, it is also important to select other research team members who have similar work styles. During our collaboration, it was apparent that we both could adhere to deadlines and would work diligently to make changes in an expedient manner. Writing a grant proposal for NIH requires numerous changes and updates, which necessitates that all members of the team are fully committed to the heavy workload.

It is important to utilize resources and personal contacts that may be able to provide assistance on smaller projects that will become part of the overall research study. For example, this research study focused on teaching oral rehydration therapy and zinc supplementation to families in rural Guatemala. The lead investigator contacted a medical physician, who specializes in international medicine and has worked in many lesser-developed countries, to ask if he would review the plan for medical appropriateness if the grant was funded. Due to the limited funding of this small grant, monetary payment for his services would not be feasible, therefore the lead investigator creatively negotiated other incentives for the physician's work with the project. It is essential for researchers to think

outside the box to identify incentives to gain the help of other team members.

Developing a team that utilizes a multidisciplinary approach is important. Our research team consisted of a transcultural nurse with a background in community health nursing, a medical anthropologist with field experience working in Guatemala, a medical physician who specializes in international medicine, and a sociologist with experience in implementing promotora programs. It is not required that all team members actively participate in the research implementation at the local level. Team members may play a variety of roles, including serving as a consultant. The goal is to demonstrate that the researchers involved in the grant proposal include experts from different disciplines to provide input from various perspectives.

### **Developing the Research Strategy – Developing the Game Plan**

Once the initial players are in place, it is time to develop a research strategy (game plan). One consideration that researchers should consider is the type of award that will be needed to meet the needs of the project, and it is important to have a basic understanding of the types of awards that are available through NIH. An R01 grant is the most commonly used grant program. This type of grant provides larger monetary awards and is generally awarded for three to five years. An RO3 is a smaller grant that provides limited funding (up to \$50,000 direct costs per year) for up to two years. An R21 is a grant that supports new, exploratory, and developmental research projects in the early stages of development. This award is limited to two years and may not exceed \$275,000. A review of the NIH website will provide the definitions and limitations of the various types of grant awards that are available (NIH, 2012).

To show that a research plan has significance and will be innovative, NIH has specific page limits for the research strategy, depending on

the type of award that is being requested. Because our grant is an RO3 award, the limit was six pages. While there were many supporting documents that were required to be submitted, the bulk of the plan was required to be presented within this six page document. Crucial for gaining the attention of reviewers, the significance and innovation of the proposed project must be concise and highly-developed. The following exemplar demonstrates the relevance, significance, and innovation associated with this grant proposal:

### **Relevance/Significance**

*Diarrhea is the second leading cause of preventable death in children less than 5 years of age (USAID, 2009). In 2004, the WHO and UNICEF issued a joint statement recommending the use of oral rehydration therapy (ORT) in conjunction with zinc supplementation (ZS) to manage diarrhea; unfortunately, the implementation into low income countries has been poor (Walker, Fontaine, Young, & Black, 2009).*

### **Innovation**

*This study will use a culturally-informed, collaborative approach along with a literacy-appropriate curriculum to increase knowledge of ORT and ZS in a low-income country. Additionally, this research will evaluate knowledge and utilization of ORT and ZS by parents, rather than just the change in knowledge levels of promotoras following training.*

It is critical that proposals demonstrate why the research is needed and how the study will not only be different from other studies, but also build upon other studies that have been completed to add to the body of knowledge. These two sections of the proposal should be limited to one full page and must immediately grab the attention of the reviewers.

Another crucial aspect of the research strat-

egy is the aims and expectations of the project. For a RO3 award, researchers should limit project goals to one or two aims, and be concise and realistic about expectations. Researchers should be aware that overestimating project expectations can be fatal to the review score of the proposal. Reviewers will be paying close attention to the ability of researchers to recognize the limitations of the proposed project. The following exemplar identifies the aims associated with this grant proposal:

*1. Identify the cultural and educational barriers to effective training in the use of homemade ORT and ZS in Guatemala.*

*Working hypothesis – Cultural norms in communication and health-seeking decision-making (e.g., role of low adult literacy in effective communication of health messages, influence of globalization through the preference for high-cost ORT products) and methods of instruction (e.g., lecture, role play, pictorial teaching aids) influence the use of ORT and ZS by parents in Guatemala.*

*2. Disseminate accessible information via promotoras on the use of homemade ORT and ZS to prevent and treat dehydration resulting from diarrheal diseases in children under five years of age.*

*Working hypothesis – Information presented in a low-literacy format to parents by community promotoras de salud will promote utilization of ORT and ZS in low-income countries.*

This section will require researchers to make multiple revisions to ensure the wording is concise and explicit about what the research project is expected to accomplish. The working hypothesis provides a rationale for the importance of these specific aims.

Researchers should consider other on-going initiatives that can provide support for the significance of their research plan. The *Unit-*

*ed Nations Millennium Development Goals (MDGs)* (n.d.) identifies the reduction of child mortality as a priority for all countries. Of the eight goals established by the United Nations, the fourth goal directs the target reduction of mortality rates in children under the age of five by two-thirds between 1990 and 2015. Current evidence suggests that child deaths are decreasing, but not in a manner that will allow nations to reach the target. Efforts need to be revitalized against diarrhea, while increasing nutritional resources, to save millions of children. The implementation of zinc supplementation should be re-emphasized, and the importance of breastfeeding needs to be provided through health education programs. Essential to the plan of reducing childhood deaths related to diarrhea is the need for clean water and improved sanitation practices. Each of these measures are essential components of our proposed health education program, which will be delivered using promotoras. In 2008, Guatemala was established as a maternal and child health (MCH) priority country in Latin America by United States Agency International Development (USAID, 2008). Funding was put in place for the next five years to provide support to the country of Guatemala to help address infant mortality rates. This research will help continue support and provide further interventions as the funding established in 2008 potentially draws to a close.

#### **Investigation of Effective Training of Promotoras in Oral Rehydration Therapy: Playing the Game**

The scoring of a proposal is essential to understanding how to proceed once a proposal is reviewed and rated. Proposals are given a score on a scale of 10-90. Contrary to normal logic, the lower the score the better, with a score of 10 being the best possible score. Proposals which receive a score of 50 or higher are not considered for funding and do not receive detailed feedback about the proposal. Proposals scoring less than 50 receive a detailed summary of the

problems or questions noted by reviewers. It is critical that this summary is reviewed and used as a guide to revise the proposal for resubmission. NIH proposals are only allowed one resubmission, so it is essential that grant proposal writers address as many of the problem areas as possible when undertaking revisions before resubmitting a revised proposal.

In this example, the initial proposal received a score of 38. While this score was considered a potentially fundable score, it did not receive funding. This was expected, considering the highly competitive nature of the process. Although this proposal did not receive funding, we were encouraged that our first proposal actually scored within the fundable range. Over the next six months, we worked diligently to address the problem areas and resubmitted the proposal on the next submission date. Approximately four months later, we received our new score; we scored an 11 on our re-submission. While we received a highly competitive score, it took almost five more months to complete the process and receive the final approval for implementing the grant.

#### **Suggestions for the Novice Researcher – Increasing the Odds**

Increasing the odds of receiving a fundable score will rely heavily upon the presentation of the document itself. Many resources are available to help the novice researcher in writing a successful grant proposal. Books such as the *Grant Application Writer's Workbook* (Russell & Morrison, 2010) provide detailed instructions of the elements and documentation styles that are essential to writing a concise grant proposal. It is crucial to pay attention to details in "how-to" guides for grant writers, and having a member of the team with a critical eye for small details is essential. Even small details, such as making sure the font is the same in all documents, is recommended by expert sources. Supplemental biographical sketches are required for all members as part of the submission packet and

provide important evidence of the skills and expertise that research team members bring to the project. The biographical sketches should have the exact same format for each person using the same font style and size. Having several trusted colleagues review the document before submission will help to identify any inconsistencies or typographical errors that may exist, and also ensure that the document is complete and cohesive. Adhering to the exact page limits for required sections of the proposal is also crucial. While it may be tempting to decrease the font or decrease the page margins in order to increase content, it is important to review the guidelines to ensure that compliance is met within the specifications of the required format of the proposal.

While institutional review board approval (IRB) is not required prior to a proposal submission, it may increase the odds of receiving a fundable score. In our case, we initiated the process with a developmental approval from our IRB prior to the first submission of our proposal. As our IRB reviewed the plan, they identified several areas that needed further development. Many of the areas that needed improvement were also identified by the grant reviewers. Using the feedback from our IRB and the grant reviewers, we were able to revise our proposal and gain IRB approval prior to the resubmission. It may not be feasible to obtain IRB approval prior to the first submission, but having this approval in place at the time of resubmission may prove to be advantageous in the long run.

Prior to final approval by NIH, it will be necessary to have subcontracts in place for research team members who work outside of a research team's institution. Negotiating subcontracts and identifying how team members will be paid can be complex. The sponsoring university or organization should contact the responsible parties at the contracted facilities to determine how monies will be distributed. Most universities will have a sponsored program or grant office that can provide assistance with this process. As

part of the proposal packet, researchers are required to identify the facilities and equipment that each organization will provide to ensure the success of the project.

Novice researchers may want to consider applying initially for smaller grants, such as a RO3 grant. This type of grant may be used to conduct pilot or feasibility studies, collect preliminary data, perform a secondary analysis of existing data, complete a self-contained research project, or develop new research technology. Obtaining one of these small grants will allow novice researchers to demonstrate their ability to successfully manage a small grant before attempting to secure a larger RO1 grant.

It is also important to have a team member with an established history of external funding. This person is not required to be the primary investigator or the project director. The person may only serve as a consultant if the project director or primary investigators have the skills to manage the grant. In the proposal and biographical sketches, it is important for researchers to identify the skills of the project director who will actually manage the oversight of the grant. Supporting documents that provide evidence of resources may be another place to identify collaborative relationships that may exist at an institution that will help guide the process for first-time external grant applicants.

Novice researchers should take advantage of new and early stage investigator status. A new investigator is a researcher who has not worked as a primary investigator or project director on a previously NIH funded research grant. Also, NIH considers an early stage investigator to be within 10 years of completing his/her terminal research degree, or is within 10 years of completing medical residency (or the equivalent). NIH is committed to helping new researchers engage in research. Combining these status categories with a strong, collaborative relationship with a previously-funded researcher demonstrates a strong potential for a successful grant implementation.

If a grant applicant is proposing to work in a cross-cultural setting, two other areas are important. Language skills will be critical, as one researcher on a research team should have the ability to speak the language of a targeted population. Language abilities should be made very clear in the biographical sketches. Reviewers will scan the biographical sketches for relevant information, and researchers should make sure this information stands out and will not be overlooked. Also, it is important to identify a cultural expert who will be willing to review plans to ensure the study is culturally appropriate. While the primary investigators may have worked with the targeted population extensively, it is still important for researchers to have someone outside the research team to provide an objective point of view. In our case, we secured the help of a non-governmental agency in Guatemala to review our plan for cultural context. The IRB for most institutions will probably want to be involved in securing this approval, and researchers will want to discuss this ahead of time to allow sufficient time to get the review completed.

Our study will be implemented in a foreign country, and one last step was required prior to our final approval. The NIH contacted the United States State Department to verify with the Guatemalan government that we would be approved to conduct research in their country. Surprisingly, this approval occurred very quickly. Researchers should not expect this rapid approval in most cases, because this approval will probably vary greatly between countries. Because the second primary investigator in our study is employed in the United Kingdom, approval was also required through the State Department for this country as well.

### Conclusion

The process of submitting an NIH grant proposal is overwhelming at times. It requires a substantial commitment of time and effort, but it can be a rewarding process. Navigating

the rules and procedures should be viewed as a challenge, but one that can be attained even by novice researchers. As researchers, we do not claim to have all the answers, but sharing our experiences may be helpful and encouraging to other researchers. When we began this process, it seemed that the norm from colleagues were negative comments and doubts of being successful. We hope that our experience will be a positive encouragement to others. The overall objective is to get the money to fund research.

### References

- Forsberg, B. C., Petzold, M. G., Tomson, G., & Allebeck, P. (2007). Diarrhoea case management in low- and middle-income countries -- an unfinished agenda. *Bulletin of the World Health Organization*, 85(1), 42-A. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=24049517&site=ehost-live>
- Hall-Clifford, R.A. (2009). *Oral rehydration therapy in highland Guatemala: Long-term impacts of public health intervention on the self* (Unpublished Ph.D. dissertation). Boston University. (UMI #3334541; <http://gradworks.umi.com/33/34/3334541.html>).
- Russell, S.W. & Morrison, D.C. (2010). *The Grant Application Writer's Workbook – National Institute of Health Version*. Los Olivos, CA: Grant Writers' Seminars & Workshops, LLC.
- Sistema de Información Gerencial de Salud (SIGSA) (2010). *Causas por departamento – mortalidad infantil – Sololá*. Retrieved from [http://sigsa.mspas.gob.gt/index.php?option=com\\_content&view=category&id=13&Itemid=12](http://sigsa.mspas.gob.gt/index.php?option=com_content&view=category&id=13&Itemid=12)
- United Nations (n.d.) *Millennium Development Goals*. Retrieved from <http://www.un.org/millenniumgoals/childhealth.shtml>
- U.S. Department of Health and Human Services, National Institute of Health (NIH), *Funding Facts*. (2013a) Retrieved from <http://report.nih.gov/fundingfacts/index.cfm>
- U.S. Department of Health and Human Services, National Institute of Health (NIH), *Research Portfolio Online Reporting Tools (RePORTER) database*. (2013b). Retrieved from <http://projectreporter.nih.gov/reporter.cfm>
- U.S. Department of Health and Human Services, National Institute of Health (NIH), *Types of Grant Programs*. (2012). Retrieved from [http://grants.nih.gov/grants/funding/funding\\_program.htm#RSeries](http://grants.nih.gov/grants/funding/funding_program.htm#RSeries)

United States Agency International Development (USAID). (2008). *MCH Program Description Guatemala*. Retrieved from [https://docs.google.com/viewer?a=v&q=cache:iNFX80oPSL4J:pdf.usaid.gov/pdf\\_docs/PDACP008.pdf+Guatemala+is+MCH+priority+country&hl=en&gl=us&pid=bl&srcid=ADG-EE5iadHG-i-xww-kE6caMaEXRVuOVzbqm-8vfkQZNhbFOHC07gNf-F5E-cuhri89IUmtPxtmUJ\\_stqaxzngJIjkZIPZwE0hITJTZ2SDuXha\\_vF1arPZ\\_aHxZLgMyvUVON8rr67fZQDH&sig=AHIEtbQJX-uoKY83ILNoKuF-8lw5DX6\\_XjA](https://docs.google.com/viewer?a=v&q=cache:iNFX80oPSL4J:pdf.usaid.gov/pdf_docs/PDACP008.pdf+Guatemala+is+MCH+priority+country&hl=en&gl=us&pid=bl&srcid=ADG-EE5iadHG-i-xww-kE6caMaEXRVuOVzbqm-8vfkQZNhbFOHC07gNf-F5E-cuhri89IUmtPxtmUJ_stqaxzngJIjkZIPZwE0hITJTZ2SDuXha_vF1arPZ_aHxZLgMyvUVON8rr67fZQDH&sig=AHIEtbQJX-uoKY83ILNoKuF-8lw5DX6_XjA)

United States Agency International Development (USAID). (2009). *Two decades of progress: USAID's child survival and maternal health program* (pg 4, 16). Retrieved from [http://pdf.usaid.gov/pdf\\_docs/PDACN044.pdf](http://pdf.usaid.gov/pdf_docs/PDACN044.pdf)

Walker, C. L. F., Fontaine, O., Young, M. W., & Black, R. E. (2009). *Zinc and low osmolarity oral rehydration salts for diarrhoea: A renewed call to action*. *Bulletin of the World Health Organization*, 87(10), 780-786. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=44968383&site=ehost-live>

World Health Organization. (2008). *Guatemala: Health profile*. Retrieved from <http://www.who.int/gho/countries/gtm.pdf>

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