



## Executive Summary

### HHS Office of Research: Assessment of Existing Initiatives

Prepared by Esther M. Leerkes

September 2018

#### Background

The purpose of this report is to summarize data about the extent to which three existing initiatives in HHS are meeting the goal of increasing external grant/contract submissions and awards and advancing the scholarship of our faculty. Additional secondary outcomes to consider are opportunities for students to engage in research and media attention that may serve to enhance the visibility of HHS faculty and their scholarship. The three programs are: HHS Faculty Research Grants, HHS Graduate Research Assistantships, and HHS Summer Grant Writing Fellows Program.

#### Key Findings

- Among faculty respondents who received research grants and graduate assistant funding from HHS:
  - The majority indicated their research would not have been possible without this financial support; the remainder indicated their research would have been delayed or reduced in scope without these funds.
  - Most indicated that a number of scholarly outputs including peer-reviewed manuscripts and chapters in edited volumes stemmed from this funding.
  - Several described concrete benefits to undergraduate and graduate students including use of resulting data for thesis/dissertation projects.
- For all three mechanisms, the vast majority of recipients have either submitted or plan to submit grants/contracts for external funding that build upon the work supported by these initiatives.
- When considering the expenditures of these programs and the external funds awarded to date, the return on investment for each initiative is as follows:
  - HHS Faculty Research Grants: \$0.53 per dollar spent (*note the majority of related grant submissions are forthcoming at this point*)
  - HHS Graduate Research Assistantships: \$4.05 per dollar spent
  - HHS Summer Grant Writing Fellows Program: \$19.00 per dollar spent

The full report follows on pages 2 through 10.

## HHS OOR: Assessment of Existing Initiatives: Full Report

Prepared by Esther M. Leerkes

September 2018

### Background

The purpose of this report is to summarize data about the extent to which three existing initiatives in HHS are meeting the goal of increasing external grant submissions and awards and advancing the scholarship of our faculty. Additional secondary outcomes to consider are opportunities for students to engage in research and media attention that may serve to enhance the visibility of HHS faculty and their scholarship.

### HHS Faculty Research Grants

Beginning in 2014, HHS has awarded HHS Faculty Research Grants (previously known as HHS Research Excellence Grants) to faculty with the goal of supporting projects that are highly likely to lead to subsequent external funding. These funds are primarily drawn from the HHS annual allocation from ORE which is typically \$30,000. Since inception, 27 Awards have been made totaling \$190,000, 6 of which were just awarded this spring and hence omitted from data collection. Of the remaining 21 awards, 3 involved faculty PIs who have since left UNCG, although 2 of these had co-investigators who are still here. Nineteen of the faculty who are still at UNCG responded to an online survey created by Jeff Labban and Lisa Walker.

Results indicate **most funded projects are ongoing**; thus, the intended outcomes are likely forthcoming:

- 9 projects are in ongoing data collection
- 6 are in the analysis or dissemination phase
- 3 are complete
- 1 did not respond

According to respondents, 3 of these projects **facilitated external grant submissions** (to NIH, USDA and a foundation). Eleven respondents indicated that future grant submissions are planned that build upon these projects. The *average* request for external dollars is:

- \$941,000 for those that were already submitted (1 funded, \$79,146)
- \$582,143 for those that are planned

The **return on investment** (ROI) to date is \$0.53 for every dollar spent (\$79,146/\$150,000-excluding \$40,000 awarded in the spring). If 2017 awards (\$50,000) are excluded from the denominator also, the ROI is \$0.79 for every dollar spent.

As a set, the studies have resulted in 27 manuscripts to date (published, under review, or in prep) and 41 conference presentations. The **level of dissemination is high** given

most projects are still ongoing. In addition, results have been **shared in media outlets**, including the local news, NY Times, and UNCG Research Magazine.

These awards have also benefited students, resulting in 5 dissertations, 1 master's thesis, and 1 undergraduate research project.

Twelve of 19 respondents indicated this work would not have been possible without this funding. The remaining 7 respondents indicated that the project would have been reduced in scope or its completion delayed.

Open ended comments are attached (Appendix A, page 6).

Conclusion: Preliminary evidence suggests this mechanism is effective in that it is tied to research productivity/dissemination. We must continue to monitor over time given it likely takes several years to complete pilot projects and then seek/obtain external funding, which is one of the primary goals of the mechanism.

### **HHS Graduate Research Assistantships**

Beginning in 2014, HHS has held a competition to fund graduate research assistants for faculty under three conditions: 1) insufficient funds in existing grant to pay needed GRAs; 2) funding terminated, but collection or analysis ongoing; and 3) assistance needed with work that will lead to an external grant submission. Funds come from salary savings, and the intent was that this resource would lead to additional external funding. Since then, 32 awards to 24 different faculty have been made, totaling \$235,500. Eight were just awarded this spring and hence have been omitted from data collection. Of the remaining 24 awards eligible for evaluation, 18 surveys were completed. The online survey was created and administered by Jeff Labban and Lisa Walker.

Results indicate **the status of all projects is ongoing** and thus the likely return on investment is yet to come:

- 11 projects are in ongoing data collection
- 7 are in the analysis or dissemination phase

According to respondents, 7 of these projects **facilitated external grant submissions** (to NIH, DoD, and a foundation) with an additional 15 future grant submissions planned that build upon these projects within the next 1 to 3 years. The average request for external dollars is:

- \$808,972 for those that were already submitted (3 funded, \$632,406)
- \$835,667 for those that are planned

The **ROI** to date is \$4.05 for every dollar spent (\$632,406/\$156,000-excluding \$79,500 awarded in the spring). If 2017 awards (\$48,000) are excluded from the denominator also, the ROI is \$5.86 for every dollar spent. Likewise, if exclude 2016 (\$48,000), the return on investment is \$10.54.

As a set, the studies have resulted in 47 publications to date (published, under review, or in prep) and 62 conference presentations. The **level of dissemination is high** given most projects are still ongoing. In addition, results have been **shared in media outlets**, including the News & Record, NY Times, NPR, and UNCG Research Magazine.

These awards have also benefited students, resulting in 3 dissertations, 9 master's theses, and 3 undergraduate research projects.

Nine respondents indicated would this work would not have been possible without this funding, and the remaining 9 respondents indicated that the project would have been reduced in scope or its completion delayed.

Open ended comments are attached (Appendix B, page 8).

Conclusion: Preliminary evidence suggests this mechanism is effective in that is it tied to research productivity/dissemination. We must continue to monitor over time with attention to awarded grants.

### **HHS Summer Grant Writing Fellows Program**

The HHS summer grant writing fellows program has been offered during the summers of 2015, 2017, and 2018. The goal is to provide faculty with the needed training and support to facilitate a high-quality grant submission within a year, ultimately leading to increased external funding. Thus far, 18 faculty have received funding from this program, and 3 of these faculty have received support for 2 summers with the follow up funding to support the resubmission process in 2 cases. Five of the 18 just participated this summer and are expected to submit by June 2019. Thus, the below summary is focused on the 13 faculty who received support in 2015 and/or 2017.

Of the 13 faculty, 2 left the university and were no longer tracked.

Of the remaining 11,

- 7 submitted grants
  - 2 have been funded and 1 just received a score likely in the fundable range, the latter received 2 years of support
    - All are R15s
    - Assuming the 3<sup>rd</sup> is funded, current success rate of those submitted is 43%
    - **Total awarded to date = \$792,877**, total to date + pending = \$1.2 million
  - 3 of the 4 unfunded are likely to be re-submitted; 4<sup>th</sup> not, but the PI is actively working on other grant submissions
- 1 additional submission is planned in the next month—if this one is submitted, **72% of faculty who receive this support, and stay at UNCG, do submit the intended grants.**

- 3 never submitted and we are not aware of any plans to do so. However, each of these faculty have sought other sources of funding—1 via small contracts, 1 as PI on a subcontract on a different proposal, and 1 as a Co-I on at least 2 other submissions.

Total expenditures, excluding current year = \$40,989.07. Thus, the **ROI** is \$19 for every dollar spent (\$792,877/\$40,989.07). The ROI will be \$29 per dollar spent if the pending award is funded in full. Please note, this is a conservative estimate that does not include the possibility that others may be funded in the future.

Data sources: internal spreadsheet of recipients, internal spreadsheets about submission plans, RAMSeS data

### **General Conclusions**

Comparing the 3 initiatives, it seems reasonable to infer that HHS Faculty Research Grants are furthest removed from applying for a grant in that they are most commonly intended to collect pilot data for use in a future grant proposal. It seems likely it would take 1 to 5 years from the *conclusion* of such a project to receiving external funding, in which case we would just begin to see a return in the coming year. GRA awards may yield a ROI more rapidly because many of these proposals are for GRA support for ongoing work/bridge funding between awards, and as such there may be a 1 to 3-year lag in likely return on investment. The summer grant writing workshop is likely to see the shortest lag in that the funding is specifically designed to prepare a grant submission. Building in time for reviews and likely a re-submission, it is reasonable that a return on investment may be apparent within 2 years. The data, generally bear this out with the Summer Grant Writing Fellows Program having the largest ROI (\$19 to \$29), followed by GRA Award (\$4.05-\$10.54) and then finally Faculty Research Grants which have not yielded a return yet (\$0.53 to \$0.79). Certainly, additional longitudinal data are needed to draw stronger conclusions given each of these initiatives have only been in effect a relatively short period. Nevertheless, the preliminary data are promising and suggest these initiatives are worth continuing. In this analyses, we considered each type of funding separately. In fact, several faculty have received support from multiple of these programs. In future assessments, we should examine the extent to which support from multiple initiatives promotes subsequent grant/contract success.

## **Appendix A: Open Ended Comments on Faculty Research Grant Survey**

### Critical to the project

Receiving internal funding is really helpful when there's a hiatus in the receipt of external funding. It's particularly important when the goal of the funded work is to make it more likely to receive external funding, as is the present situation. I'm most grateful!!

This funding allowed me to recruit a non-thesis MS to become a thesis MS student, and also to get important methods developed in my lab that will support future research. Thank you.

This funding is critical for faculty to get research off the ground.

This project is a major exploration of multiple aspects of arts-based therapies as complements to medicalized cancer treatments. I am exploring their effective use in medicalized venues and non-medicalized venues, during treatment, and after treatment, as well as their connection to establishing healthy leisure habits. This is significant work that needs support mechanisms like this to be successful.

This is a very useful funding mechanism. In our case it enabled a component of a larger ongoing community engaged project among the Montagnard community. The larger project examines social determinants of hypertension (family relationships, stress, nutrition, health behaviors) in this refugee community. The Research Excellence award enabled collection of scalp hair samples and paid for hair cortisol analyses. This has enabled a collaboration with researchers at Guilford College, NC A&T, and Texas Woman's University. After we publish a few papers from these data, we will submit external grants.

### Supporting Collaboration

Our data collection is near complete (by May 31). One of our specific aims was to submit an external grant to X. Unfortunately, this grant mechanism was not offered during the award period and we have not been able to pursue that funding.

Alternatively, the work has positioned us to partner on other funded projects through X University and X University. Specifically, Dr. X invited Dr. {UNCG Faculty Member} as a subcontractor on a program evaluation grant funded by the X Government (\$100,000) which grew directly out of the HHS project (which Dr. X collaborated). Dr. X at X University has also invited us to collaborate on his existing X grants including an opportunity to submit a subcontract (pending approval of the program manager). We feel that this is an appropriate step toward building capacity for future funding.

HHS Research Excellence Grants has helped support collaboration with *Dr. X* in nutrition.

### Making Progress

I had to answer no to most of the questions because we are still in the process of data collection, but I hope that in a year many of these 'no's' will be 'yes.' Even though we may not have a lot of publishable data, this funding has been absolutely critical for us to pilot our methods and determine feasibility. We have learned invaluable information as a result

This project was pretty extensive and required daily data collection of subjects - because of the limited funding, subject payment was low for this type of work, but we were successful gathering the data, just took longer than expected. Data reduction is almost complete, and then we will use as pilot data for an R21 grant proposal in preparation that we plan to submit in October. There is also intention to submit abstracts and papers and happy to update survey at that time. Although this particularly project has been slow, our lab has a very good record of using this funding to product papers and future grant submissions.

Due to delays in obtaining almond meal supply from the X Funder, the funded project is not yet completed, therefore I could not respond to several of the questions. I will be happy to provide responses to these questions late in Fall 2018.

### Investigators Leaving

Dr. X was the lead researcher on this project. She chose to leave UNCG and academia just as the funding ended. Most of the \$ was used to pay a grad assistant who she supervised. Even in this difficult situation, one presentation resulted from the small amount of funding and ....

Unfortunately, the co-investigator on this grant has a chronic illness and we were unable to pursue this together. The data from the study, though, may help to support other related funding proposals as our focus on BDNF is on-going.

We had plans to submit a grant to Pcori; however, Dr. X left UNCG and relocated to X state. His new position was not conducive to continuing to work on this project. We both believe that, had he stayed, a Pcori funded project was a real possibility. The funding we received through HHS was essential in developing the data we needed for a PCORI proposal.

## **Appendix B: Open Ended Comments on GRA Survey**

### Critical to the Project

Having funding available to explore an area of inquiry is useful for enhancing the potential for external funding and is highly valued by myself and other Faculty members. Advancing an area of research often requires new ways of thinking, pilot data and the establishment of new research partnerships. The thoughtful review process of the Research Excellence proposal was very useful and resulted in an examination of some aspects of our thinking, so thank you for that. While the work proposed is ongoing, I believe this institutional support is important for faculty feeling and being supported in our work. Thank you.

This funding helps me to provide support for GAs who are imperative to running the program effectively and safely. We hike year-round, twice a week, and I cannot be at every hike. Additionally, I like to have at least one additional assistant to ensure safety during the hikes.

This funding was essential to the progress we have made on this project.

This funding was extraordinarily helpful for me. These park renovation projects tend to get delayed, making the funding of assistantships difficult to time (i.e., you may fund a student for two years, and then a necessary no-cost extension on the project results in not having that student available because of project timelines that are not researcher-related). The structure of this funding allowed me to bridge this gap issue and I will have enough research assistant time to complete the work. This particular funder-researcher relationship should continue and having extra student hours helped contribute to the excellence of the research. This should certainly help proliferate the funding relationship.

### Supporting Dissemination & Proposal Preparation

For our project, this award came at a perfect time as we prepare to move to stage II of our research plan and disseminate (in peer reviewed journals) our findings.

Having a GRA enhanced my ability to prepare for grant submission.

Having this funding was essential to the project. It was very helpful to have graduate student support to led to multiple products. I hope that opportunity for funding like this continues in the future.

I had a really hard time answering all of these questions - the student was helping me with writing a grant proposal, but these questions all referred to 'data collection' and talk about whether there have been products (manuscripts, chapter, conferences) as a result of the funding. These weren't the goal of the funding for this student but checking 'no' to everything makes it sound like he hasn't been useful. The student has been invaluable with pieces such as developing the lit review for my grant proposal. Unfortunately, there have been a lot of issues getting access to the data that I would analyze with this grant (it's a secondary data analysis proposal) and thus the student has



not been able to help me with that aspect of the grant proposal. The fact that things have been delayed are not related to the funding, either. Had there not been these issues (plus some health issues on my part), I expect we would have submitted the grant. In addition, I expect that going forward, there will be outcomes such as papers and conference presentations that will result from having had this funding. I think this is a great program and should be continued going forward.

Very helpful. Please note: Although I have not applied for subsequent grants as a result of this project, my co-investigator *Dr. X* applied for a UNCG Giant Steps award which was funded and will follow a subset of these children. That may lead to a subsequent external grant submission. I will not be part of it, but it's a direct potential benefit of this funding.

### Making Progress

This funding has greatly assisted with the progress of this research and is much appreciated.

This project is still in early stages - we've had some delays from CDC funders (as they have 12-month OMB review), hoping that students will benefit more next year.

We are still analyzing the data. More publications will come.

### Student Impact

This funding mechanism provides a valuable opportunity to recruit students to assist with currently funded or budding research projects, an experience they may not have if this funding mechanism were not in place.

I may be filling this one out for the next AY project (my apologies)...as this project is still ongoing. I think the funding for this is CRUCIAL for faculty across the school at varying stages of research and is excellent for our students (mine have been on papers and presentation which make them more competitive for academic positions).