



GLOBAL RESEARCH FUNDING FORUM

Maximizing Opportunities to Build a Global Research Portfolio

Conference Report

Spring 2013

ACKNOWLEDGEMENTS

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Special thanks also go to the attendees from the international funding agencies, many of whom flew from far away places to attend and bring our worlds a bit closer for the benefit of faculty and students aspiring to be more globalized. Thanks are due to the U.S. funding agency representatives, including NSF, CRDF, and IREX, as well as non-governmental, bi-lateral S&T promotion organizations. Thanks as well go to the faculty and students from across the United States who attended. The participating U.S. university representatives deserve much credit for their recognition and willingness to act to further develop this theme.

Within UNT, the event would not have been possible without major contributions from the Toulouse Graduate School and Office of Research and Economic Development, led respectively by Mark Wardell and Kenneth Sewell. Thanks as well to the academic colleges who helped host and highlight UNT's research resources, and to all who lent advice and guidance. Thanks to the Center for the Study of Interdisciplinarity for leading the discussion on the broader impacts of global research. Appreciation to CLEAR Conference organization services for logistics. Saving the best for last, Amanda White Bennett is the single most important person behind the success of the overall initiative and event.

With sincere appreciation to all those who believe in the transformative power of global research experiences, thank you.

Rick Nader

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EXECUTIVE SUMMARY

The Global Research Funding Forum (GRFF): *Maximizing Opportunities to Build a Global Research Portfolio* was an invitation-only forum held February 4-5, 2013 at the Gateway Center at the University of North Texas (UNT). <https://international.unt.edu/global-research-funding-forum> The GRFF was organized by UNT's Office of Research and Economic Development, Toulouse Graduate School, and UNT-International.

Against a backdrop of increased national attention to a "Global" research environment as evidenced by the Singapore Statement on RCR and the NSF-initiated Global Heads of Research Organizations meetings in May 2012 and planned for May 2013, the GRFF was designed to be a "high-dialogue" venue for representatives of international funding agencies, senior research and international officers, and faculty with global exchange aspirations at U.S. universities. The three objectives of the forum included:

1. To promote the importance of expanding mutually beneficial global research cooperation
2. To promote the competitiveness of U.S. faculty and students seeking global research funding and exchange opportunities
3. To promote an improved understanding of the challenges and opportunities facing U.S. universities in supporting research-active faculty and graduate students with global research ambitions

The GRFF was a two day forum with multiple sessions and opportunities for participant dialogue. It began with a *Summary of the National Academy of Sciences (NAS) Report "Examining Core Elements of International Research Collaboration, 2010."* The summary was immediately followed by a panel discussion on *Core Issues in University Support for International Research Collaboration*. Keynote Speakers from the National Science Foundation and the European Research Council discussed *Fostering International Engagement: US-EU Science and Technology Relations* during lunch. The first day concluded with concurrent afternoon sessions where experts on global research and exchange presented information about pathways to global research funding in their respective countries. The second day began with a group dialogue on the broader impacts of global research and education. It was followed by a Graduate Student Global Research Competition in which UNT graduate students presented research posters on a topic of global relevance. Global research and exchange experts from around the world served as judges for the Graduate Student Global Research Competition. An opportunity was provided for participants to meet on an individual basis with the global research and exchange representatives. The GRFF concluded with an Awards Luncheon that recognized the winners of the Graduate Student Global Research Competition.

Key recommendations include:

1. Convening a second, focused meeting between SIOs and VPRs to further define the value propositions and articulate the rationale for a coordinated approach to support faculty and graduate students seeking global research and education experiences at the institutional level, and
2. Conducting a case study and survey of current practices of institutions engaged in supporting global research and graduate education on their campuses to develop a study framework and to identify the impacts this approach has had on improving overall research quality and graduate training output.

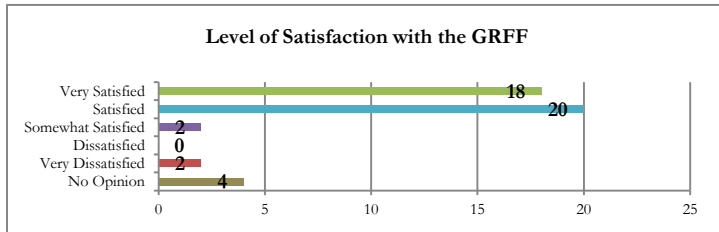
The GRFF was attended by over 200 participants representing 5 continents, 20 countries, 31 U.S. universities, and 20 U.S. States.

MEASURING ACHIEVEMENT OF GRFF OBJECTIVES

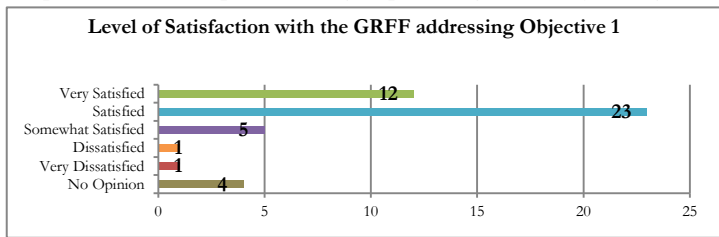
An electronic survey was sent to GRFF participants after the forum to request their feedback on the GRFF addressing the three primary objectives. About 23% of GRFF participants responded to the survey.

An overview of GRFF participant satisfaction is described below. Participants overall were satisfied (very satisfied, satisfied, or somewhat satisfied) with the GRFF.

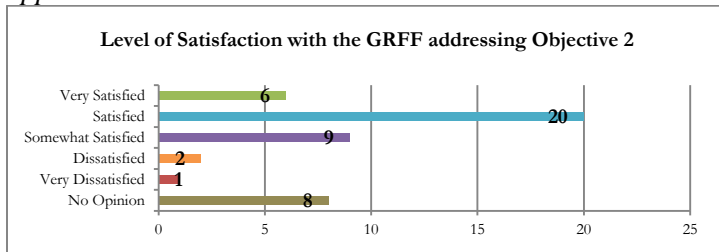
The majority of respondents or 87% were satisfied with the GRFF.



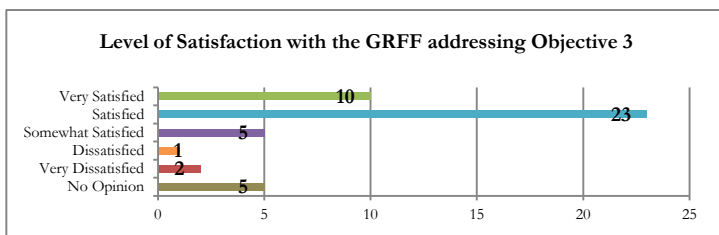
The majority of respondents or 87% were satisfied with the GRFF addressing Objective 1: *To promote the importance of expanding mutually beneficial global research cooperation.*



The majority of respondents or 76.1% were satisfied with the GRFF addressing Objective 2: *To promote the competitiveness of US faculty and students seeking global research funding and exchange opportunities.*



The majority of respondents or 82.6% were satisfied with the GRFF addressing Objective 3: *To promote an improved understanding of the challenges and opportunities facing U.S. universities in supporting research-active faculty and graduate students with global ambitions.*



KEY TAKEAWAYS AND PARTICIPANT QUESTIONS

Feedback from Participants

Many of the participants commented that the biggest lesson learned during the GRFF is that institutions have an opportunity to articulate an *institutional-level global research strategy*, one which defines the benefits and accounts for the multiple reference points on campus that serve to meet growing interest in and necessity for improved infrastructure for supporting global research and graduate education.

During the GRFF and indicated in the post-GRFF surveys, U.S. university participants identified a myriad of challenges facing institutions seeking to take on a coordinated institutional international research strategy, such as:

- Lack of awareness among international office staff of the nature of research administration, and conversely, lack of awareness among research office staff of the nature of international administration.
- Administrative turf or silos that impede support of faculty and student global research aspirations
- Identifying appropriate international funding sources with unfamiliar application processes.
- Lack of counterpart research services offices in some locations lead to a lack of support for pre-award processes (budgets) and post-award (compliance), and where these do exist, they are often more complex, vary by funding source and country, and entail arduous/ambiguous regulations (export control).
- PI's and SRO's lack of familiarity with submission and review processes in joint calls (operating under two, sometimes conflicting RFPs).
- Misperceptions concerning foreign funding sources, such as, restrictions on spending, Human subjects protections, etc.
- University administrators tend to be risk averse and create burdensome precautions. As a result, researchers are discouraged because of the extra time required for approvals.
- Standards, accountability and transparency, for example expectations around data sharing, may be problematic.
- The high likelihood that simple cultural or language mistakes will undermine months of careful relationship building.
- Singular focus of administration on receipt of extramural U.S. funding in defining *excellence*- is it an issue of familiarity and U.S. bias or quality?
- *Double jeopardy* in submitting joint proposals to both U.S. and international funders.
- Generally, a lack of familiarity can lead to financial and legal problems which can take a very long time to resolve and result in a chilling effect on overall international research productivity.

International funding agency representatives in attendance voiced particular concern for agency capacity to undertake global joint projects. Agencies from different countries have varied levels of university activity disposed toward global research. The merit/peer review systems are considered the “gold standard”, but language, logistics and overall bureaucratic restrictions for funding non-citizens tended to interfere with global peer review perspectives and agency-to-agency collaboration in support of a single investigator with international partner, or multi-investigator international projects.

A **Q&A list** from participants was started at the workshop. The questions asked by participants and some preliminary answers are below.

- (1) What is the value of limiting the number of international agreement partners to a "select" (e.g. institutions of similar quality) number as opposed to allowing faculty to initiative agreements wherever there is research or collaborative potential? Or, in other words, what are the pros and cons of a top down vs. bottom up approach to international partnerships with institutions abroad?
 - A. Pros of top-down are ease of administrative priority setting and decision-making, while pros of bottom-up include more ideas reflective of faculty strengths and interests and may drive new faculty into the *research-active* category. Cons of top-down can lead to faculty disengagement and missed opportunity while cons of bottom up can be lack of sufficient investment to impact change.
- (2) Should international research be given a designated "place" within a sponsored research division? What are the key elements of research administration infrastructure that need to be in place for international research to flourish at a large, research-oriented university?
 - A. For smaller SR offices, it may be wise to designate a person to specialize in global as these types of projects do have similar challenges. For larger SROs diversification by country and agency is possible. Key elements required in order to have global research flourish include language and cultural interpersonal skills, planning and a systematic examination of the 8 elements as outlined in the core elements report.
- (3) Should international engagement be recognized specifically in the Promotion and Tenure (P&T) process? Or is it relevant in the context of activities already considered such as research and teaching more generally?
 - A. It is important to have P&T policies that reflect the fact that excellence in research is increasingly defined by a globally located peer group. It is important for P&T policies to recognize the diversity of ways knowledge is discovered, applied and understood in various contexts, among those is the global context. International collaboration can be an indication of excellence. Global perspectives bring a diversity of lenses by which to learn and discover, and language and cultural engagement lead to improved pattern recognition, observation, and communication skills. These are the markers of great science, engineering, humanities and innovation.
- (4) What are the "best practices" of (1) incentivizing faculty to engage in international research/activities and (2) rewarding their international success?
 - A. TBD (needs further study)
- (5) What are the key criteria for evaluating a "successful" international collaboration – how can a university best evaluate which partnerships are value-added? For example, if limited funds are available for internal awards for international engagement, what criteria should a university use to allocate those funds to maximize impact?
 - A. The key criterion to assess success includes: Did the activity lead to quality, recognized, academic output, that without this collaboration, would not have been achieved? If funds are limited, criteria should include: mutual intellectual benefit, access to new or unique resources to the institution (students/faculty/facility), leverage and long-term impacts on quality and reputation of the institution. Did the student/faculty achieve a deeper (nuanced) understanding of the phenomenon, improve powers of interpretation, observation or communication across cultural, language or disciplinary contexts as practiced in different countries?

- (6) How does one demonstrate the value of international collaborations (particularly when institutional rank is often out of kilter with the quality of faculty in any given disciplinary context)?
- A. A focus on the reputation or ranking of the sub-unit, in some cases the single faculty member, is the appropriate unit of measure. All universities have great assets and resources on which to draw. Build on these strengths and highlight others. Relationships should exhibit mutual benefit. Stratify the types of institutional partnerships (Research, Faculty exchange, Transfer, Special programs) and types of MOUs. This can help define success and expectations across categories of institutional relationships. Recall that rankings are largely reputational and self-reported.
- (7) [How can one] measure the impact, depth of international collaboration: what counts?
- A. Academic Analytics, graduate student and post-doc referrals, new grants, greater student achievement on measures of global competencies, self-reported changes and insights gained by participants in global collaborations, growth in popularity of programs abroad or with international components, curricular offerings have increasing global context/content. Does the partnership evolve into a deeper or develop more dimensions? If so, it is taking root and flourishing.
- (8) A key aspect of academic globalization and successful international research collaborations involves faculty sabbaticals abroad, graduate student exchange, and international research experiences for undergraduates. All of these require extended stays overseas, which bring issues of language (communication), culture shock, visa requirements, employment for spouses, school for children, and many other innocently unanticipated stumbling blocks. Multinational companies tend to have programs to assist their employees with such moves. What can universities do not only to assist faculty and students with all of these issues, but to encourage them to engage in such ventures?
- A. Examine extending the support services of agreements that exist on campus for such circumstances to partner institutions abroad to the greatest extent possible. Staff exchange with partner institutions and growing the definition of reciprocal exchange agreements to reflect faculty and students with families. Dovetailing Faculty Success policies and Research Development initiatives to improve faculty-life and development strategies (like NSF Advance) to include “planning” for international.
- (9) How does a global focus really help the bottom line for research awards & expenditures? After all, it’s only maximally a 26% average off campus IDC rate.
- A. Global research cooperation, if done to expand access to new talent and resources, leverage new funding and grow and diversify the academic networks of existing faculty, provides entry for faculty who otherwise would not have engaged in the process of a new venue in which to contribute. Large NSF Center grants, for example, REQUIRE global connections.
- (10) What does this effort do to attract and promote domestic diversity that is also a target to boost US competitiveness? Are there overlaps, mutually beneficial to both groups?
- A. In academia, domestically and internationally diverse faculty face multiple cultural dimensions to negotiate their way to tenure. Gender differences are compounded by ethnic or societal family expectations. When institutions provide a full accounting of these multiple diversities, the institution does much better overall than a singular focus on *domestic* diversity. To partition these groups along international and domestic lines misses the larger point. For students, “minority” groups tend to identify each other as friends more frequently. Both domestic and international diversity inclusion and friend making strategies mutually reinforce retention and help overcome stereotypes.

(11) Are different fields of research in need of more or less globalization of perspectives? Where do you draw the line on relevance of knowledge of global work?

A. Yes...

(12) What are the risks of globalization to the institution? What if other countries don't *play by the same rules*...

A. TBD (needs to be examined)

(13) Isn't this overall line of thinking just a way to add one more voice on campus in support of research? What real value added can international offices bring to the table?

A. Diplomacy -a bridge between various levels of institutional bureaucracies, language and cultural competence, partnership building knowledge (accreditation), models for financials and other “doing business abroad”, networks and contacts to facilitate administrative processes,...

(14) What intended results does one hope to achieve by greater alignment between international offices and research offices? What are potential un-intended consequences?

A. TBD (needs study)

NEXT STEPS

GRFF participants' number one recommendation was for a *second meeting* comprising a small group of Senior International and Research Officers who are committed to this idea to convene in order to draft a synopsis statement on the *value of international research* to the quality and volume of an institution's teaching, research and graduate training offerings.

Questions to be addressed at a second venue could include: How are universities defining their roles in support of global research and graduate education? Are universities optimally supporting integrated global research and graduate education on campus? How are global collaborative partnerships impacting the quality and processes of research and education on campus? How, and to what extent is global engagement affecting administrative support for research and graduate education? How can graduate training be improved by focusing on the skills required for successful collaborative global research (e.g., Team Science)? How are faculty collegial networks transformed when an emphasis is placed on global engagement? Are knowledge dissemination patterns and resource allocation decisions within the institution changed, and how? Are more faculty newly engaged in research and scholarly or creative work as a result of an emphasis, incentives and value placed on global engagement? Does an emphasis on global enhance the *bottom line* of scholarly output, including preparing the next generation the skills necessary to be globally engaged scholars?

In addition to VPRs and SIOs, key representatives from major professional research support and international administration organizations such as NORDP, NCURA and AIEA, among others could respond to and critique the draft statement. All participants would help clarify and prioritize important dimensions on which to build infrastructure, policy and technology to maximize U.S. institutions plans. The outcome of a second meeting would include the value statement, and a preliminary list of answers to the questions above.

Participants also wanted to hear more from the international funders and saw great value in dialogue with these agency representatives. Therefore, a need for a focused, working-level dialogue with international funding agencies was suggested. This might ideally be scheduled in tandem with the Global Heads of Research Councils meetings in May catalyzed by NSF.

As a result of this Forum, it became clear that a coordinated approach among research, international and other offices on campus could lead to more globalization on campus among faculty and students. Yet organizers needed first to better understand the status of and current practices related to supporting global research and graduate education occurring at student-focused, public research institutions.

It is proposed that institutions that undertake coordinated efforts across domains of policy, organizational structure, budget, and academic support functions will realize increased overall academic output and improve the institution's ranking and reputation on accepted measures of quality for research and graduate education.

Therefore, organizers propose a *study to establish a framework for analyzing international graduate education and research activities at select campuses* in order to better understand how international research collaborations flourish with support from central campus offices, such as the research office, the

international office, and the graduate school. A possible outcome is the establishment of guidelines for campus level administration SIOs and VPRs.

At present, the following institutions have been identified to participate: University of South Florida, Colorado State University, University of Texas at El Paso, Washington State University, and the University of North Texas. Additional institutions that may join can be drawn from the list of participants in the GRFF <https://international.unt.edu/participating-us-universities>. A particular emphasis will be on institutions which are or have transitioned from being teaching intensive to becoming research intensive (e.g., between \$10-45 million in research expenditures).

To illustrate:

The study would collect, analyze, and categorize current and recent institutional efforts by VP for Global Affairs (and similar offices) aimed at encouraging and initiating international collaborations in research and graduate education. Using a case study approach the study would ask:

- a. What has been done, by whom?
- b. What was the context and organizational structure in which the initiative emerged and flourished?
- c. What worked and what did not work so well and why?

The study would begin with developing a conceptual framework for an analysis at the institutional level. This requires much thinking ahead of time as many of the initiatives are individual projects reflective of leadership priorities at those institutions. Care will be taken to account for existing or newly created infrastructure supporting international research collaborations and research management, as well as graduate student research training and the motivations for initiating these partnerships and incentive programs.

Methods used in the case study will include surveys and focus groups beginning with the GRFF participants fitting the sampling frame of an emerging research university. Results will be analyzed to determine whether and how to enhance the study to a larger set of institutions. Results should provide evidence of whether a coordinated approach focused on globalization of research and graduate education can bring faculty and students into research and increase overall activity.

SUMMARY OF RECOMMENDATIONS AND CONCLUSIONS

Many of the participants requested that the GRFF or a focused conference be held again. There were requests that subsequent conferences allow more time for networking. It was also suggested that the program schedule for future conferences be redesigned to decrease the number of concurrent sessions, allowing participants to attend more presentations and work toward higher levels of dialogue, especially with the global funding representatives. Participants suggested additional session topics such as philanthropic funding opportunities, import/export controls, operational challenges to conducting international research, and institutional incentives for international research, IP, corporate perspectives and others. Washington DC was suggested in order to increase funding agency turnout and to enhance the speaker line-up. They also suggested that the conference be organized by a consortium of U.S. universities.

Participants recommended GRFF organizers create a *statement* that describes the significance of universities engaging in global research. Further, it was suggested that a consortium of U.S. universities develop a framework that defines global research as well as the best practices and challenges to engaging in global research.

The panelists recommended a study, perhaps sponsored by NSF to examine how the collaborative nature of research offices, international offices, and graduate schools might result not only in increased global research by faculty and graduate students, but a more globally engaged campus research environment that better prepares the next generation of U.S. academics and professionals.

Conclusions

The University of North Texas was pleased to catalyze the conversation and with the high interest expressed from the very diverse participation in the GRFF and positive feedback surrounding the forum. The proceedings will be shared widely and new projects and plans for the second meeting are moving forward.