

Externally Funded/Sponsored Research: Strengths and Opportunities In Bryan School

**REPORT SUBMITTED BY
BRYAN COMMITTEE ON RESEARCH**

I Rationale

This report is a product of the BCR (Bryan Committee on Research). Its primary objective is to focus on the more positive aspects of obtaining external funding, about which less may perhaps be presently known or understood within Bryan School. Therefore this document complements other Bryan School efforts to enhance our collective efforts to secure external support by adding to those efforts by attempting to identify areas of research and aspects of our organizational structure that seem compatible with efforts to secure external funding.

The above objective is accomplished by the two principal sections of this report, the first of which (Section III) addresses areas in Bryan School that present a potential for being leveraged for external support. The next section (section IV) addresses some opportunities that may be pursued by Bryan School faculty in seeking such external funding; its purpose is to assist faculty and administrators in efforts to secure external research funding.

II Methodology

In identifying the strengths related to research in the Bryan School, input was sought from various sources in the Bryan School: Department Heads, BCR members, Center directors and faculty in general. These faculty members were sent an email asking them to identify their areas of strength and several of them responded back by email. We received responses from all departments and centers. Even though the following may appear to be a comprehensive compilation, as a caveat, the areas discussed are not exhaustive and are based on the judgments of the BCR members and the faculty members who responded. There may also be some overlap between the identified areas, but we let it remain in order to not exclude important dimensions.

The opportunities section was identified by seeking input from faculty with successful records in grantsmanship, staff from Office of Sponsored Research, Corporate and Foundation Relations and independent web based research by BCR members.

Notwithstanding the above, this report does not presume to be an exhaustive list. Instead, BCR welcomes any additional ideas about our school's strengths in sponsored research and how to leverage these strengths.

III Strengths

We have grouped the strengths into institutional and academic categories. Within each category, the strengths are not listed in any particular order.

III.A Institutional Strengths

There are numerous institutional units within UNCG designed to facilitate funded research. We will only discuss those located within the Bryan School.

III.A.1 Bryan School Office of Research

Established in Fall 2007, the mission of the Office of Research is to support faculty members in their scholarly and creative research activities. In particular, the office assists faculty members with the following services in sponsored research: finding sponsors for external contracts and grants, preparation of proposals and research manuscripts, administration of funded projects, guidance on Bryan School and UNCG policies and procedures, and locating research partners in the Bryan School.

III.A.2 The Center for Business and Economics Research (CBER)

CBER's mission is community outreach via research. CBER is the focal point for economic-development research and data in the Bryan School and at UNCG. The Center's activities fall into two main categories, contract research and public education. CBER's funded research projects have included surveys, economic-impact studies, industry analyses, and regional profiles. CBER's public-education activities are evolving and currently include newspaper and magazine columns on economics and lectures to community and business groups. In the future, CBER will add to these activities by enhancing the CBER website to include regional economic data, establishing a quarterly newsletter, and hosting periodic economic-outlook events. CBER links Bryan faculty research to economic development activities within the Triad; and, as such, can and does provide considerable leverage in securing financial resources targeted specifically for local needs and purposes.

III.A.3 The McDowell Research Center for Global IT Management (MRC)

MRC's mission is "to support and stimulate the application of information technology in organizations, worldwide, with an emphasis on the Piedmont Triad region, North Carolina, and the United States." Research projects focus on contemporary issues facing companies worldwide. The Center contributes to the IT-related industry clusters in the Triad region, thereby aiding in the economic development and business environment of affected firms and offers programs targeted to both for-profit and non-profit businesses. MRC is particularly concerned with two areas: information technology in healthcare and global information technology. The MRC provides funding for both research as well as research grant proposals, and it can serve as a locus for collaborative work and for identification of funding sources in areas related to its mission.

III.B Academic Strengths

III.B.1 Faculty

The Bryan School has diverse and qualified faculty. Many have received their degrees from reputable universities and have excellent training and background. The intellectual contributions made by these faculty appear in many forms: books, research articles, teaching articles, and practitioner articles in a variety of outlets: academic journals, practitioner journals, and in national, international and regional conferences. Many of the publications are in journals that are ranked as top-tier, i.e., the very best in the discipline. Some salient strengths of Bryan School's collective pool of faculty expertise include the following:

- Multiple Interests and Diversity of Research Interests: Faculty in general has multiple research interests. For example, the BADM department has several research interests, founded in areas such as marketing, human resources, organization behavior, international business, strategy, entrepreneurship, diversity, leadership, and health care. The ISOM department has interests in organizational as well as technological aspects of Information Systems. While some may regard the lack of focus as a limitation, it needs to be viewed as resourcefulness and this diversity can be exploited by encouraging interdisciplinary research.
- Multiple Paradigms: Faculty has expertise in multiple research approaches and methodologies. This encompasses both quantitative and qualitative modes of inquiries, including positivistic, interpretive, survey based, experimental, case study, and modeling research. These multiple paradigms allow the investigation of a problem in a holistic and multi-dimensional manner.
- Global Connections: Many faculty members have developed global relationships either because of their origins or interests. The Bryan School has a large presence of international faculty. We have connections in Australia, China, India, Italy, Germany, Mexico, Moldova, Pakistan, and Russia. Several departments have faculty who teach in England, Germany, and the Netherlands.
- Journals: Faculty members in various department are the editors of the following journals: *Case Research Journal*, *International Journal of Information Security & Privacy*, *Journal of Information Science & Technology*, *Journal of Global Information Technology Management*, and *Journal of Real Estate Practice and Education*. These editorships not only provide high visibility to UNCG, but also allow early access to state-of-the-art research and many opportunities to build relationships.

III.B.2 Collaboration and Inter-Disciplinary Research

An important potential source of external support is to leverage Bryan School's faculty expertise in contributing to inter-disciplinary research across disciplines within and outside the school. Encouragingly, many faculty members are already engaged in such collaborative projects within the department, across departments, across units on the campus, as well as with other universities and organizations. One example of collaboration within the Bryan School itself is that of Drs. Buttner and Lowe (BADM) with L. Billings-Harris (a diversity consultant) in studying diversity climate in professional organizations. Another is the joint work between Drs. Nemati and Bearer (ISOM and ECO respectively) on data mining. Discussions have also taken place between the McDowell Research Center in the Bryan School and the Center for Biotechnology, Genomics, and Health Research at UNCG and with North Carolina Healthcare Information and Communications Alliance (NCHICA) in the Research Triangle for research collaboration. Several economics researchers are active with UNCG's new Children and Families Research Network. Finally, the Bryan School is actively involved in initiating new projects on financial literacy with School of Education and assessing marketing and operational needs of the NC Winegrowing industry with NC A&T University.

III.B.3 Ph.D. Programs

The Bryan School has two Ph.D. programs: in Information Systems and Economics. The Ph.D. programs allow access to doctoral students, greater opportunities for research and in general, and more resources for externally supported research. The Ph.D. programs also elevate our status as a research institution and help attract and retain higher quality faculty and students.

III.B.4 Niche Areas Of Competence

The Bryan School has national reputation in some areas and emerging reputation in others. Examples include: Health Economics, Economic Impact and Assessment, Labor Economics, and Global Information Technology Management.

These have been developed as a result of several past and present efforts within the Bryan School which are focused and help develop niche areas. For example, this has resulted in the health related focus in the Economics department. Two other examples of niche areas of competence in the ISOM department pertain to information security and semantic technologies in e-business. Finally, the McDowell Research Center is focusing on Global Information Technology and IT in Healthcare. Such focus areas can help develop critical mass which can lead to better utilization of resources and external recognition.

III.B.5 Conferences Organized By Bryan Faculty

Several Bryan School faculty are involved in organizing national and international research conferences. The Bryan School and the ISOM department sponsor the annual international conference of the Global Information Technology Management Association. ISOM faculty is

also involved in organizing Conference on Information Science Technology and Management in India. Besides worldwide recognition and reputation, such conferences allow Bryan faculty to network with colleagues from all over the world, advance their research agenda and initiate new alliances and research projects. Finally, conferences are often sponsored by external agencies (including federal grant agencies such as NSF) and therefore represent a valuable opportunity to generate external support funds.

III.B.6 Sponsored Research In Economics

The Economics department has had much success with sponsored research. Its faculty have considerable history of and experience in sponsored research in areas of personal behavior related to health and human development (fundable by NIH, Center for Medicare and Medicaid Services and the Tobacco Settlement Fund) and sponsored research experience in program evaluation (current projects funded by USDA and Upjohn Institute).

III.B.7 Pedagogical Innovation

There are several innovative courses offered at Bryan School that could be the basis for external support or research grants. For example, the Economics department has several pedagogical innovations in online education that have received national attention. Further several experiential education courses offered in BADM and the MBA Program have students working on real-world problems for different organizations that have won local and national acclaim for their quality.

III.B.8 Undergraduate Student Research

Undergraduate research is another very popular avenue for generating external support at many institutions and could be used as such within the Bryan School too. Some Bryan faculty are already engaged in supervising undergraduate research. For example, with the coordination provided by a faculty member in BADM, a number of students are involved in Honors work which concludes with a research report. Several faculty members have sponsored students in Honors studies and independent studies that have received local and state level recognition.

IV Opportunities

This section lists some different avenues that exist for Bryan School faculty to seek external support. As mentioned in the introductory section of this report, this information was compiled from input provided by various constituencies. First, the members of BCR offered their knowledge of external funding sources. Since all four departments within the Bryan School are represented on the Committee, we were able to generate a representative list of funding sources, with the recognition that some sources are more relevant to some departments than others. In

addition, the Office of Sponsored Programs and Director of Corporate and Foundation Relations also contributed. The overall tone and intention is to be informative and invitational and the list provided below is suggestive, even if not exhaustive. The types of funding listed below are not in any particular order of priority.

1. Open-Ended Research Grants. These grants are typically funded by large federal agencies as NIH and NSF. The agencies issue program announcements, and such grants typically offer the PI fairly broad latitude in research initiatives within the program's funding mandate.
2. Research Contracts. These are also offered by large federal funding agencies, but the dynamics of funding are more tightly structured than in open-ended grants. The agency typically invites PIs to attend a kick-off meeting where the goals and objectives of the funding are announced, and the recipient of a contract is held to providing an agreed-upon deliverable product in a quid pro quo relationship.
3. Cooperative Agreements. Grants.gov describes these as “An award of financial assistance that is used to enter into the same kind of relationship as a grant; and is distinguished from a grant in that it provides for substantial involvement between the federal agency and the recipient in carrying out the activity contemplated by the award”.
4. Task Orders. Task orders are non-competitive. The faculty member becomes certified as a "qualified vendor" for providing specific services on a research initiative. The agency would outsource the task (e.g., conduct a literature review) to the vendor.
5. Sub-Contracts. In this form of funding an individual or group of faculty serve as de facto consultants or sub-contractors to other researchers who have procured a large grant, and have apportioned the responsibility for completing certain activities to the sub-contractor. An example might be a business school faculty member conducting a cost/benefit analysis as a component of evaluating the effectiveness of some intervention program.
6. Economic Development Grants. The sources of these funds are typically state agencies, but they can also be at the federal level. Examples include the Economic Development Administration (EDA), North Carolina Rural Development Center and the Golden Leaf Foundation. Such agencies receive unsolicited proposals as well as RFPs. The research often provides an economic impact assessment of a proposed activity.
7. Small Technology Transfer Research (STTR). This type of funding involves a university partnering with a small business to produce an innovative product. Faculty from a business school could help market the product of this research.
8. Contracts from Private Companies. Private companies seek the involvement of university faculty through funding notifications as provided by the Community of Science (COS).

9. Interagency Personnel Agreement Act. This is a federal program that pays a university to "lease" the services of a faculty member to work on a specific project for a pre-determined time period.
10. Private Foundations. A fairly large number of private research foundations sponsor funded research on particular topics of interest to them, as the Kaufman Foundation's interest in entrepreneurship. The Bryan School Office of Research (<http://www.uncg.edu/bae/or/>) hosts a list of such agencies at the website.
11. Career Development Awards: These are awards supporting Ph.D.s and professionals who wish to develop their careers in research. Awards are available at different career stages including post-doctoral fellowships, early career development or young investigator awards, career transition awards, mid-career awards, and senior scientist or distinguished career awards.

One prominent example of Career Development Awards are the NIH K-awards (<http://grants.nih.gov/training/careerdevelopmentawards.htm>).

Another example is the Faculty Early Career Development (CAREER) Program at NSF, which is described by the agency as "the most prestigious awards in support of the early career-development activities of those teacher-scholars who most effectively integrate research and education within the context of the mission of their organization. Such activities should build a firm foundation for a lifetime of integrated contributions to research and education".

PECASE Award: NSF describes them as follows: "Each year NSF selects nominees for the Presidential Early Career Awards for Scientists and Engineers (PECASE) from among the most meritorious new CAREER awardees. The PECASE program recognizes outstanding scientists and engineers who, early in their careers, show exceptional potential for leadership at the frontiers of knowledge. This Presidential Award is the highest honor bestowed by the United States Government on scientists and engineers beginning their independent careers".

12. Fulbright Fellowships. Fulbright Fellowships are awarded across the full spectrum of academia. They typically involve the recipient living overseas in a host country and teaching/researching in a major university within that country. Most Fulbright Fellowships have duration of one year.

A comprehensive list of funding opportunities is available at the following URLs at UNCG

Office of Sponsored Programs: <http://www.uncg.edu/rss/findfund.html>

Bryan School Office of Research: <http://www.uncg.edu/bae/or/sources.html#funding>

Federal Grants: <http://grants.gov/>