January 16 \mid 2013

Strengthening UPR-RP Through Development of a Research-Based Academic Culture

External Review of the iINAS, INICIATIVAS DE INVESTIGACIÓN Y ACTIVIDAD CREATIVA SUBGRADUADA, Program

Submitted by: Medeva Ghee, Ph.D. External Consultant

Submitted to: Carmen S. Maldonado-Vlaar, Ph.D. Project Director

Table of Contents

Executive Summary	3
Methodology	6
Results	6
Meeting with the Project Staff	6
Meeting with the Professors	11
Meeting with the Deans	14
Meeting with the Assistant Dean for Sponsored Programs	16
Meeting with the Marketing Director	18
Meeting with the Dean of DEGI	20
Meeting with Undergraduate Students	24
Meeting with Project Evaluator	27
Appendix 1: External Consultant Meeting Agenda	29

Executive Summary

The University of Puerto Rico, Rio Piedras (UPR-RP) campus received funding from the Title V program to expand its research capacity for faculty and students in the Colleges of General Studies, Social Sciences, Education, Humanities and Business Administration. The resulting project, Iniciativas de Investigacion y Actividad Creativa Subgraduada (iINAS), created specific activities over a five year project period that enable undergraduate faculty to engage in research, expand research opportunities for undergraduate students and enhance the institution's grant writing and fundraising capacity. Institutional matching funds supported activities that enabled the participation of the School of Architecture in select iINAS activities in the 2011-2012 project period.

In compliance with the evaluative component of the project activities, the iINAS Project Director invited an external consultant to meet with principal stakeholders involved in the iINAS project in order to monitor activity/strands progress and measure its success. This report includes findings and recommendations corresponding to the second year of the iINAS project.

Summary of iINAS Project Findings and Recommendations

The principal stakeholders unanimously agree that the iINAS project activities are well organized and are beneficial to the consumers of the mentoring and professional development activities provided by the grant. The efforts of the iINAS project staff are applauded by institutional partners who acknowledge and commend the expert and high quality management of the project activities. The following section highlights recurring challenges and opportunities as well as discusses potential solutions to improve project design and implementation.

Creating More Effective Communication Among Institutional Partners. The recurring challenge that became apparent in all discussions centered around a need for greater communication on a more regular basis between the institutional partners involved in the various aspects of project implementation and the iINAS project staff. In many instances, the project staff was unaware of administrative activities related to or supporting the project. There are many examples cited throughout this report that substantiates this urgent need. The first example is evidenced in discussions with the project staff regarding their plans to increase the visibility of the iINAS

Office and its programmatic activities. Some of the ideas of developing brochures and promoting a greater web presence were discussed in a meeting with the Marketing Director during this site visit. The Office of Development, Marketing and Communications has resources to develop these promotional materials. Although the Marketing Director was aware of the iINAS project, she did not have sufficient information to clearly articulate the transformative impact of this project on both students and faculty. The iINAS project staff has the content, data, and access to participants to feature in promotional materials designed to effectively brand the project for the campus community and potential funders. Greater visibility for the campus community would also be accomplished with the establishment of the new iINAS project office. In another example, the iINAS project staff was unaware of any plans to raise \$300,000 within years 3-5, a key strategic goal of the grant. The Marketing Director outlined a comprehensive fundraising strategy (see pgs. 18-19 of this report) to meet this goal. Leveraging resources of the ilNAS Office would contribute substantially to these fundraising efforts. Regularly scheduled meetings between the iINAS project staff and the Office of Development, Marketing and Communications would result in the development of an effective publicity and fundraising campaigns that leverage the expertise of both offices and accomplishes the goals of the grant. Moreover, the iINAS project staff indicated that they have limited access to undergraduates to inform them of the programs sponsored by the iINAS project. This presents another opportunity to collaborate more closely with the Office of Development, Marketing and Communications. With regard to the grants management process, the iINAS project staff works closely with the professors as part of the project's faculty initiatives. Greater collaboration with the Office of Sponsored Projects would support the efforts of Sponsored Programs in piloting the GEM system with faculty poised to develop proposals.

Effective communication is a common challenge on many campuses wherein departments are decentralized and autonomous. Leveraging common, web-based applications can help to centralize efforts to ensure constant communication. One tool that may be employed for this project is a shared calendar, such as a Google calendar, wherein all administrative personnel involved in the project would be able to access. This calendar would list the project activities and can be used to coordinate schedules for project meetings and incorporate project deadlines and milestones. These tools would assist in ensuring effective coordination of project activities. Although the use of technology can enhance communication efforts, planning in person

meetings are critical and provides opportunities to share information, challenges, and insights that will ensure successful implementation of the project activities.

Improving the Administrative Infrastructure. There is a consensus among all institutional partners involved in the iINAS project to review and revamp administrative policies and procedures. Recommendations from the professors proposed leveraging the best practices and lessons learned from the iINAS project staff as a model to inform more effective administrative processes. This would support the Finance Director's efforts to understanding the challenges in order to develop appropriate and relevant strategies that would make the administrative processes more agile.

Institutionalizing iINAS Project Activities. As the project is entering the third year of the grant, one of the key issues that was discussed with each stakeholder is institutionalizing and sustaining these efforts once the grant support ends. The consensus is to identify resources to sustain these efforts. As evidenced from the conversations with the Deans, there is a need to develop novel strategies to continue supporting student and faculty initiatives. Based on the discussions, funding is one aspect required to continue these efforts. In many cases, stakeholders cited a need to transform institutional culture to support these activities.

Changing the culture requires more opportunities for faculty to work with students, for faculty to develop research proposals and pursue external funding to support their research so that their teaching can be informed by their research. External funding can also be used to support various components of the iINAS project activities.

Faculty Release Time. Various strategies were proposed by the Deans of Colleges as well as the Dean of DEGI in support of release time for research-intensive faculty. Joint discussions that involve institutional administrators implicated in this process would ensure all ideas have been considered to develop informed policies that would benefit faculty and contribute to integrating research in the intellectual infrastructure of the university.

Fostering a Community of Scholars. The iINAS project has developed opportunities for students and faculty to present their research. Recommendations from both students and faculty will enhance this effort by reaching across Colleges to provide networking and scholarly opportunities to ensure students and faculty interact and learn more about the research being conducted throughout the campus.

Methodology

The purpose of this visit was to gather qualitative data about the iINAS Title V Project from its principal stakeholders. A two-day site visit was conducted on September 12-13, 2012. Interviews were conducted with the project team staff, faculty, administrators and students involved in the iINAS project. A list of the participants is included on the agenda in Appendix 1.

All of the interviews were conducted with permission of the participants. Consistent with practices to protect human subjects, participants were thoroughly briefed on issues of data confidentiality and security. The interviews for each of the stakeholder groups contained openended questions that enabled the external consultant to gather data on important themes and other program-related issues.

In addition to the on site interviews, project documents were reviewed prior to the site visit, which included the grant application, 2011 annual performance report, and the external evaluation report for the first year of the project.

Results

Meeting with the Project Staff

The Project Director, Dr. Maldonado-Vlaar, and her staff provided an overview presentation of the three strands of the project and discussed challenges and support needed to ensure successful implementation of the project activities in subsequent years of the grant. The three project strands are as follows:

- Expanding undergraduate faculty capacity to actively engage in research
- Expanding research opportunities for undergraduate students
- Improve the institution's grant writing and fundraising capacity

Expanding Research Opportunities for Undergraduate Students: Administrative Process

Ms. Zobeida Perez, the Project Administrative Coordinator, described the administrative scope of the project. In Ms. Perez's presentation, she outlined a comprehensive task list that spans all of the project activities. The accomplishments reported reveal a level of efficiency, quality customer service, and accurate data gathering.

Expanding Undergraduate Faculty Capacity to Actively Engage in Research

Dr. Aurora Lauzardo, Faculty Initiatives Coordinator, described multiple initiatives to effectively engage faculty in research and infuse research practices into the undergraduate curriculum. The various activities that have been implemented for faculty in 2011-2012 include:

- Summer Research Fellowships
- Integration Seminars
- Summer Research Institutes
- Faculty Workshops (Research Capacity Enhancement Training)
- Research, Discovery, and Innovation Seminars
- Additional Activities: Travel journals; Lectures; Radio interviews

The results of the faculty initiatives were detailed in the presentation. Dr. Lauzaudo described a multi-faceted approach to recruit and engage faculty from the specific Colleges. One approach that has been successful is the "coffee meeting" which provides an opportunity for faculty to learn about the various activities in an informal setting. In addition, follow-up communiqués were made to ensure faculty awareness and participation in the specific initiatives. Of the faculty initiatives, the Research Capacity Enhancement workshops were not well attended. Surveying faculty would provide useful information as to potential challenges that prohibit faculty from participating in these workshops and would inform the development of future plans for years 3-5 of the project period. Pre- and post surveys of the faculty initiatives would also help to gauge expectations and determine whether they were met to monitor the quality control of the programmatic and logistic components of the faculty initiatives.

Expanding Research Opportunities for Undergraduate Students

Dr. Ana Isabel Alvarez, Coordinator of the Undergraduate Student Initiatives, described the mission and vision of the student component of the project activities. The objectives outlined in the presentation include:

- Developing a databank on resources for research and creative activity (2010)
- Offering at least eight workshops on research and creative activity each academic year (2010-2015)
- Establishing the Scholars in Residence Program (SR) (2010-2015)
- Establishing the Summer Research and Creative Activity Internship (SRCAI) (2012-2015)

- Establishing an online journal for publication of undergraduate intellectual works (2013)
- Organizing an Undergraduate Research and Creative Activity Symposium (2013 & 2015)

Student Workshops. The outcome and evaluation data of the workshop activities indicate that the project goals are being met and student participant satisfaction scores affirm that the workshop topics, included in the presentation, are of value as evidenced by satisfaction scores ranging from 82% (October 17 Orientation) to 96% (Letter & Statement Workshop). The satisfaction data are displayed in aggregate. Additional analyses that disaggregate the data by College may shed some light on the differences in attendance at the various workshops and inform the development of new workshop topics of interest to students. Open-ended questions would also solicit ideas for new topics to incorporate in subsequent years that may be more suited to students from specific Colleges. The varying participation data warrant future discussions on ways to increase student attendance in the workshops.

The Scholars in Residence Program and Summer Research Experiences. These programs are well defined and provide unique opportunities for (1) students and faculty to engage in research; (2) students to meet regularly to discuss topics relevant to the research process; and (3) students to present their research at conferences internal and external to UPR-RP. One challenge cited included developing a sense of belonging among a special cadre of students from very different disciplines to develop a sense of connectedness among the students and ultimately a peer support group. Another issue to be addressed relates to the pre and post evaluations, wherein observed with the regarding the Did not see change in change in knowledge during. Students indicated that they knew concepts that they didn't really know;

Online Journal. Plans are underway to ensure the successful implementation of the online journal. Dr. Alvarez has begun consulting with experts and researching and identifying content. Future tasks are clearly articulated and the first online journal is scheduled to be published December 2013. One issue to be addressed is that most online journals are STEM-focused. This journal needs to be multidisciplinary. Dr. Alvarez cited the Honors Program as having an online multidisciplinary resource that could be useful in the development process of the online journal.

Undergraduate Research and Creation Colloquium. Dr. Alvarez presented plans for the multidisciplinary colloquium that would span one and a half days. Two-three internationally renowned keynote speakers would be invited. The colloquium would also include a competition by disciplines. Dr. Alvarez is also considering publishing awarded works in the online journal. The tentative timeframe for the colloquium is March, 2013. One of the frustrations cited during the discussion of this initiative is the limited access the iINAS project staff has in communicating events to the undergraduates.

Publicity and Orientation Activities. The iINAS project staff expressed the need to have more exposure and not just by the project personnel. Toward this end, Dr. Alvarez reported on activities to publicize and orient the campus community about iINAS project activities, which includes:

- Developing brochures of student initiatives
- Developing application forms, instructions, evaluation instruments for applications, evaluation instruments for each program and each event, evaluation instruments for mentors and students
- Organizing orientation events for deans, faculty, and students about initiatives
- Developing and distributing posters and flyers for iINAS workshops
- Planning orientations on how to apply to the initiatives

Strengthening Institution's Grant Writing and Fundraising Capacity

The project staff indicated that the pre- and post-award management was localized with the DEGI and the Office of Sponsored Projects. Although, the project team is working closely with faculty to encourage them to develop proposals, they expressed concern that they have not been involved in the planning of activities associated with the grants management process. Further, at the time of this visit, the project staff has not been involved in the planning process of the fundraising initiative to raise \$300,000 between years 3-5. The project staff expressed frustration in not being able to contribute input on key components of the grant.

The project staff detailed the challenges encountered during the implementation of the project activities to date.

- Lack of office space for the iINAS staff
- Unwillingness of the UPR-RP administration to accept electronic signatures of nonresident invitees in order to process travel requests and direct payment contracts prior to the scheduled event.
- Lack of priority order assignment of documents sent for approval at the DEGI.
- Lack of effective communication between the DEGI administrative staff and the project staff
- Extremely bureaucratic process to request meeting rooms in the UPR-RP campus.
- Lack of personnel in the DEGI that is knowledgeable in external funds and grants administration
- The UPR-RP fiscal year-end process is in June and affects the student participant stipend check requests
- Administrative structure requires multiple signatures and approvals. Expect postmanagement to be more agile; require less approvals
- Visibility
- Lack of appropriate personnel on technology- Web page for iINAS
- Lack of direct on line contact with student population
- Faculty members' inertia
- Lack of projection and presence at campus level by higher level administrators

Despite the challenges, it was clearly evident from this visit that the project staff is passionate and extremely committed to this project. Comprehensive programmatic evaluation components are in place to allow for ongoing improvements to project design and implementation. The project staff is forward thinking in their planning and manages to overcome institutional challenges to ensure the successful implementation of the project activities.

Meeting with the Professors

The iINAS project provides a variety of activities for professors to enhance their scholarship and research capacity. The activities that were implemented at the time of this site visit include the Faculty Summer Research Institute and Faculty Summer Fellows Program. The Colleges that participated in these activities included General Studies and Social Sciences. The professors who participated in this interview represented the following Colleges: General Studies, Social Sciences, and Architecture.

Advantages of the Faculty Initiatives

The majority of the professors participated in the Faculty Summer Fellows Program. All in attendance commented on the important benefits this program provided for their research and teaching. For one professor, the Summer Fellows Program provided access to materials that were not easily accessible in Puerto Rico. The materials were incorporated in the professor's research and teaching. Further, the materials acquired will become part of a larger research center that will enable students to benefit from the documents in the future. In other instances, this support helped to bring scholars from other countries to Puerto Rico to participate in seminars and workshops and initiate the development of an international group for research collaborations in a wide variety of academic disciplines.

One professor commented on the support from this program to create a Biocomplexity Transdisciplinary Research Institute that has assembled scholars from various Colleges within UPR and from other institutions. The initial support from the Faculty Summer Fellows Program was important in that it was a good step towards institutionalizing the research in Puerto Rico. The professor is in the process of submitting other research proposals to sustain the Institute.

Two professors reported receiving mini grants that have been beneficial in incorporating their research or materials obtained from external sources to incorporate in their courses, which creates a culture of research based learning.

Another advantage articulated in this meeting is that the iINAS project staff organizes meetings that enable the professors to network and get to know each other.

The professors appreciated the specific structured activities of the summer research grant and seminars, which were described as "inviting activity and evoking an interest." The structure of the summer seminars gave professors an opportunity to read and prepare and afforded time for them to discuss scholarly issues. The summer research grant and seminars empowered professors to link their research with their teaching.

Challenges with the Faculty Initiatives

- Professor from the Faculty for General Studies expressed challenges regarding the
 expectation to conduct research because there are no research labs and no funding to
 support research.
- Professors appreciated the mini grant that enabled them to pursue their research in resource-rich environments. The challenge is that the professors, given their teaching loads, described as ~ 4 courses per semester and student advising/mentoring responsibilities, have limited time to apply the research and resources obtained over the summer.
- Professors were unaware of their peers who participated and benefitted from the summer research faculty program.

Feedback from the Professors to the iINAS Project Staff

The discussion revealed that the iINAS project has been important in exposing students to a culture of research. As a result, students are eager to have more professors who could act as mentors for their research. Further, the professors noted that the project activities have been effective in separating the intellectual and research activities from the expectation that all work has to be remunerated. According to the professors, students are more willing to engage in research projects of their own apart from the fact that they have been in work-study. Thus, the iINAS project has been successful in inspiring students to activate their research and intellectual skills.

The professors provided complimentary remarks regarding the project team's ability to manage the initiatives. The professors acknowledged that the project team has to deal with "a lot of bureaucracy in the university that needs to be addressed by the institution."

- One professor indicated "the project team was very supportive and diligent in the face of a bureaucratic process in order to provide the service that was needed to ensure successful implementation of the project activities."
- Another professor stated that the "iINAS administrative group is extraordinary, consistently dedicated to facilitating faculty research, eliminate bureaucracy; they're brilliant."
- "iINAS has been a discovery; personnel has been so efficient, which allows the professor to concentrate on the intellectual and research work."
- One professor commented that the "Rift between teaching and research is a total disaster. There is a need to revitalize the link and iINAS is compelling in that sense."
- "This program shows that it is possible to work with a more flexible and agile
 administrative system. It's not a question of money but a question of organization to
 make the development of work more viable. The iINAS project serves as a model for an
 effective administrative structure."

Recommendations from the Professors

- Sustainability. Assign resources to ensure faculty initiatives are institutionalized. This is
 necessary to support and maintain the intellectual infrastructure of the university.
 Institutionalizing of research structures, such as the Scholars in Residence would
 strengthen students to become the next generation of professors.
- Institutional Culture. There is a need to transform institutional culture; slow bureaucratic culture. Professors recommend using iINAS as a model to reorganize the administrative procedures in the university.
- Professional Development. Professors would like to participate as an evaluator for student proposals. In so doing, they proposed developing workshops for professors to obtain a greater understanding for developing the student proposals.
- Release Time post- iINAS Sponsored Summer Grant. Professors indicated a need for more research time to be able to incorporate the research they conducted over the summer into their courses. Professors indicated that linked to the summer grant is an agreement with the Deans of each College that would allow teaching release time the semester after the summer research experience. Toward this end, the professors

- recommend meeting with the Deans to discuss setting aside funding that would ensure release time for the summer grant recipients.
- Disseminating Research Experiences Across Colleges. The meetings iINAS organizes with professors provide a great networking opportunity. The professors would like for these meetings to continue. One example proposed involved organizing an end of year annual conference with iINAS. The professors indicated an interest in learning more about the research conducted by their colleagues and suggested inviting professors from other Colleges or Departments; such as Humanities or Department of English. These opportunities could establish a bridge between different departments.
- Establishing a Scholarly Community. iINAS could be a way to connect professors among
 Colleges by creating a blog to make sure professors stay involved. In addition, professors
 entertained the notion of having the iINAS project staff assist with facilitating
 connections between undergraduates and graduate students.

Meeting with the Deans

Deans and senior administrators representing the Colleges of General Studies, Business Administration, Architecture, and Education participated in this interview. Introductory remarks from the participants echoed words of praise for the project activities, management and the staff. The iINAS project provided an opportunity for one of the deans to attend a workshop at Dartmouth on fundraising. For this specific activity, the project staff was complimented on their professionalism in organizing the various aspects of this opportunity.

The iINAS project has also served as a catalyst to generate new activities and workshops. The iINAS project team has taken the initiative to organize workshops, which removes the administrative burden of coordinating the logistics of these activities from the senior administrators. The Deans conveyed their commitment to creating and supporting academic workshops. This discussion revealed that workshops have been taking place in the College of General Studies. An effort is being made to engage professors who are traditionally spending most of their time teaching, in these academic workshops and in mentoring students. One example involved a professor who reviewed the summer proposal of four students. According to the mentor, the materials were well organized, simple and easy to understand.

Sustainability of iINAS Project Activities

During the interview, participants were asked to reflect on strategies required to sustain the project activities once the grant funding has ended. Funding was identified as one of the issues needed to sustain these activities. It was suggested that the administration should create an endowment to fund research at the undergraduate level that would expose students in their first year to research. Funding for these activities would ensure research skills are embedded in the courses and would continue throughout students' academic pathway to develop their sophistication in research skills.

Because research has become more important for the College of Business Administration, particularly as the College is in the process of seeking accreditation, the Dean of this College, Dr. Latortue, requested to participate in the ilNAS project activities earlier than what was planned in the grant proposal. According to Dr. Latortue, less than 10 professors out of 130 were regularly researching and publishing ten years ago. To date, approximately 98 professors are more engaged in conducting research and publishing and between 30-40 professors are actively researching and publishing regularly. This is result of a transformation that included the participation and support of the broader UPR-RP community, from the president down to the professor. In support of their accreditation efforts, the College of Business Administration has made a focus on undergraduate research and is contributing financially to the support of these activities, which also made it the right time to participate in the iINAS project activities. The College has reached a stage where undergraduate research is being promoted. To ensure faculty participation in creating a culture of undergraduate research, Dr. Latortue proposed the following strategies:

- Give more faculty release time to professors so that they have the time to be engaged
 with advising undergraduates. He proposed to take one or two professors out of the
 classroom. In so doing, he argues that the costs are implicit and that no external money
 would be required to support this effort.
- 2. Propose reallocating funds when a professor retires by not replacing the professor. The savings (estimated at \$180,000) could be used as incentive income for professors who publish and who submit proposals to actively engage students in research. An external committee would evaluate the proposals. Professors would have the potential of

obtaining supplemental financial support of \$5k up to \$15k with very explicit conditions and an objective way of evaluating specified outcomes.

- a. Proposed reallocation of a retired professor would provide 1/3 of the salary in the President's Office, 1/3 in the Chancellor's Office and 1/3 for faculty research. It was suggested that this may be a financial incentive to encourage Chairs and Deans to support younger PhDs interested in research.
- 3. Another strategy discussed is to acknowledge that research in academia is not a disconnect with reality and there are practical applications that benefit the community. One of the interviewees took a proactive approach to identify opportunities to participate in research. In so doing, funding was obtained from different agencies by recruiting the right people for the Center. "Researchers have to evolve and follow trends in research. Incentives for faculty are important."
- 4. Every student pays \$25/semester for technology. A portion of this amount could be used to conduct research on building databases.
- 5. Deans would come together to make a proposal to lobby senior administration.

In order to make this university have more students and enter grad school, which is one of the main objectives of the Rio Piedras campus, the Deans emphasized the importance of working with undergraduates, which will lead to a domino effect of ensuring the integrity of the intellectual infrastructure.

Meeting with the Assistant Dean for Sponsored Programs

The Assistant Dean for Sponsored Programs, Ms. Carmen Bachier, was interviewed to assess the progress of developing an Office of Sponsored Research, which is related to the project initiative of strengthening the institution's grant writing and fundraising capacity. Ms. Bachier explained the hierarchy of the pre- and post-award activities. Since 2012, the Deanship of Graduate Studies and Research (DEGI, Spanish acronym) oversees the Center for External Funding and Integrating Grant Initiatives, which processes and supports the pre- and post-award activities. The Grants Electronic Management System, GEMS, (formerly InfoEd) provides an electronic platform for pre- and post award activities. The Center is designed to work with professors to assist with developing proposals and submitting them through the GEMS.

At the time of this meeting, GEMS was in the phase of configuring the first module, which is proposal development. The Center acquired six modules: proposal development, IRB, financial module, etc. A pilot is underway with 2-3 professors.

The grant proposed developing an Office of Sponsored Programs to guide professors through the pre- and post award process within the first three years of the project. Moreover, in years 1-5, the grant indicated that the Title V project staff will organize a series of proposal writing workshops and seminars to increase faculty's knowledge of available funding sources, the individual requirements for various federal funding entities, including the National Science Foundation, National Institutes of Health, U.S. Departments of Education, Labor, Health and Human Services, Agriculture, as well as Puerto Rican organizations and private foundations and corporations.

Ms. Bachier provided the following updates in response to the aforementioned project activities:

- In Social Sciences, the Center has provided training to professors in psychology to develop proposals around the theme of *Violence*.
- The work plan for 2012 and 2013 involves sending emails to professors and deans to
 disseminate funding announcements. Part of the work plan also involves outreach to
 the federal agencies, with a specific focus on those agencies that have not typically
 funded research at UPR.

The Center is expecting a great number of professors who would need training. Toward this end, the Center is creating a committee that will meet with the Chancellor every Tuesday on Financial Planning and Sustainability. The committee is expected to be comprised of a diverse group from Finance, Continuation Studies, Extension Marketing and will present a plan to assist professors who are not accustomed to developing and writing proposals.

The Center is also developing a new strategy that will provide an opportunity for the Deans to meet with the Chancellor and report on the status of their funding strategies/opportunities. The

Center will first reach out to new professors and help them to prepare submissions to Foundations, which according to Ms. Bachier, are easier to submit. A data-informed approach will also be used to provide information about the competitiveness of NIH and NSF grants. An inventory of professors from the different Colleges will be made to specifically target professors to discuss funding opportunities and resources. The Center will also make sure the Deans are aware of the funding opportunities for their respective College. This process will enable an annual monitoring of the number of proposals that are submitted and measure any changes in proposal submission. Ms. Bachier also discussed a presentation she was preparing entitled, *Historical Perspectives and Projections on Management of External Funds for the Future*.

Recommendations

- Although the Center sends emails to professors in various Colleges requesting their needs for workshops, an evaluation mechanism to determine whether the needs have been met may help to improve the programming of the workshops.
- As the iINAS project staff are working very closely with the professors, coordination among the iINAS project team and the Center would ensure professors who are prepared to develop proposal are identified systematically.
- More structured meetings with the iINAS project team would ensure more meaningful collaboration and awareness of the project activities as it relates to the pre- and postaward initiatives.

Meeting with the Marketing Director

The fundraising initiative of the iINAS project requires UPR to raise up to \$300,000 in private funds that will be matched by the USDE to sustain undergraduate research activities. Mrs. Rosa A. Rivera, Director of the Office of Development, Marketing and Communications provided an update on this project activity. This office is new and is the result of a merge of the Office of Development and Alumni Relations and the Communications Office. Their focus with regard to the iINAS project is fundraising to ensure the sustainability of these activities once the grant has ended. Toward this end, the office has established a development plan for the next three years.

The plan consists of developing a campaign, wherein marketing materials will be created to demonstrate the societal benefits of the project activities. This marketing campaign will be addressed and distributed to potential donors, such as private companies, alumni, etc. Events will be planned during homecoming and the 100th anniversary to raise money. Alumni, students and parents will be invited. Each of the Colleges will also be involved in the fundraising efforts. Professors will be given a quota and encouraged to connect directly with alumni to raise money.

Mrs. Rivera articulated four goals for the next three years that involves the following initiatives:

- Developing and disseminating internal and external communication
- Establishing a new Advancement Office
- Monitoring the progress of their strategic plan and work plan
 - o Golf tournament next Friday obtained \$30,000
 - Anniversary
 - Gala event for alumni association
 - Concert at theatre
- Developing campaign strategies
 - o Private: \$20k

o Colleges (5): \$50k

Annual campaign: \$20k

Employees: \$10k

Plans are underway to design and launch a new website for the university. Although iINAS administers their home page, information can be more widely disseminated by sharing information about their project activities and events with this office. According to Mrs. Rivera, they have the capacity to disseminate information university-wide to students.

Recommendations

During this discussion, it became apparent that this office was not well informed about the various activities and resulting outcomes and impact the iINAS project has had and continues to have on its students and professors. Consequently, two main recommendations would enhance these efforts:

19

- There is a need for the iINAS project staff to create a comprehensive communication
 plan that leverages the resources of this office to ensure widespread dissemination of
 the project activities and impact.
- Meetings with the Office of Development, Marketing and Communications and the iINAS project staff should occur on a regular basis to increase awareness of the project activities and share responsibilities of developing promotional materials that will contribute to the fundraising efforts.

Meeting with the Dean of DEGI

Overview of the Project

The Office of Sponsored Research Projects is localized at the DEGI. The Dean of DEGI, Dr. Haydee Seijo, participated in this interview to discuss various aspects of the project. Dean Seijo indicated that she inherited proposal. In her opinion, the project has the potential to impact more students. In her assessment of the undergraduate activities, she indicated that the student participants are organized, well prepared and develop good research questions. In reference to the student symposium that was held last April, the 7 ilNAS students who participated created very professional posters and were able to discuss their research and respond to questions. Dean Seijo stated that the ilNAS students have the potential to become graduate students.

We discussed her impressions of the iINAS project impact on the professors. Dean Seijo reported that the first group of professors who participated in the summer experience numbered 16. Each professor gave a 10-minute presentation of their experience, which was not sufficient given their enthusiasm to discuss their research experiences. How can they include that experience in their classes? Dean Seijo commented that she was very satisfied to see recharged faculty with just one experience. She remarked, "It will be important to see how the experience permeates in their course syllabus."

Administrative Challenges

Dean Seijo admitted that the administrative procedures need to be more agile or faster. "Within the institution, there is a culture that is snail mail." The institutional processes do not facilitate quick process of working with external, international speakers. One example discussed was the travel arrangements, which requires her signature. Currently, administrative processes require multiple signatures and the challenge occurs when signatures are required at the time of the activity. One suggestion provided by Dean Seijo is to identify new strategies to communicate with project participants to ensure administrative processes are managed in a timely fashion. Regardless of the administrative challenges, the iINAS project team ensures the activities go on as scheduled. To address the administrative challenges, she described the recent creation of an office that will review administrative procedures. The office has a new Director of Finance who is enthusiastic about change and who has been working in the recinto. A meeting, requested by DEGI, assembled the Office of Sponsored Programs, Director of Finance, Auxillary Dean of Research and Dean of DEGI to discuss strategies to expedite and improve administrative procedures. The administrative staff needs to understand how important it is to deal with researchers' requests in an efficient manner. Despite the administrative challenges, Dean Seijo affirmed that the "iINAS project staff goes beyond the call of duty."

Update on the Proposed iINAS Project Office

The progress report indicated that a plan has been approved to relocate the iINAS project office to the first floor of the main library. Dean Seijo confirmed that there have been discussions with the engineer regarding the floor plan and that funding has been allocated for this project activity. The Director of the Library apparently was eager and cooperative at the beginning, but did not realize the amount of space that was being requested for the undergraduate iINAS project participants. Conversations have since stalled. Dean Seijo proposed a series of meetings that include the Chancellor in order to move forward with this project activity.

Institutionalizing iINAS Project Activities to Ensure Sustainability

The progress report and meetings with various constituents have clearly identified the value-added benefit of the project activities in enhancing the scholarship and research activities for both students and faculty. The following describes Dean Seijo's thoughts on how to institutionalize some or all of the project activities.

- Continue coordinating symposia or small conferences for students that will keep students interested in research. The symposium last April for undergraduates and graduate students resulted in 84 poster sessions and 20 conference sessions. Dean Seijo was amazed at the response, as most of the projects presented were from undergraduates and included the iINAS student participants. Plans are underway to make this an annual symposium.
- Ensure opportunities exist that enable professors to continue working with students.
 Consider formalizing an Independent Studies like course where students would be eligible to receive credit hours to do research.

Release Time for Faculty

Dean Seijo indicated that the Chancellor's commitment to research is absolute. DEGI has been creating ways to provide professors with assistance to present their research at conferences. Further, the Deanship of Academic Affairs has provided funds to support this initiative. The Academic Senate is considering a new policy for graduate studies that states that professors who are productive and are able to obtain external funding can have release time for research that can range from 3-6 credits. It is her hope that this proposed policy would be approved by next month, October 2012. The Subcommittee of Administrative Council has been working with a definition of release time and productivity to produce a clear policy. Further, discussions that clearly articulate parameters defining research and the types of publications that should be taken into account for promotions will also be broached. Release time should also be taken into consideration for faculty who are going abroad to do their research. The release time would be available after their summer research experience. Professors would prepare a work plan indicating their time and effort and describing their activities for submission. A follow-up report would be required to measure the professor's progress with respect to their work plan. This process would monitor the effectiveness of providing release time to faculty.

Project Management Procedures and Mechanisms

Do you consider the opportunities you have to meet with the iINAS Project Director sufficient to have a clear understanding of the status of the project or address any challenges? In response to

this question, Dean Seijo indicated that she meets with Dr. Maldonado-Vlaar monthly to stay aware of the project activities, but confesses that more communication would be helpful. She mentioned that there is open communication and a good working relationship with the project director and staff.

The Office of Sponsored Programs and iINAS

Dean Seijo explained that dealing with the modules and implementation and configuration of a new system has been a "huge change of culture for employees." DEGI has focused on this process. There is a Grants Administration Specialist to prepare workshops for the faculty. Efforts are needed to spread the word about GEMS and communicate this new system more assertively. Currently, small groups of professors have been recruited to use the modules to obtain their impressions and input. Ten staff members are being integrated into the Office of Sponsored Programs to assist with this new initiative and manage time and effort reports. Upon reflection, she agreed that more communication to the iINAS project team would be beneficial during this process.

Recommendations

- Need to design strategies as to how efforts can be sustained. "Great effort! The group has
 done well and are very passionate; we need to keep it alive."
- Greater visibility is needed. Dean Seijo mentioned iINAS in several meetings and not everyone is aware of the project.
 - Use the Webpage, post activities
 - The current iINAS project office is not centrally located. This speaks to the importance and urgency to get the new office established.
 - Take advantage of the university radio station to be interviewed during shows. DEGI has ½ hour program to present research and researchers on radio. Make a program about iINAS and include students who have been through the process. Propose creating a session for iINAS students and faculty weekly on Mondays at 5pm. The radio reaches a large student and external audience.
 - Work with the Office of Development, Marketing and Communications to invite the
 Press to cover iINAS project external seminars and other activities.

Meeting with Undergraduate Students

Undergraduate Student Initiatives

During this site visit, a meeting with students from two of the iINAS project undergraduate initiatives, Scholars in Residence Program (SR) and the Summer Research and Creative Activity Internship Program (SRCAI) was organized to obtain their feedback and recommendations.

Population and Sample

Seven undergraduates participated in this interview. Four students participated in the Scholars in Residence Program (SR) and three participated in the summer research program. More than half of the participants were females. Majors reported by the students consisted of political science, geography, sociology, psychology, criminology and neuropsychology. At the time of the interview, the student sample was comprised of one student each currently enrolled in their second, fifth, or sixth year. Three students were enrolled in their fourth year. Prior to the start of the interview, students were apprised of their rights in accordance with regulations governing human subject protection. To further protect the confidentiality and anonymity of subjects, the following findings do not reveal any information that would identify the student participants.

Student views of the iINAS project activities

Student responses clearly revealed the value-added benefit of the iINAS project activities. According to one of the students, the iINAS project provided opportunities for students to do research and encouraged students to present their research and foster relationships with professors. For most of the students, it was their first time doing research.

Building Awareness of the Research Process, Graduate School and Career Opportunities

One of the benefits mentioned involved helping the student become more aware of applying to graduate school. In this instance, the student was interested in applying to graduate school. The iINAS project resources and the student's mentor helped to define the student's research interest and discipline for graduate study. In addition, the iINAS project activities and faculty mentor were essential in clarifying what it means to be in a graduate program, what it means to do research and create new knowledge, how to develop research questions and the importance of being motivated in a graduate program. A student commented, "Dr. Alvarez did a great job in saying that noone else in Puerto Rico has done this." Students showed enthusiasm about their

research experience and mentioned that through research, you have the opportunity to "meet cool people, experts and professors." One student recounted an experience of presenting a poster and obtaining feedback from other researchers and described how it was a motivational experience. In some instances, students indicated that, prior to their research experience, they did not fully understand what it meant to have a Master's or PhD degree; nor were they aware of what a thesis is. Nearly half of the participants (3 out of 7) expressed an interest in applying to graduate programs. Lastly, the interviews also revealed that the research experience broadened students' minds of career opportunities. All students continue to do research with a faculty mentor.

Student Comments on the Summer Research Program

Students unanimously agreed that the length of the summer research program (six weeks) was too short. Students conducting research in the social sciences needed IRB approval before being able to begin the research. According to the students, this process took approximately two weeks and as such did not allow for sufficient time to work with participants in the research study. Students also remarked that the research has enhanced their academic development. In some courses, students commented on having a greater understanding of the methodology because of this experience and are also eager to publish their work.

Student Comments on the Scholars in Residence Program

Students who participated in this program indicated that they grew a lot academically and personally as well as learned a lot in their discipline and in their abilities as future researchers. They all expressed an interest to continue after the actual program experience ended. The students were aware that without this program, they would not have been able to do research and advocated for more students to have the opportunity to participate in this program. One of the students was accepted into an external internship program and indicated that he/she felt more prepared and more disciplined as a result of participating in the program.

Most Rewarding Experience

Students were asked to comment on their most rewarding experiences.

• Summer Research: The most rewarding experience was ... "to know that you structured an idea and researched a new project; like nurturing a baby idea"

- For one student, the most rewarding experience was talking to people about their experiences in relation to the student's research project.
- For one student, the most rewarding experience was ... "When my family understood what I was doing. I presented at the final ceremony at iINAS, and my parents were proud. They kept asking questions. It was rewarding to have disciplined yourself to be a researcher."
- For another student, the most rewarding experience was ... when a student asked a
 question and the mentor did not have the answer. The student realized that he/she was
 contributing new knowledge and that the research was indeed important.

Student Recommendations for the Summer Research Program and Scholars in Residence Program

• Summer Research Program

- Because of the length of the program, better communication of program expectations and deliverables need to occur earlier in the 6 week period
- Sessions should be less abstract. For example, if discussing how to create a poster,
 provide an opportunity for students to create their posters
- For students doing research for the first time, need to explain that research is a difficult process
- Invite other students that have published their work as an idea for one of the weekly meetings
- o Talk about lessons learned, need concrete examples
- Opportunities to continue their research projects
- o First meeting reunion for summer research should be about the IRB process

Scholars in Residence Program

 Classes with Alvarez, feedback should be weekly instead of twice a month to learn more about different areas

- Didn't talk about their projects during their meetings; students would like to incorporate this in the reunions
- Sessions should be hands on with specific examples
- Need feedback more timely
- Sessions were structured with one format, which may not have been relevant for other disciplines
- Unrealistic to attend all projects, but need a space where students can talk about the project
- Incorporate dedicated time to discuss their research projects and learn about the research projects of fellow students
- Students expressed an interest in being involved in the conceptualization of the weekly meetings
- Used SR Program students to recruit students for subsequent years

• General Suggestions

- o Involve graduate students in similar disciplines
- o Research and classroom and should compliment each other
- Develop a scholarly community with students in both programs as well as grad students

Meeting with Project Evaluator

The last meeting provided an opportunity to discuss the project's evaluation component with Ms. Gladys Colon-Rivera, the project evaluator. Based on the review of the year 1 evaluation report and the interview with Ms. Colon-Rivera, the project evaluation activities are comprehensive and involve literature-based strategies and validated survey methodologies to effectively monitor and assess the project activities toward its stated goals and objectives. At the time of this meeting, Ms. Colon-Rivera indicated that she was working on the second evaluation report base that will involve focus groups with students and faculty.

Recommendations

Currently, the evaluative activities have focused primarily on the short-term impact of the programmatic activities. One recommendation would be to develop and disseminate follow-up surveys for students and faculty to assess the long-term usefulness of the project activities. Continuous monitoring of project participants is essential to fully understanding the long-term impact of the project and the factors that impact students and faculty to more fully engage in the research enterprise in their respected disciplines. The follow-up surveys would gather data on the impact of the project activities with respect to a change in the level of knowledge of key research areas, perceived usefulness of the project activities, sustained level of participation in related research activities, and career and educational intentions. These efforts will not only provide a long-term assessment of the project activities, but also assist in tracking the educational progress of the student participants.

Appendix 1: External Consultant Meeting Agenda



University of Puerto Rico
Río Piedras Campus

"Strengthening UPR-RP through the Development of
Research Based- Academic Culture"

Department of Education Title V



External Consultant Meeting (Title V)

Agenda

Monday, September 10, 2012

9:00 am- 5:00 pm

Jaime Benítez Rexach 306 Meeting Room

8:00 am- 9:00 am Departure from Hotel Casa Blanca Old San Juan

Dr. Medeva Ghee

Dr. Carmen S. Maldonado-Vlaar

9:00 am- 12:00 noon Introductory Meeting with iINAS staff

Dr. Carmen S. Maldonado-Vlaar, iINAS Director

Dr. Aurora Lauzardo, Coordinator

Dr. Ana I. Álvarez, Coordinator

Mrs. Zobeida Díaz Pérez, Project Manager

Dr. Medeva Ghee, External Consultant

12:00 noon- 2:30 pm Lunch

Dr. Carmen S. Maldonado-Vlaar

Dr. Aurora Lauzardo

Dr. Ana I. Álvarez

Mrs. Zobeida Díaz Pérez

Dr. Medeva Ghee

2:30 pm- 3:30 pm iINAS

Meeting with professors- iINAS

Dr. Vanessa Vilches, General Studies Professor

Dr. Madeline Román, Social Sciences Professor

Dr. John Stinson, Social Sciences Professor

Arch. Jorge Lizardi, Architecture Professor

Dr. Estevao Fachini, General Studies Professor

Dr. Don Walicek, General Studies Professor

Dr. Jorge Giovannetti, Social Sciences Professor

Dr. Medeva Ghee

3:30-4:30 PM iINAS

Meeting with Deans iINAS

Dr. Luis A. Ferrao, College of General Studies Dean

Dr. Paul Latortue, College of Business Administration Dean

Arch. Francisco J. Rodríguez, College of Architecture Dean

Dr. Edwin Vega, College of Education Associate Dean

Dr. Medeva Ghee

4:30pm – 5:30 pm Back to Hotel Casa Blanca

Dr. Medeva Ghee

Dr. Carmen S. Maldonado- Vlaar

7:30pm Dinner-Restaurant Old San Juan

Dr. Cynthia Garcia Coll

Dr. Carmen S. Maldonado- Vlaar

Dr. Aurora Lauzardo

Dr. Ana I. Álvarez

Dr. Medeva Ghee



University of Puerto Rico

Río Piedras Campus

"Strengthening UPR-RP through the Development of

Research Based- Academic Culture"

Department of Education Title V



Tuesday, September 11, 2012 9:00 am- 5:30 pm

8:00 am-9:00 am Departure from Hotel Casa Blanca Old San Juan

Dr. Medeva Ghee

Dr. Carmen S. Maldonado-Vlaar

9:00 am-10:00 am Deanship of Graduate Studies and Research

(DEGI for its Spanish acronym)

Ms. Carmen Bachier, Assistant Dean for Sponsors Programs

Hogar Masónico Building, First Floor

Dr. Medeva Ghee

Dr. Carmen S. Maldonado-Vlaar

10:00 am-11:00 am Meeting with Marketing Director UPR-RP

Mrs. Rosa A. Rivera Rivera, Director Román Baldorioty de Castro

Building, First Floor

Marketing, Development and Communication Office

Dr. Medeva Ghee

Dr. Carmen S. Maldonado-Vlaar

11:00 am-12:00 noon

Meeting with Chancellor

Dr. Ana R. Guadalupe, UPR-RP Chancellor

Dr. Haydeé Seijo Maldonado, DEGI Dean Román Baldorioty de

Castro Building, Second Floor

Chancellor's Office

Dr. Medeva Ghee

Dr. Carmen S. Maldonado- Vlaar, Director

12:00 noon- 2:00 pm

Lunch iINAS

Meeting with undergraduate students

General Studies College; JBR- 306 Meeting Room

Scholars in Residence Program 2011-2012

- María R. Santiago, Undergraduate
- Cheryl Vázquez Colón, Undergraduate
- Dana Muñiz, Undergraduate
- Nelson Schwarz Iglesias, Undergraduate

Summer Research and Creative Project Experience

- María C. Chaparro, Undergraduate
- Blanca Santo, Undergraduate
- Jaime Géliga, Undergraduate

2:00 pm- 4:00 pm

Exit Meeting and Recommendation

General Studies College

JBR-306 Meeting Room

4:00 pm- 5:00 pm

Meeting with internal evaluator iINAS

Mrs. Gladys Colón, iINAS Evaluator

Former Architecture Building, Second Floor, Office 202

iINAS Administrative Office

Dr. Carmen S. Maldonado- Vlaar

Mrs. Zobeida Díaz Pérez

Dr. Medeva Ghee

5:00 pm- 6:00 pm Back to Hotel Casa Blanca

7:30 pm Dinner

Dr. Carmen Maldonado-Vlaar

Dr. Medeva Ghee