I.   Narrative Description of the Status of the Discipline from a National Perspective (including emerging issues and trends)

Faculty-student collaboration in academic research and creative works is one of the most enriching and rewarding experiences on an undergraduate campus. In fact, this activity is so important that it is becoming one of the standards of excellence by which nationally pre-eminent undergraduate institutions are measured. According to George Kuh (2008, AAC&U), participation in a high impact practice such as faculty-student research at the undergraduate level, leads to deep learning that correlates with higher levels of student performance. Such engagement, argues Kuh, increases the frequency of meaningful interactions with faculty and peers. The net result is that students spend more time and effort in hands-on and collaborative forms of learning that contribute to the development of their analytical thinking skills. Interestingly, data suggest that a mentored research experience has benefits for all students, but particularly for students from underrepresented groups (e.g. Vieyra, Gilmore, Timmerman, 2011, CUR Quarterly) and in STEM disciplines.

More broadly, some institutions have begun to recognize that a well-conceived and managed undergraduate research program not only serves current students, but can also be an excellent tool for the recruitment of new students (e.g., Noji, 2011, CUR Quarterly). Showcasing faculty-student research is quickly becoming a primary public relations strategy that increases the visibility of academic programs and encourages students to become involved in research early in their academic careers.

At the College of Charleston, we believe that students who participate in faculty-mentored projects will gain a better appreciation for the nature of scholarly work. Faculty members who participate in these projects are expected to imprint understanding and love of scholarship on the students and to help the students develop skills appropriate to the discipline of the inquiry and also to develop improved communication skills. Furthermore, it is hoped that the faculty-student teams who work on collaborative projects will serve as ambassadors of excellence both on and beyond the College of Charleston campus.

II.   Program
  a. Mission statement: To provide grant funding that expands the opportunities for undergraduate students and faculty to work collaboratively on scholarly projects in the academic year and during the summer. In the context of this program, research and creative activities are defined as *"any intellectual, inquiry-based project undertaken by the undergraduate student that advances the knowledge of the student in an academic discipline, immerses the student in the culture of the discipline, and leads to new scholarly insights or the creation of new works that add to the wealth of the discipline."*
  b. Program goals and their relationship to the College's strategic plan:
      i.   Program Goal 1: To provide financial support for undergraduates at the College of Charleston to work on a research or creative project under the mentorship of a CofC faculty member.
      ii. Program Goal 2: To provide sufficient financial support of faculty during summers so that they are encouraged to work collaboratively with students.
      iii. Program Goal 3: To ensure access to research support for faculty-student teams across all disciplines represented at the College of Charleston.
      iv. Program Goal 4: To provide opportunity for students to pursue professional development within the context of their chosen discipline, particularly in terms of dissemination of the research results or creative products in appropriate academic or professional forums.
      v.   Program Goal 5: To provide training opportunities for students and faculty who are interested in learning more about faculty-student collaboration and strategies for successfully implementing collaborative projects.

c. Strategies and tactics in the College's strategic plan your department would place as highest priorities *(please consider this a preliminary and tentative list that would collectively provide a starting point for a workshop on strategic priorities this fall)*
    i. Strategy 1: Enhance the Undergraduate Academic Core
        1. Provide each student a personalized experience that integrates classroom learning with at least two the following: research and creative activities, civic engagement, study away, internships and peer education
    ii. Strategy 2: Develop and Retain a Highly Qualified and Diverse Faculty and Staff
        1. Enhance resources for pedagogical innovation, faculty research, and creative activity through the re-establishment of a faculty development center. Incentivize faculty and staff to write and administer grants in all of these areas.
d. Student Learning Outcomes of the program
    i. Learning Outcome #1: Student will be able to demonstrate knowledge and application of the "tools of the discipline" as a result of participation in a project funded by the URCA program.
    ii. Learning Outcome #2: Student will demonstrate the professional skills of the discipline in the form of a poster or oral presentation at a professional conference and/or a publication in a professional journal.

III. Narrative Summary and Analysis of Departmental or Program Accomplishments

The Undergraduate Research and Creative Activities Program had a successful and exciting year of supporting the collaborative work of students and faculty across multiple disciplines at the College of Charleston.

Faculty Participation in Administration of Program:
<u>Academic Year Grants</u>: A group of 20 faculty members, representing 20 different programs/departments of the College served on the campus review committee for MAYS, AYRA, and RPG funding requests. At least one faculty member from each school served on the committee, as well as a representative from the library. Committee members participated in 2 rounds of proposal reviews: September and November. Reviewers read all proposals submitted in the round and completed an online evaluation of each proposal. These individual evaluations were compiled, and the review team met to discuss/resolve discrepancies and to determine a ranking of proposals. Building on the work of previous years, the evaluation rubric for the proposals was refined so that final decisions about funding were based on more standardized, and thus valid, assessments of project quality and effectiveness of the mentoring plan.

Faculty on At Large Committee:

School	Department	Name	School	Department	Name
SOA	Theatre	McCabe, Janine	LCWA	Hispanic Studies	Weyers, Joseph
SOB	Econ and Finance	Evan, Jocelyn	LCWA	French, Francophone and Italian Studies	Signori, Lisa
SOB	Marketing and Supply Chain	Blose, Julia	SSM	Physics	Carson, Joe
SEHHP	Health & Human Performance	Flynn, Michael	SSM	Chem & Biochem	Doig, Marion
SHSS	Philosophy	Nadelhoffer, Thomas	SSM	Computer Science	Anderson, Paul
SHSS	English	Carens, Tim	SSM	Geo & Env. Geosci	Vulava, Vijay
SHSS	Political Science	Liu, Guoli		Academic Affairs	Diamond, Bev
SHSS	Psychology	Ruscio, Mike		Library	Profit, Steven
SHSS	Religious Studies	Siegler, Elijah		Student Affairs	Ben-Yisrael, Carrie
LCWA	Classics	Gentile, Kristen		Honors College	Folds-Bennett, Trisha

SURF grants: For the SURF review process, 31 faculty members from 17 different departments/programs and at least one representative from each school served on the review panel. Reviewers were sorted into two levels. At the first level, 7 multi-disciplinary teams of 2-3 reviewers each were created. Each reviewed 6-8 proposals focused on similar research questions and methodologies. Each of these teams ranked their proposals, eliminating any proposals that were considered to be of a quality that did not merit funding. These groups of ranked proposals were submitted to a second level of reviewers, a team made up of one representative from each of the six schools. This team made final recommendations for funding. As with the academic year grant process, evaluation rubrics were refined to increase validity and reliability.

SURF 1st Level Review Committee:

Name	Department	School
Dudgeon, Wesley	Health & Human Performance	SEHHP
Flynn, Michael	Health & Human Performance	SEHHP
Carens, Timothy	English	SHSS
Liu, Guoli	Political Science	SHSS
Ruscio, Michael	Psychology	SHSS
Siegler, Elijah	Religious Studies	SHSS
Simonian, Susan	Psychology	SHSS
Gentile, Kristen	Classics	SLCWA
Signori, Lisa	French, Francophone & Italian Studies	SLCWA
Weyers, Joseph	Hispanic Studies	SLCWA
McCabe, Janine	Theatre	SOA
Blose, Julia	Marketing & Supply Chain Management	SOB
Evans, Jocelyn	Economics & Finance	SOB
Anderson, Paul	Computer Science	SSM
Carson, Joseph	Physics & Astronomy	SSM
Chartes, George	Physics & Astronomy	SSM
Cory, Wendy	Chemistry & Biochemistry	SSM
Deavor, Jim	Chemistry & Biochemistry	SSM
Doig, Marion	Chemistry & Biochemistry	SSM
Heldrich, Rick	Chemistry & Biochemistry	SSM
Larsen, Michael	Physics & Astronomy	SSM
McElroy, Eric	Biology	SSM
Morrison, Susan	Biology	SSM
Rutter, Matthew	Biology	SSM
Southgate, Agnes	Biology	SSM
Vulava, Vijay	Geology & Environmental Geosciences	SSM

SURF 2nd Level Review Committee:

Name	Department	School
Diamond, Beverly	Senior Vice Provost	Academic Affairs
Hakim-Butt, Karen	Associate Dean	SEHHP
Hays, Maureen	Sociology & Anthropology	SHSS
Gomez, Michael	Hispanic Studies	SLCWA
McBroome, Deanna	Music	SOA
LeMesurier, Brenton	Mathematics	SSM

Grant Application and Award Activity

Academic Year Grants (MAYS, AYRA, RPG): In total, 69 applications were received during the academic year, representing a total request of $98,705; a 44% increase over last year. Of these, 58 proposals were awarded funding support for a total award of $48,600. Requests exceeded the total available budget by $50,105. In order to distribute funding among a greater number of applicants, 100% of MAYS and 46% of RPG awards were not fully funded. Breakout by Award Type:

MAYS	24 Applications	$ 78,835	Amount Requested
	19 Awarded	$ 34,100	Amount Awarded
AYRA	2 Applications	$ 600	Amount Requested
	2 Awarded	$ 600	Amount Awarded
RPG	43 Applications	$ 19,270	Amount Requested
	37 Awarded	$ 13,900	Amount Awarded

One focus of our planning and outreach has been to increase the diversity of disciplines represented among applicants and awardees. We have struggled to achieve that goal, as evidenced by the data in the graph below. Despite efforts to publicize that the opportunities for funding are not limited to the sciences (and psychology), to reach out to department chairs in disciplines outside the sciences, and to highlight the work of faculty and students in diverse disciplines through links to video and testimony on our website, we continue to receive the majority of applications from science disciplines (including psychology). In their defense, these applications are of the highest quality and represent an impressive record of mentoring students well; it is often tempting to fund all of the proposals in the sciences to preserve the quality of experience that we expect students to have in the URCA program. However, the review committee has focused specifically on reflecting the same diversity of disciplines in funding decisions that exists in the application process. Last year, we began actively seeking applications from the humanities, an initiative that was led by a team of faculty who attended a CUR conference on undergraduate research in the humanities in spring 2012. A representative from this team visited several departments in the humanities to talk about the URCA program and encourage applications. We are encouraged by the increase in academic year applications from SOB and LWCA who have not submitted in recent years and will continue our diversification efforts this upcoming year.

	SSM	HUM	SS	SOA	EHHP	SOB	LWCA	Library
2011-2012								
Applied	59%	4%	25%	1%	11%	0%	0%	0%
Awarded	58%	4%	24%	4%	11%	0%	0%	0%
2012-13								
Applied	84%	5%	21%	2%	0%	0%	0%	0%
Awarded	78%	8%	25%	3%	0%	0%	0%	0%
2013-14								
Applied	62%	7%	20%	4%	0%	1%	3%	0%
Awarded	67%	7%	19%	2%	0%	0%	3%	0%

SURF Grants: In total, 52 applications for SURF grants were received, representing a total request of $305,688. Of these, 37 applications were awarded funding support for a total award of $188,344.

SURF 52 Applications $305,688   Amount Requested

     37 Awarded $188,344   Amount Awarded

Diversity with regard to Discipline:

SSM	HUM	SS	SOA	EHHP	SOB	LWCA
Applied: 71% Awarded: 73%	Applied:10% Awarded: 5%	Applied: 10% Awarded: 11%	Applied: 6% Awarded: 5%	Applied: 4% Awarded: 5%	Applied: 0% Awarded: 0%	Applied: 0% Awarded: 0%

Dissemination of Results: Although tracking of this outcome is ongoing, we have some insight regarding the dissemination of results through our RPG funding opportunity. Of the 37 students who received RPG funding to attend a regional or national conference during the 2013-14 academic year, 13 were previous recipients of research support in the form of MAYS, SURF or AYRA funding. The 2012 SURF awards have led to the publication of at least 4 peer-reviewed manuscripts over the past year.

Celebration of Scholars Event: At the end of each summer, the URCA program holds a poster session to showcase the faculty-student research that has occurred during the summer months. All faculty-student teams who receive SURF funding are required to present at this session. The event also includes submissions from faculty and students outside of the SURF program. In total, 84 faculty –student teams presented posters that displayed the results of their collaborations on Convocation Day 2013. The event was held in Physician's Promenade and Auditorium, and was coordinate with the Convocation schedule to encourage attendance.

Training and Outreach

Campuswide Information Sessions: In an effort to better inform faculty and students about the opportunities offered through the URCA program and to provide guidance regarding the application process, two information sessions were held, one in the fall and one in the spring. In addition, Trisha Folds-Bennett presented an overview of the program at New Faculty Orientation.

Faculty Development

Enhanced Institutional Membership in the Council on Undergraduate Research: For 2011-12, the College of Charleston moved to an Enhanced Institutional Membership in CUR. With this membership, all faculty and students on campus are eligible to be members of CUR and to receive their publications and other electronic communications. As a result, the College currently has 118 faculty (55) and students (63) registered as members in CUR. If these same persons had joined as individual members, the cost to the College of Charleston would have been approximately $6700 (vs $3000 for the Enhanced Institutional Membership).Recently, Associate Professor Chris Korey was elected as a CUR Biology Councilor.

His position in conjunction with our strong membership numbers made possible with the Enhanced Institutional Membership will serve to increase our national visibility in undergraduate research.

Progress Towards 2012-2013 Goals
Over the past five years, we have worked to refine the review process, to increase diversity in the program, and to provide opportunities for faculty and student development beyond simply funding grants. We will continue to work toward improvement in these areas for 2013-14. Last year, we focused our efforts on four particular areas for advancement. We will continue to develop these areas over the upcoming year.

1) **Expansion of Disciplines represented in review process** – Although we have a diverse representation of disciplines on the review panel, our goal is to have one representative from every single department on campus. That way, we can ensure that the various types of scholarship and creative activity that characterize the academic departments on our campus are given voice in the grant review process. Although we did not hit the 100% target, we at least had reviewers from every school represented. The SURF review panel had more diverse representation as well.

2) **Assessment of Impact** – Last year, we proposed to initiate a more formal assessment approach to the evaluation of the URCA program. However, a new URCA director did not start in 2013 as anticipated. With the recent hiring of an Associate Dean who will also serve as URCA Director, we are well positioned to begin this process in the upcoming year. Assessment tools will include student tracking and surveys for both students and mentors. We will also create a rubric to be used by faculty mentors that helps us to determine in a more standardized manner the extent to which students learn the tools of their discipline through the projects that URCA funds.

3) **Heightened Awareness of the Faculty-Student Research being Conducted at CofC** – Starting in summer 2012, the Celebration of Scholars event was better integrated with the Convocation Day activities. We continued this initiative in 2013. The event was located visibly on Physician's Promenade. Traffic through the event was much heavier than in the past when attendees had to make a more intentional effort to attend. For the next three summers, Physician's Promenade will not be available due to renovations of RHSC. A similarly visible venue will be sought out for this event to maintain a heightened awareness of our undergraduate student research accomplishments. Additionally, we are planning to more actively utilize social media as a venue to further highlight undergraduate research.

4) **Increased Publicity of Program Opportunities** – Over the past year, we made a concerted effort to spread the word about grant opportunities through visits to departmental meetings and student organization meetings, partnerships with other programs (e.g., McNair, ROAR Scholars, Spectra, Honors College), updating of website information, and strategically-placed posters/flyers around campus. While this did not result in an increase in total number of applications, it did increase the diversity of departments applying for academic year grants. Unfortunately, this increase was not mirrored in the SURF applications. These efforts will continue this upcoming year paying special attention to ways in which we can utilize social media.

New Initiatives

1) **Summer Programming for Research Students in the Humanities and Social Sciences** – In the summer of 2005, a Biomedical Skills course was initiated through funding from the National Institutes of Health SC-INBRE grant. The course was designed to augment summer research for science students receiving funding through INBRE and has continued with funding from the Howard Hughes Medical Institute Education Grant. Each summer, 15-30 students conducting research primarily in SSM attend a weekly seminar that covers topics including lab safety, scientific writing and research ethics. This course has been invaluable to undergraduate research students as an opportunity to work on skills outside of the laboratory. Using the Biomedical Skills course as a model, one goal this year is to develop a discipline appropriate summer course for students in the humanities and social sciences.

2) **Update application process.** This upcoming year, we will work to streamline the application process by implementing online forms for URCA grant applications.