

ABSTRACT

The Academic Senate's Council on Research (COR) serves as the faculty's shared-governance committee on matters impacting the research mission of the University. This includes managing the Faculty Grants Program (FGP) which is subdivided into a Travel Grants program, a Research Enabling Grant program (REG) and a Faculty Research Grant (FRG) program. The Travel Grants Program is awarded to any Academic Senate faculty member with a research-related travel need while the REG and the FGP is awarded to Academic Senate members on a peer-reviewed, competitive basis. The impact of the FGP across campus is palpable: the grants are awarded across disciplines in both North and South campus and enable publications (221 publications reported in 2008-09), generate extramural funding (\$750,361 in 2008-09) support graduate students, provide support to disciplines where extramural support is minimal, and act as seed funding for initiation of research concepts.

INTRODUCTION: THE COUNCIL ON RESEARCH

The Council on Research (COR) is a committee of the Academic Senate. COR has 10 representatives including a Chair, a Vice Chair, and 8 regular members selected from the various divisions. Membership on COR is by appointment of the Committee on Committees. In addition to the regular members, the Vice Chancellor for Research (VCR) is an ex officio member of COR and there are both undergraduate and graduate council representatives. Its mandate is to advise the Chancellor and inform the Senate concerning (a) faculty perspectives on issues pertaining to the research mission of the University; (b) campus budgetary needs for support of research; (c) promotion and coordination of multidisciplinary research and collaborative work among faculty; and (d) policies governing acceptance of extramural funding. Specifically related to this memo is COR's charge to (e) establish policies and procedures governing the allocation of funds within the Faculty Grants Program (FGP). The primary purpose of this report is to provide a information on the allocation, expenditures, and benefits to the UCLA campus from the FGP during the last three years.

FGP OVERVIEW

The Faculty Grants Program (FGP) is divided into three grant programs. These three programs are the Travel program, the Research Enabling Grant REG program, and the Faculty Research Grant FRG program. In the paragraphs below a brief description of each of these three programs is provided prior to reviewing the programs during the last three years.

In the area of the Travel Program, COR oversees two travel grants, the Conference Travel Grant and the Intercampus Exchange Program. The Conference Travel Grant program provides support for up to \$1,200 in International travel or \$700 in domestic travel (note: funds can only be used for travel expenses) for Academic Senate members to attend conferences for oral or poster presentations. The Intercampus Exchange Program supports travel for the study and research on other University of California campuses by academic senate members and is seldom used. An academic senate member can only receive one travel grant award per academic year.

COR also oversees the Research Enabling Grant (REG) program. This program is designed to support faculty that receive relatively little contract/grant support (i.e. less than \$5,000 per annum) and/or to facilitate research in areas receiving marginal financial support from outside agencies. The maximum amount that can be requested through this program is \$1,000 and these funds cannot be used for travel to conferences or to augment the academic senate member's salary. This award requires a written proposal which is peer reviewed by two members of the academic senate (i.e. initiated in the 2008-2009 school year).

The third program COR oversees is the Faculty Research Grant (FRG) Program. This program supports faculty research up to \$10,000. The funds are awarded through a peer review process (i.e. two reviews per proposal submitted) to examine the merit and originality of a project, its potential to generate extramural funding, non-overlap with other research funding available to the investigator and the investigator's prior record of scholarly productivity in the use of Faculty Grants Program awards. The funds may not be used for faculty salary, nor can they be used for conference travel. Also, individuals receiving a FRG are prohibited from also receiving a REG award.

Each of these programs (Travel Program, REG, and FGP) has been in existence for at least the last three years with relatively minor changes with the exception of the REG. During the 2008-2009 academic year COR changed the review process for the REG program from means tested to a peer reviewed process. A productivity overview of each of these three programs including financial outlays during the last three years is provided below.

1. Travel Program

The travel grants program provides support for faculty to attend conferences and symposia to disseminate their research to the respective outside communities. This represents an important component on campus because many research activities do not receive financial support and as such may be cost prohibited from disseminating the research activities being conducted on UCLA campus. Therefore, COR believes that this particular program substantially increases the research visibility of the entire UCLA campus. The outlays of funds for the last three years are provided in the table below. It should be noted that the vast majority of these funds (i.e. greater than 95%) go to the Conference Travel Program and very little of this money goes to the Intercampus Exchange Program

Travel Grants Program

<u>Fiscal Year</u>	<u>Awards Given</u>	<u>Amount awarded</u>
2008/2009	408	\$317,670
2007/2008	435	\$361,167
2006/2007	413	\$346,007

2. REG Program

Table 1 displays the number of proposals received and the number of proposals awarded for the Research Enabling Grant program during the year 2006/2007, 2007/2008, and 2008/2009. For 2006/2007, 274 applications were submitted and 235 were awarded., During 2007/2008, 229 grants were submitted and 221 were awarded. During the submission process for 2008/2009, 221

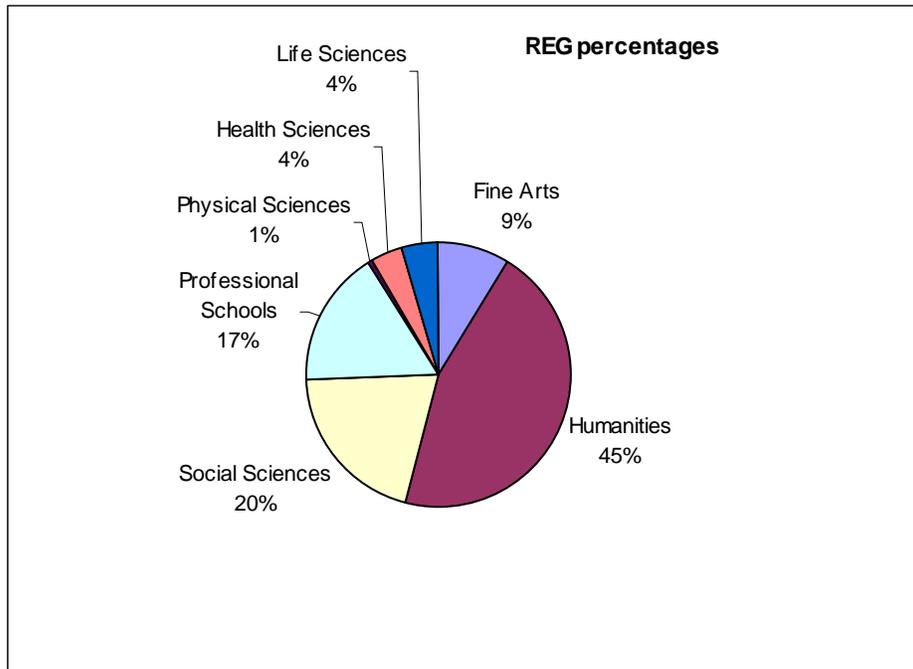
proposals were received and a substantially smaller number of awards were allocated 159. The reason for the decrease in the number of awards granted during the 2008/2009 is attributed to the institution of a required proposal along with a peer review process for granting the REG award.

A breakdown of the REG awards in terms of percentages per discipline on campus is provided in Chart 1 for the submission year 2008/2009. The breakdown of previous years is similar to the Chart presented and is not provided in this report. In reviewing this breakdown, approximately \$158k is allocated to the REG program during the 2008/2009 school year. Of this \$158k, approximately 45% went to humanities, 20% to social sciences, 17% to Professional Schools, and the remainder distributed to other units on campus. As one can see, this program provides benefits across campus but has a major focus on humanities, an area that historically receives little outside research support due to the lack of available funding from outside agencies. It has provided faculty with research resources that otherwise would have to come from personal funds. It represents a quantitative statement of the appreciation the campus has for scholarship activities that do not normally receive extramural support. Members of COR have recently suggested that the REG funding source maybe one of the most useful programs on campus with regards to research productivity per dollar of investment. In Appendix A of this report a detailed list of REG awards given out during 2008/2009 is presented.

Table 1

Year	Applications Received	Awards Given	Total Amount Awarded
2006/2007	274	235	\$234,083
2007/2008	229	266	\$262,396
2008/2009	221	159	\$157,874

Chart 1



3. FRG Program

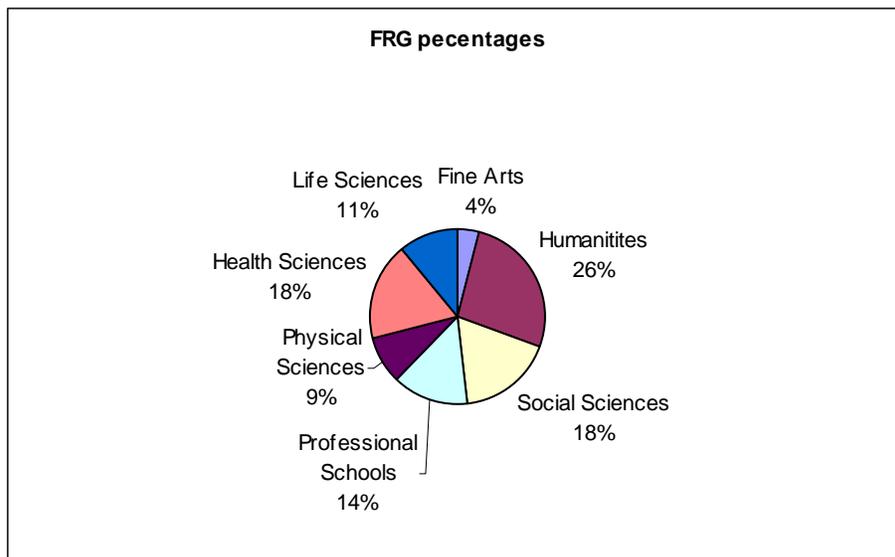
Table 2 presents the number of proposals received and the number of proposals awarded for the Faculty Research Grant program during the submission years 2006/2007, 2007/2008, and 2008/2009. The number of applications is 359, 314, and 342 respectively while the number of awards is 258, 177, and 206 respectively. The ratio of awards to applications received is approximately equivalent to the funding ratio of the REG awards during the 2008/2009 funding cycle (i.e. peer reviewed process). The total amount of awards for each of the three years is \$1.15, for 2007/2008, 1.6M for 2006/2007, and \$1.34M (2008/2009).

A breakdown of the FRG awards in terms of percentages per discipline on campus is provided in Chart 2 for the year 2008/2009. The breakdown of previous years is similar to the Chart presented and is not provided in this report. The breakdown of financial support for this particular award is substantially more uniform across campus when contrasted with the REG award even though the ranking orders is similar (i.e. Humanities receives the most funds). For the FRG award, Humanities received approximately 26%, Social Sciences 18%, Health Sciences 18%, Professional Schools 14%, Life Sciences 11%, Physical Sciences 9%, and Fine Arts 4%. While there is a difference in the percentages for each discipline, they are all of the same order of magnitude. Thus this breakdown indicates that the resources provided by the FRG program is relatively evenly distributed across campus and suggests that this program benefits every sector on campus. In Appendix A of this report a detailed list of REG awards submitted/won during 2008/2009 is presented.

Table 2

<u>Year</u>	<u>Applications Received</u>	<u>Awards Given</u>	<u>Total Amount Awarded</u>
2006/2007	359	257	\$1,694,000
2007/2008	314	177	\$1,155,000
2008/2009	342	206	\$1,340,884

Chart 2



RESEARCH IMPACT OF THE FACULTY GRANTS PROGRAM AT UCLA

The previous sections described the three grant programs administered by COR on campus as well as a financial breakdown for the last three years. One important question that arises is the productivity produced by this investment on campus. To quantitatively track this question, COR has instituted a questionnaire in the application for Academic Senate members to self-report the number of books, book chapters, and articles published as a direct result of support under the FGP programs. Note this does not account for the publications as a result of the travels grant process nor does it represent a full reporting from all of the grantees. Thus this information is representative of a lower bound on the publication numbers as a direct result of the FGP programs. Based on this information, COR developed the following three tables as an indicator of the publication success of the FGP programs. While there have been moderate fluctuations during the last three years, a total publication count of 158 (2006/2007), 241 (2007/2008) and 221 (2008/2009) per year has been reported. This represents a publication rate of approximately 1 publication per \$10k of investment dollars. As an anecdotal measure of success, many NSF programs are funded at the level of \$100k/year and typically produce approximately 1 publication per year, i.e. 1 publication per \$100k of investment dollar. Based on this information, one would conclude that the investment of FGP funds at UCLA represents a high return of research productivity per dollar of investment.

Publications 2008-09

<i>Books published:</i>	26
<i>Book chapters published</i>	13
<i>Articles published</i>	<u>182</u>
Total Publications	<u><u>221</u></u>

Publications 2007-08

<i>Books published</i>	23
<i>Book chapters published</i>	15
<i>Articles published</i>	<u>203</u>
Total Publications	<u><u>241</u></u>

Publications 2006-07

<i>Books published</i>	32
<i>Book chapters published</i>	12
<i>Articles published</i>	<u>114</u>
Total Publications	<u><u>158</u></u>

In addition to reporting publications, the Faculty Grants Program is also viewed as a seed funding source to secure extramural funding. Once again the information reporting in this document is based on a voluntary data provided on the application form and as such should be viewed as a

lower bound on the actual dollar value of extramural funding generated as a result of the FGP. In 2008-09, our grant awardees reported that the Academic Senate's REG and FRG programs provided seed money which, in turn, enabled *at least* \$750,361. A list of the awards reported is provided below. While this amount is respectable, COR members believe it represents a substantial underreporting of the extramural funds that develop as a direct result of the faculty research program. That is in most cases extramural funds are not awarded for 1-5 years after the award of a faculty grant program and thus are not reported during the submission process, i.e. investigators may not submit a proposal every year. Thus, COR believes that the amount of extramural funding generated across campus is significantly higher than the \$750k reported in this document. Based on this assumption, COR concludes that funding provided by these FGP programs has a significant benefit both from a publication perspective as well as a financial perspective on campus.

- 2-year grant from the CA Dept. of Transportation for \$474,461
- Mellon Foundation grant for \$50,000
- NSF grant for \$11,700
- Leakey Foundation grant for \$21,200
- MacArthur "Digital Media and Learning" grant for \$238,000
- NIH Award (specific amount was not reported)
- Spencer Foundation grant (specific amount was not reported)

Recommendations

1. Better tracking quantitatively of the benefits of each program (recipients required to report publications, books, chapters in books, grants on a yearly basis including out years)
2. Improve the assessment of the quality (e.g. investigate citation index) of the publications developed from COR funding
3. Suggest a 5 year review of COR funding by the Vice-Chancellor of Research
4. Request return on overhead dollar generated by grants that developed from COR initiated efforts
5. Track funding that produced IP or patent related items and request return on investment
6. Develop funding sources from outside donors, could be tied to retired faculty who benefited from COR funding

Critical Assessment of COR Management of Funds

1. *What justification is there for expenditure of funds on the faculty grants program?*
Answer: These funds are provided across campus and they support efforts that are either in an initial seed funding stage (FRG) or enable research efforts that would not be otherwise supported by an outside agency (REG). Both of these programs provide a critical component that enable UCLA to remain amongst the top universities in the country. By eliminating the REG awards, a significant impact would be felt on areas of campus that conduct high quality research but are unable to obtain financial support for these endeavors. These REG awards amount to less than \$200k/year which is a very small amount compared to the campus budget and it has been suggested that this maybe one of the best returns on research investments on campus. However, a better quantification of the benefits supporting this argument needs to be developed beyond what currently exists. Furthermore, the FRG program provides financial support to early

seed research endeavors that many agencies would not otherwise support. We (members of COR) argue that these efforts return basic research as well as overhead return on the new programs that develop, however, once again quantification on this matter is needed. This would require a few years of reporting by the recipients of grants following an initial award and not just in the year the recipient applies for an award. However, the chair of COR reports that when he arrived at UCLA his extramural funding outside of UCLA was essentially zero. The COR research program helped him with seed funding that aided in building a substantially successful research program within the School of Engineering. This anecdotal evidence suggests that many other members of the UCLA campus may also have significantly benefited from COR funding and as such the entire university. This needs to be quantified to fully understand the impact that COR funds are having across campus.

2. *Is COR cost effective?*

Answer: COR does not require any teaching release or funds to manage the program. Therefore, the COR management team is a self-supporting entity through donation of academic senate members time. Furthermore, all COR Faculty Grants Programs specifically prohibits using the funds for faculty salary and all funds must go to either travel, graduate student support, or supplies in support of basic research. As such, there is an absence of cost associated with management or faculty salaries and all the funds go directly to support a basic research effort on the UCLA campus. It would be hard to argue for a better use of research funds on the UCLA campus (i.e. research based university) given that the funds go to directly support research endeavors and that all of these awards are peer reviewed.

3. *Does the FGP program serve the University in some special unique fashion that benefits the community?*

Answer: The FGP program provides financial support for various research projects which are either in an early stage of development or would not historically receive funding from an outside agency. This financial support spans the divide between the humanities to the basic sciences to professional activities. In addition to providing and promoting fundamental research on campus, the resources provide a mechanisms that allows the UC and thus the UCLA campus to stay at a considerable higher ranking than other public and private universities that do not make a similar investment on campus. These investments encourage our best and brightest stars to stay here on the UC campus because this source of COR funding offers opportunities to study areas of research that would not necessarily be supported if they moved to a different university system. The ability to attract a breadth of researchers with substantial research capabilities is a difficult exercise and very few universities in the United States have achieved such balance. The funding provided to the academic senate through the FGP programs, while a fairly small amount, represents an investment in the future of the UCLA and the UC system and also represents the fundamental basis that the UC systems has prided itself on. Losing this fairly small brick in the building of the fundamental research infrastructure on campus may cause irreparable harm to the long term vision on which this university was founded.

4. *How does the funding at UCLA COR compare with other UC campuses?*

COR believes that UCLA represents one of the premier campuses within the UC structure and would have expectations that the research investment would be one of the largest within the UC campuses. Based on COR review of the other UC campuses it was surprising to find that rather being near the top in terms of dollar investment per faculty,

UCLA was second-to-last in terms of dollar investment per faculty (see table below for details on 2007-2008 year). Out of the ten UC campuses, Berkley had the highest dollar investment per faculty while Irvine and UCLA had the lowest dollar investment per faculty. Rounding out the top four campuses were Merced (actually an aberration due to small number of faculty), San Francisco, and San Diego. The fact that UCSD has made great strides in increasing their national rankings during the last decade suggests that these investments do provide an indication of future success. On the other side rounding out the bottom four campuses are Irvine, UCLA, Davis, and Riverside. . Therefore, these results strongly suggest that a larger investment is warranted on UCLA in regards to comparisons with other UC campuses.

COMPARATIVE FACULTY GRANTS PROGRAM (FGP) ALLOCATIONS IN THE UC SYSTEM FOR ACADEMIC YEAR 2007/2008

<u>Ranking</u>	<u>Campus</u>	<u>#Senate Faculty</u>	<u>Total FGP Allocation</u>	<u>Average \$ Per Senate Faculty</u>
1	Berkeley	1550	1,900,000	1,226
2	Merced	114	100,000	877
3	San Francisco	1500	1,220,000	813
4	San Diego	1870	1,330,000	711
5	Santa Cruz	745	500,000	671
6	Santa Barbara	1240	696,694	562
7	Riverside	990	396,316	501
8	Davis	2500	1,200,000	480
9	Los Angeles	3400	1,511,157	444
10	Irvine	1130	470,000	416