

CMU 2010 FY07 Annual Report

Project Title: Increasing Infrastructural Support for Student Centered Research at Central Michigan University
 Project Leader: Wayne Osborn, Interim Vice Provost for Research
 Project Number: 200510 Date of Report: July 1, 2007

Refer to your *Outcome Evaluation Worksheet* to complete the information below. Insert additional rows if needed. Rows will automatically expand as you type. You are welcome to attach additional documents to supplement – but **not** substitute for - the information provided below.

	Outcome/Milestone	Status (Complete, in Progress, or Not started)	Date Measured	What are the next steps to achieving this outcome?
1	Increase the number of students involved in scholarly and creative activity	P	6/30/2007	Number of students in <u>supported</u> scholarly and creative activity projects has increased each year of the project (one year remains). The data are given in the attached report. We have no data on those students engaged in scholarly activity that are not financially supported by ORSP. We will continue offer enhanced support in year three of the project.
2	By end of 3 rd year of project have at least a 25% increase in the number of student authorships on refereed journal publications and juried performances at the national level	P	6/30/2007	Try to compile data on student-authored publications over the six year period 2002-03 through 2007-08. These data are not readily available. We plan to survey the recipients of support and their advisors on papers resulting from the CMU 2010 support
3	Carry out a needs assessment for increasing student-centered research and creative activity at CMU	N	6/30/2007	The needs assessment needs to be carried out.
4				

What are your plans for sustaining support for your project beyond the CMU 2010 funding period?

Sustained support is dependent on successfully implementing the fund raising program that would result from the needs assessment.

Report on CMU 2010 Project 200510
Increasing Infrastructural Support for Student-Centered Research at Central Michigan University
July 2, 2007

Background

The objective of this project was to increase the engagement of students in research and creative activities, particularly at the undergraduate level. Specifically, funds were approved to increase the numbers of students that could be supported in the Undergraduate Summer Scholars program and in the undergraduate and graduate Research and Presentation and Publication Programs. The additional funds were to “be prioritized for students who are working with a faculty member whose previous sponsorship of a student has led to an authorship for the student in a refereed journal publication, or whose sponsorship has led to a juried performance or show by the student at a national venue.” For the graduate student support, preference was to be given to “requests coming from students in an accelerated Masters program or for graduate student research projects that also involve undergraduates.”

The project was funded at the level of \$68,000 per year for three years. Although the proposal originated with the Research and Creative Activities Subcommittee of the Institutional Strategic Planning Committee, the Office of Research and Sponsored Programs (ORSP) was provided the funds and charged with administering the project. ORSP was also charged with furnishing annual reports on the number of students involved in the various activities with the goal that “by the end of the third year of the project there would be at least a 25% or more increase in the number of student authorships on refereed journal publications and juried performances or shows at the national level” compared to the three years prior to the project. Finally, ORSP was charged with working with the Colleges and University Development Office to carry out an internal needs assessment for increasing student-centered research and creativity at CMU.

Dr. James Hageman, Dean of the College of Graduate Studies and Vice Provost for Research, resigned his position and left CMU in July, 2006. With his departure, the President and Provost decided to separate the College of Graduate Studies from the Office of Research; Gail Scukanec was appointed Interim Dean of Graduate Studies and Wayne Osborn the Interim Vice Provost for Research. The former office became responsible for administering research support for graduate students while the latter assumed responsibility for support of undergraduate research activities. Consequently, CGS is responsible for the portion of the report related to graduate student research and ORSP has prepared the portion dealing with undergraduate research. Some relevant information may have been lost with Hageman’s departure.

UNDERGRADUATE RESEARCH

Tasks accomplished 2005-06

Funding was awarded on February 16, 2006. The Undergraduate Research Award and Undergraduate Presentation and Publication Award programs operate mainly during the fall and spring semesters. For 2005-06 these programs’ procedures were already in place and no changes were made in FY2006 as a result of the CMU 2010 funding. Instead, efforts focused on increasing the number of students in the Summer Scholars Program. ORSP had been funding 12 scholars each summer. For Summer 2006, twenty-two scholars were supported (and the College of Science and Technology supported three more). All students presented posters on their projects at the fall Summer Scholars Symposium in the Park Library corridor on October 6.

Tasks accomplished 2006-07

During the Fall 2006 semester a more complete budget for the 2010 funds was developed. Three factors necessitated the budget in the original proposal:

- 1) The project’s proposed \$68,200 budget had three portions: funds to increase the number of undergraduate Summer Scholars (\$31,200), increased funding for the Undergraduate Research and Undergraduate Presentation and Publication grant programs (\$20,000), and increased funding for the Graduate Research and Presentation and Publication grant programs (\$17,000). The proposal specified an increased level in the maximum award for the two research programs – from \$450 to \$500 for an Undergraduate Research Award and from \$700 to \$1,000 for the Graduate Research Awards. There was no mention, however, of how to apply the funds toward the presentation and publication programs.
- 2) The request in the proposal was for \$68,200 per year for three years, but the awarded amount was \$68,000 a year for three years (\$200 per year less).
- 3) As part of the separations of ORSP and CGS, it was agreed to divide the \$68,000 per year funding for this project with \$50,000 for undergraduate research and \$18,000 for graduate student research

Taking the above factors into account, the following budget for supporting undergraduate research was adopted in Fall 2006

Increase Summer Scholar awards from \$2400 to \$3000 and raise number of awards from 12 to 20:

Cost of increased stipend for present awards: 12 @ \$600 increase	\$ 7,200
Cost of additional awards: eight @ \$3,000 each	\$ 24,000

Increased funding for Undergraduate Research awards to raise the maximum limit from \$450 to \$500:

Cost of increased award for present awards: ~ 25 @ \$50 increase	\$ 1,250
Cost of additional research awards: ~14 @ \$500 each	\$ 7,000

Increased funding for Undergraduate Presentation and Publication grants to raise limit from \$250 to \$350:

Cost of increased award for present awards: ~ 33 @ \$100 increase	\$ 3,300
Cost of additional awards: ~16 @ \$350 each	\$ 5,250
Cost of two awards for exceptionally expensive presentations: 2 @ 1,000	<u>\$ 2,000</u>

TOTAL FOR INCREASING UNDERGRADUATE RESEARCH SUPPORT **\$50,000**

Using the adopted budget, larger Undergraduate Research Awards and Undergraduate Presentation and Publication Grants were initiated starting in the Fall 2006 semester. Five Undergraduate Research Awards were made at the fall award competition, including two at the higher limit of \$500, and twenty nine Awards in the spring competition, with sixteen at the increased award amount. The details are given in Table 1,

Table 1: Undergraduate Research Awards

	Awards	Students involved	CMU 2010 Assisted	CMU 2010 cost
Fall 2006	5	5	2	\$100.00
Spring 2007	27	30	17	\$850.00
TOTAL	32	35	19	\$950.00

Decisions on Presentation and Publication Awards are made on a rolling basis as the applications are received. Forty-four awards were made in 2006-07. In the fall, eight students were provided \$350 toward the presentation rather than the former \$250, one received \$115 more than the former amount, and in one case we provided \$250 to each of two students involved in a joint presentation rather than the former \$250 limit for a given presentation. We found that fewer awards were being made than anticipated, and in the spring we increased the maximum award to \$400. Twenty five were supported with 19 receiving the increased award of \$400, of which 11 received the additional amount from CMU 2010 funds. Two students made presentations in both semesters. The details are in Table 2.

Table 2: Undergraduate Publication and Presentation Awards

	Awards	Students involved	CMU 2010 Assisted	CMU 2010 cost
Fall 2006	19	19	11	\$1,250.00
Spring 2007	25	25	11	\$1,600.00
TOTAL	44	42	22	\$2,850.00

Summer Scholar Awards of \$3000 were made to 36 students, of which three declined the awards because they had received summer support from other sources. Of the 33 Summer Scholars awards, 25 were partially (12 at \$600) or fully (13 at \$3000) supported with CMU 2010 funds and ORSP arranged for five additional awards fully or partially to have full supported by the College of Science and Technology. The details are in Table 3.

Table 3: Summer Scholar Awards

	Awards	CMU 2010 Assisted	CMU 2010 cost
Full award, partial support from CMU 2010	12	12	\$ 7,200.00
Full award, full support from CMU 2010	13	13	\$39,000.00
Full award, full support from ORSP	4		
Full award, support from CST	3		
Full award, support from CST and ORSP	1		
Half award, support from CST	1		
TOTAL	34	25	\$46,200.00

Outcomes and Expenses Incurred

The specifically identified goal for this project is to have, by the end of its third year, a 25% or more increase in the number of student authorships on refereed journal publications and juried performances or shows at the national level” compared to the three years prior. The process is to increase the investment in student research so that more students are engaged in research and creative activities.

Table 4 shows the numbers of students supported through the three undergraduate programs for the past four academic years. The project has not yet produced an increase in the number of awards that are made during the academic year. On the other hand, the effect on the Summer Scholars program has been significant with almost double the number of undergraduate students carrying out research with or under the supervision of a faculty member in Summer 2006 and three times the number in Summer 2007 compared to the two summers prior to the project. We do not yet have data on if this additional involvement in student research has led to increased student publications.

With regard to the other charges to ORSP in the CMU 2010 award, we have begun to gather information on student authorship on refereed journal publications and on juried performances or shows at the national level. This information is not readily accessible. No progress has been made on the planned needs assessment.

Table 4: Numbers of students in CMU's programs to support undergraduate research and CMU2010 FY06 funds expended

	2003-2004 (number)	2004-2005 (number)	2005-2006		2006-2007	
			No.	Cost	No.	Cost
Summer Scholars	12	12	22	\$ 37,200	34	\$46,200
Undergraduate Research Grants	26	32	32	\$ 749	32	\$ 950
Undergrad. Presentation & Publication	32	40	29		44	\$ 2,850

Total FY2007 expenditures were \$50,000. The breakdown was as follows:

12 Summer Scholars at \$600 increase over former award amount of \$2400	\$ 7,200
13 additional Summer Scholars at \$3000 each	\$ <u>39,000</u>
	\$ 46,200
2 Undergraduate Research Awards at the old rate (before start of program)	\$ 0
19 Undergraduate Research Awards at \$50 increase over former limit of \$450	\$ 950
11 Undergraduate Presentation Awards at \$100 increase over former limit of \$250	\$ 1,100
1 Undergraduate Presentation Award at \$250 for second author	\$ 250
10 Undergraduate Presentation Award at \$150 increase over former limit of \$250	\$ <u>1,500</u>
	\$ 2,850

Revised Budget for 2007-08

Based on two year expenditure history of the project, the revised budget for 2007-08 is as follows:

Increase Summer Scholar awards from \$2400 to \$3000 and raise number of awards from 12 to 20:	
Cost of increased stipend for present awards: 12 @ \$600 increase	\$ 7,200
Cost of additional awards: 9 @ \$3,000 each	\$ <u>27,000</u>
	\$ 34,200

Increased funding for Undergraduate Research Grants to raise the maximum limit from \$450 to \$500:	
Cost of increased award for present awards: 26 @ \$50 increase	\$ 1,300
Cost of additional research awards: ~8 @ \$500 each	\$ <u>4,000</u>
	\$ 5,300

Increased funding for Undergraduate Presentation and Publication grants to raise limit from \$250 to \$400:	
Cost of increased award for present awards: 34 @ \$150 increase	\$ 5,100
Cost of additional awards: ~11 @ \$400 each	\$ 4,400
Cost of one award for exceptionally expensive presentation : 1 @ 1,000	\$ <u>1,000</u>
	\$ 10,500

TOTAL FOR INCREASING UNDERGRADUATE RESEARCH SUPPORT \$50,000