# Preliminary Results UM Faculty Survey on Research Support Needs

April 25, 2012

This survey was conducted by the Research & Scholarship Committee of the Faculty Senate, in cooperation with the University Research Council (URC)

Members of the RSC:

Emmanuel Boss Janet Fairman Bob Gundersen Ramesh Gupta Paul Rawson Benildo de los Reyes

For questions, please contact: janet.fairman@maine.edu

# Preliminary Results of UM Faculty Survey on Research Support Needs 4/25/12

The Research and Scholarship Committee (RSC) of the Faculty Senate, in joint cooperation with the University Research Council (URC) conducted an online survey of UM faculty from March 16 – April 12, 2012. The survey will also be conducted in April with professional staff members who are engaged in funded research. This survey seeks to obtain faculty and staff perceptions about the current constraints and supports that impact their efforts to engage in research and expand extramural research, as well as suggestions for ways to improve University and College/ Unit level support to faculty and staff.

This preliminary report provides basic information about who responded to the survey, and then focuses on disaggregated results by faculty rank. The typed comments and coding categories will be posted along with this report on the Faculty Senate website at: <u>http://umaine.edu/facultysenate/committees/research-committee/</u> A subsequent report will provide disaggregated results by College, to help us understand how constraints and needs for support may vary by College and discipline.

#### **Summary of Demographic Results**

The survey was conducted online for a period of four weeks in spring 2012 using Qualtrics software. The survey was emailed to 753 <u>full and part-time</u> faculty at UM with four email reminders. A total of 154 faculty members completed the survey, for a response rate of 21%. Respondents were predominately full-time faculty (90%), and almost 60% indicated they are currently supported as a PI or Co-PI on an externally-funded research grant. A higher percentage of respondents (about a third) were either from the College of Liberal Arts and Sciences (LAS) or the College of Natural Sciences, Forestry and Agriculture (NSFA), compared with other Colleges or Units. Approximately a third of the respondents were in the rank of full Professor or Associate Professor. Smaller percentages were in other faculty ranks. These demographic results are shown in the tables that follow. Note that not all respondents completed every item, even demographic items, on the survey, hence the difference in the total number of respondents across items.

Table 1. Response Rate	
UM Faculty Surveyed	753
UM Faculty Completed Survey	154
Response Rate	21%

Table 2. Appointment Type

Appointment type	# Completed Survey	%
Full-time faculty	129	90%
Part-time faculty	14	10%
Total:	143	100%

11 faculty did not identify their appointment type.

Table 3. Support from Research Grants

Support on Grants	#	%
Yes, currently supported as PI or Co-PI	81	59%
No, not supported as PI or Co-PI	57	41%
Total:	138	100%

16 faculty did not identify their research support.

Table 4. College or Unit

College/ Unit	#	%
Business, Public Policy & Health	6	4
Education and Human Development	15	11
Engineering	14	10
Liberal Arts & Sciences	41	30
Natural Sciences, Forestry & Agriculture	50	37
Cooperative Extension	14	10
Other Units:	5	4
(Responses from Margaret Chase Smith		
Policy Center, Climate Change Institute,		
Center for Community Inclusion and		
Disability Studies, and Darling		
Marine Center)		

9 faculty did not identify their unit, and some faculty hold joint appointments and checked more than one unit.

Rank	#	%
Research Faculty	10	7
(non-tenure track)		
Instructor/ Lecturer	15	11
(non-tenure track)		
Assistant Prof.	19	14
Associate Prof.	50	37
Full Prof.	42	31
Total:	136	100%

Table 5. Faculty Rank of Respondents

18 faculty did not identify their rank.

#### Summary of Results by Faculty Rank, for Full-Time Faculty

The following sections report survey results for respondents who were <u>full-time</u> faculty in the rank of full Professor, Associate Professor, Assistant Professor, or Research Faculty (non-tenure track). Results from part- time faculty (14) and faculty at the rank of Instructor/ Lecturer (15) are not included in this report, as they are primarily engaged in teaching responsibilities. Please note that the number of Research Faculty (non-tenure track) responding to the survey was relatively small (10). Comparing the results across different faculty ranks helps us to understand how the constraints and needs for support may vary according to the professional career stage. Although there were some similarities across the different faculty ranks, there were also differences in the perceived constraints and supports in research. Faculty were asked to respond to four open-ended questions: one seeking their perceptions of constraints, one seeking perceptions of current supports that are most helpful, one asking what other supports are needed, and a final item asking for additional suggestions. The typed comments were coded and the results were compiled in tables. The next sections present findings on the constraints, supports, and perceived needs for further support for research.

#### I. Perceptions of Current Constraints for Research

**Primary Constraints or Barriers:** 

- Lack of time
  - teaching and advising load
  - service and administrative duties
- Lack of University funding
  - o funding for seed money, summer research, in-between grants
  - funding for equipment, maintenance, facilities, infrastructure
  - funding for graduate students
- Lack of other supports
  - support from College or Unit administration
  - o support from University administration/ or ORSP
  - support from staff in College or Unit

A lack of time and University funding were the most frequently cited factors that currently constrain faculty research efforts, followed by a lack of support from University administration/ ORSP, and College or Unit administration. For faculty in the ranks of Assistant Professor and Research faculty (non-tenure track), a lack of support from peers, College or Unit level staff, and support identifying funding opportunities were also barriers.

#### Time Constraints—

Faculty across all four ranks identified time in general as a primary barrier in doing research or expanding research effort. About a third of tenure-track faculty and a quarter of research faculty said time was the primary barrier. Teaching and advising loads were increasingly cited as a primary barrier as the faculty rank decreased; about a fifth of full Professors said teaching was a primary barrier, compared to about a third of Associate Professors and nearly a half of Assistant Professors. Several faculty members described how faculty retirements and vacant faculty positions in their unit have increased the teaching and advising loads for the remaining faculty. Research faculty already have a reduced teaching load or do not teach, so this was of less concern for that group.

Time spent on University or College/ Unit service, such as serving on committees or doing administrative work for a unit was a primary concern noted by about a fifth of the Associate and Assistant Professors. Significantly fewer full Professors said time spent on service was a primary constraint.

These results reflect the higher teaching and service load generally for more junior faculty. The written comments also reveal a much higher level of frustration among Associate and Assistant Professors. The results suggest that faculty in earlier stages of their careers may require more release time, tiered and differential teaching loads, and support to juggle their many assignments and to successfully establish and maintain their research program. Mentoring for junior faculty and vigilance by Deans and Chairs may also help junior faculty members avoid becoming over-committed, frustrated, and demoralized.

### Funding Constraints—

Faculty across all four ranks identified a lack of funding from the University for seed money, summer research, or filling in between grant projects as a primary constraint. This factor was increasingly cited as the faculty rank decreased; 18% of full Professors and 16% of Associate Professors cited a lack of University funding, compared with about a quarter of Assistant Professors and 63% of Research faculty.

A lack of funding for research equipment, laboratory facilities, maintenance, computers, or software was cited by 18% of full Professors and a quarter of Assistant Professors and Research faculty.

Another significant barrier cited was a lack of University funding for graduate students and teaching assistants. This factor was cited as a primary constraint by about a quarter of full Professors and 16% of Assistant Professors.

Smaller percentages of faculty cited other factors, such as a lack of University funding for travel to professional conferences (cited by 13% of full Professors and Research faculty), and a lack of funding opportunities (cited by 16% of Assistant Professors) which was predominantly noted by faculty working in the arts and humanities disciplines.

#### Sources of Support Lacking—

Aside from Time and University funding, other factors related to support were cited as a primary constraint to research for smaller percentages of faculty. However, different types of support were of concern to different faculty rank groups. For example, a larger percentage of Associate and Assistant Professors (12% and 16% respectively) cited a lack of support from the University Administration or ORSP compared with faculty in other ranks.

A larger percentage of faculty in the ranks of Assistant Professor and Research Professor cited a lack of support from peers in their College or Unit (16% and 13% respectively), and a lack of support staff in their College and Unit (21% and 25% respectively). Concerns about peer support varied. Some faculty said there were not sufficient numbers of colleagues in their unit with whom they could collaborate. Some junior faculty feel somewhat isolated and expressed reluctance or uncertainty about how to reach out to faculty across campus to explore the possibility of collaboration. A few faculty were frustrated or demoralized that colleagues were not more supportive of their work or interested in collaboration.

Concerns about staff support were two-fold; 1) faculty with research laboratories said the lack of stable and predictable funding for technical staff or laboratory technicians was a problem that hindered their productivity and ability to expand their research effort. Some faculty said their College used to support these positions but they are increasingly expected to fund technical staff from grants, and this funding source is not sufficiently stable to maintain their personnel; 2) other faculty expressed a high level of frustration with the administrative assistants/ staff in their College or Unit who do not provide needed and timely support in processing purchase orders, paying students, etc. This concern seems to be particular to one or two colleges, not across all colleges on campus.

Faculty at the rank of Associate Professor cited a lack of support in preparing grant proposals (25%) and post-award grant administration (12%) at a higher frequency than did faculty in other ranks.

Table 6 below presents the survey results related to constraints for research.

# Table 6. Perceptions of Constraints for Research

Q1: What are the primary factors that currently limit your ability to engage in or expand your extramural research? (A total of 114 full time faculty responded to this question.)

Note: Number and percentage of faculty noting a specific type of constraint are indicated, along with the total number (N) who responded to this survey item are shown in this table. Percentages have been rounded.

Type of Constraint		•	Assoc.		Assist.		Research		
		(n=38)		<b>Prof.</b> (n=49)		<b>Prof.</b> (n=19)		<b>Fac.</b> (n= 8)	
TIME	#	(%)	#	(%)	#	(%)	#	(%)	
Timegeneral	14	(37)	15	(31)	6	(32)	2	(25)	
Time—spent on teaching and/or advising / load	8	(21)	18	(37)	9	(47)	0	(0)	
Time—spent on University service, admin	3	(8)	11	(22)	4	(21)	0	(0)	
Time—spent on paperwork, forms, reporting	3	(8)	3	(6)	1	(5)	0	(0)	
FUNDING									
Funding from University, general (e.g., seed money,	7	(18)	8	(16)	5	(26)	5	(63)	
funding between grants, or summer research funding)									
Funding for graduate students	9	(24)	4	(8)	3	(16)	0	(0)	
Funding for equipment, maint., facilities, infrastructure	7	(18)	5	(10)	5	(25)	2	(25)	
Funding for faculty travel	5	(13)	2	(4)	0	(0)	1	(13)	
Funding for faculty positions, filling vacant positions	3	(8)	6	(12)	1	(5)	0	(0)	
Funding from external sources	0	(0)	0	(0)	1	(5)	0	(0)	
Funding opportunities in the discipline	2	(5)	0	(0)	3	(16)	0	(0)	
Funding opportunities, collaboration with industry	0	(0)	1	(2)	0	(0)	0	(0)	
SUPPORT									
Support from University administration / ORSP	3	(8)	6	(12)	3	(16)	0	(0)	
Support from College or Unit Admin.	5	(13)	5	(10)	2	(11)	0	(0)	
Support from peers within College or Unit	1	(3)	4	(8)	3	(16)	1	(13)	
Support from staff in College or Unit	0	(0)	0	(0)	4	(21)	2	(25)	
Support in identifying funding opportunities	3	(8)	4	(8)	2	(11)	1	(13)	
Support with proposal preparation (pre-award)	3	(8)	12	(25)	1	(5)	0	(0)	
Support with grant admin., accounting (post-award)	3	(8)	6	(12)	1	(5)	0	(0)	
Support with research design or data analysis	0	(0)	0	(0)	1	(5)	0	(0)	
Valuing unfunded research that faculty conduct	1	(3)	1	(2)	0	(0)	0	(0)	
Providing balanced support to all disciplines	2	(5)	0	(0)	0	(0)	0	(0)	
OTHER									
Access to equipment on campus	1	(3)	0	(0)	1	(5)	0	(0)	
Quality of graduate students	1	(3)	0	(0)	1	(5)	0	(0)	
Gender bias, uneven allocation of resources, assign.	0	(0)	0	(0)	0	(0)	0	(0)	
Opportunities for UM faculty to interact	0	(0)	2	(4)	1	(5)	1	(13)	

#### **II. Perceptions of Current Supports for Research**

**Primary Sources of Support:** 

- support from peers and colleagues within College/ Unit
- support from College/ Unit administrators
- support from University administration or ORSP
- funding from the University for seed money, summer research, etc.

Faculty across the four ranks predominantly cited factors other than time and funding that currently support their research. The most frequently cited sources of support were support from peers within the College or Unit (19-50%), followed by support from the College or Unit administrators (16-25%), followed by support from the University Administration or ORSP (8-63%).

Support from external professional organizations was cited by 17% of Assistant Professors. Support from students who assist with faculty research was cited by 13% of Associate Professors, while support from staff in the College or Unit was cited by full Professors and Research faculty (14% and 13% respectively). These staff members included clerical/ administrative assistants and technical staff. Support from library staff and ORSP staff were also cited as helpful.

Having access to electronic journals and scholarly resources was also cited as a primary support in research by Assistant Professors (11%) and Research faculty (13%).

University funding for seed money, summer research, or other research activity was mentioned as a primary source of support by faculty of all ranks (from 13-17%). Funding for graduate students was an important support to research for 17% of Assistant Professors.

These results are presented in Table 7 which follows.

# Table 7. Perceptions of Supports for Research

Q2. What are the most helpful factors that currently support your research effort? (A total of 110 full time faculty responded to this question.)

Type of Support		of.	Assoc. Prof.(n=47)		Assist. Prof.(n=18)		Research Fac. (n=8)	
		37)						
TIME	#	(%)	#	(%)	#	(%)	#	(%)
Time—time available to do research	5	(14)	7	(15)	0	(0)	0	(0)
FUNDING								
Funding from University, general (e.g., seed money,	6	(16)	6	(13)	3	(17)	1	(13)
funding between grants, or summer research funding)		~ /		~ /				
Funding for graduate students	1	(3)	1	(2)	3	(17)	0	(0)
Funding for equipment, maint., facilities,	1	(3)	4	(9)	1	(6)	1	(13)
infrastructure								
Funding for faculty travel	3	(8)	2	(4)	1	(6)	0	(0)
Funding from external sources (grants, foundation)	3	(8)	1	(2)	0	(0)	0	(0)
Funding, support, collaboration with industry	1	(3)	0	(0)	0	(0)	0	(0)
SUPPORT								
Support from University administration / ORSP staff	3	(8)	6	(13)	2	(11)	5	(63)
Support from College or Unit Admin.	6	(16)	10	(21)	4	(22)	2	(25)
Support from peers within College or Unit	10	(27)	9	(19)	9	(50)	2	(25)
Support from peers outside the University	1	(3)	3	(6)	2	(11)	0	(0)
Support from external professional organizations, conferences	4	(11)	3	(6)	3	(17)	0	(0)
Support or interest from students	1	(3)	6	(13)	1	(6)	0	(0)
Support from staff (College, Unit, Library)	5	(14)	1	(2)	0	(0)	1	(13)
Support in identifying funding opportunities	0	(0)	1	(2)	0	(0)	0	(0)
Support with proposal preparation (pre-award)	0	(0)	2	(4)	1	(6)	0	(0)
Support with grant admin., management, accounting	0	(0)	0	(0)	1	(6)	0	(0)
(post-award)								
OTHER								
Quality of graduate students	2	(5)	1	(2)	1	(6)	0	(0)
Library resources, electronic access to scholarship	2	(5)	2	(2) (4)	2	(11)	1	(13)
Incorporating research into teaching	1	(3)	0	(0)	$\frac{2}{0}$	(0)	0	(13) (0)
Own initiative / hard work	3	(8)	4	(9)	0	(0)	0	(0)
Opportunities for UM faculty to interact	0	(0)	0	(0)	1	(6)	0	(0)

#### **III. Perceptions of Supports Needed**

**Primary Supports Needed:** 

- increased support from University administration/ or ORSP
- increased support with preparation of grant proposals
- increased University funding for graduate students

The types of support that faculty say they need to engage in or expand their research activity varies considerably by faculty rank. This reflects the different needs and pressures faculty face as they move through stages of their career. Two areas where there was the most agreement about the need for support were: increased support from the University administration and ORSP (cited by 10-27%), and increased support with preparation of grant proposals (10-30%). Most respondents praised the assistance of ORSP staff, but felt this unit was understaffed to meet the needs for both pre-award and post-award grant management. Related to this was a concern about the level of bureaucracy to submit proposals and manage grants, and a request to streamline this process and provide staffing support, both within ORSP and at the Unit level to assist.

Another area of strong agreement across the faculty ranks was the suggestion for increased University funding for graduate students to assist faculty in research and teaching assistants to help with the workload of increasingly large courses and labs. This source of support was cited by 20-25% of most faculty rank groups, but only 9% of Associate Professors who responded.

The types of support emphasized by faculty varied by their rank or career stage. Faculty at the rank of Full Professor expressed the highest need for: increased funding for graduate students (21%), increased University funding for summer research or between grants (19%), increased support from University administration/ or ORSP (17%), and increased support for grant proposal preparation (17%).

Faculty at the rank of Associate Professor most frequently mentioned the following needs: reducing teaching and advising loads (29%), increased support from University administration/ or ORSP (27%), support preparing grant proposals (18%), support with grant administration (15%), and increased support from College or Unit administrators (13%).

Assistant Professors emphasized the need for: increased support preparing grant proposals (30%), increased funding for graduate students (25%), increased funding for research equipment, maintenance, facilities, or infrastructure (20%), and increased support in identifying funding opportunities (20%).

Research faculty (non-tenure track) most frequently cited the need to return some portion of indirect cost recovered from funded projects to PIs to support overhead at the unit level—40% cited this need. And 20% cited the needs of: increased funding for graduate students, increased funding for research equipment, increased support from University administration/ or ORSP, and increased support from College or Unit administrators. When considering these percentages, it is important to note that there were only eight research faculty responding to the questions about research needs.

Results related to requested supports for research are shown in Table 8 below.

## **Table 8. Perceptions of Supports Needed**

Q3.What other supports do you need from the University or your College/ Unit to engage in or expand your extramural research? (A total of 102 full time faculty responded to this question.)

Q4. Other suggestions? (A total of 31 full time faculty responded to this question.)

Type of Support Needed	Pro	f.	Assoc.		Ass	ist.	Research	
	(n=48)		<b>Prof.</b> (n=55)		<b>Prof.</b> (n=20)		<b>Fac.</b> (n=10)	
TIME	#	(%)	#	(%)	#	(%)	#	(%)
Timegeneral	4	(8)	3	(6)	1	(5)	0	(0)
Time—reduce time spent on teaching/advising	4	(8)	16	(29)	1	(5)	0	(0)
Time—reduce time spent on Univ. service, admin	1	(2)	0	(0)	0	(0)	0	(0)
Time—reduce time spent on paperwork, forms, reporting	3	(6)	2	(4)	1	(5)	0	(0)
FUNDING								
Increase funding from University, general (e.g., seed money, funding between grants, or summer research funding)	9	(19)	4	(7)	1	(5)	4	(40)
Increase funding from external sources	0	(0)	0	(0)	0	(0)	0	(0)
Increase funding, collaboration with industry	1	(2)	1	(2)	0	(0)	0	(0)
Increase funding for graduate students	10	(21)	5	(9)	5	(25)	2	(20)
Increase funding for staff (e.g. technical lab staff)	0	(0)	0	(0)	2	(10)	1	(10)
Increase funding for equipment, maint., facilities, infrastructure	3	(6)	2	(4)	4	(20)	2	(20)
Increase funding for faculty travel	1	(2)	3	(6)	0	(0)	0	(0)
Increase funding for faculty positions	4	(8)	1	(2)	1	(5)	0	(0)
Increase funding opportunities in the discipline	1	(2)	1	(2)	0	(0)	0	(0)
Reduce overhead rates on external funding	1	(2)	2	(4)	0	(0)	0	(0)
Return some IDC funding to units or PIs	3	(6)	2	(4)	2	(10)	4	(40)
Incentives to work harder, produce more grants	1	(0)	1	(2)	0	(0)	1	(10)
SUPPORT								
Increase support from University admin. / ORSP	8	(17)	15	(27)	2	(10)	2	(20)
Increase support from College or Unit Admin.	4	(8)	7	(13)	0	(0)	0	(0)
Increase support from peers within College or Unit	0	(0)	1	(2)	1	(5)	0	(0)
Increase support for staff in College or Unit	0	(0)	5	(9)	2	(10)	2	(20)
Increase support in identifying funding opportunities	1	(2)	5	(9)	4	(20)	0	(0)
Increase support with proposal prep (pre-award)	8	(17)	10	(18)	6	(30)	1	(10)
Increase support with grant admin. (post-award)	2	(4)	8	(15)	1	(5)	0	(0)
Support with research design or data analysis	0	(0)	1	(2)	2	(10)	0	(0)
Increase recognition of creative and scholarly work	5	(10)	2	(4)	0	(0)	0	(0)
Valuing unfunded research that faculty conduct	3	(6)	0	(0)	0	(0)	0	(0)
Providing balanced support to all disciplines	5	(10)	1	(2)	0	(0)	0	(0)
OTHER								
Improve quality of graduate students	0	(0)	0	(0)	0	(0)	0	(0)
Raise expectations for faculty research at UM	2	(4)	1	(2)	1	(5)	0	(0)
Increase opportunities for UM faculty to interact	1	(2)	2	(4)	2	(10)	1	(10)

Note: The number of responses to both items, dealing with requested supports, have been added together in this table.

#### **Concluding Thoughts**

Though perceptions of constraints and supports in research varied somewhat across the four faculty ranks of full Professor, Associate Professor, Assistant Professor, and Research Faculty (non-tenure track), there were many similarities in their responses on this survey. There was a high level of agreement that time and funding were primary factors inhibiting research productivity. Teaching and advising loads, together with service duties, were cited by faculty across all ranks, but were mentioned more frequently by more junior faculty at the ranks of Assistant or Associate Professor.

Funding from the University was also viewed as a primary constraint for all faculty ranks. Faculty emphasized the need for University support for summer research, to fill gaps between grant funding, for equipment and research infrastructure, and for graduate students or teaching assistants.

Other sources of support emphasized across faculty ranks included the need for increased support from University administration and ORSP, particularly in the form of assistance in grant proposal preparation and post-award grant administration.

Different needs were highlighted across the faculty ranks. For example, junior faculty expressed more frustration about the need for relief in their teaching, advising, and service loads. Many faculty members mentioned the reduction in faculty numbers within their units and the increased workload resulting from unfilled faculty positions. Unfilled faculty positions also had the impact of reducing the number of colleagues within a unit with whom one might collaborate on research.

A larger percentage of junior faculty also mentioned the need for support in identifying funding opportunities. Faculty in the arts and humanities described the difficulty of finding research funding in their disciplines. Although these faculty members would like more assistance in obtaining research funding, they also requested increased support from the campus in the form of recognition for their scholarly and creative work and contribution, and a more balanced perception of the value different disciplines contribute.

Taken together, these results indicate strong support for many of the recommendations made in the University Research Council's Strategic Plan for Research. The results also show that the University cannot take a "one size fits all" approach, but needs a more nuanced and targeted approach to meeting the specific needs of faculty in different disciplines and in different stages of their professional careers. Some Colleges are quite large and diverse, and this creates internal struggles for scarce resources.

While faculty indicated a need for financial supports from the University and their College/ Unit, they also suggested some important non-monetary supports, such as mentoring, facilitating research and interactions across the Colleges/ Units and disciplines, and increased recognition for scholarly work across disciplines. For example, both the University and Colleges might make greater effort to showcase faculty accomplishments through news media and other means so that low-profile work is recognized and all members of the academy feel valued.

A subsequent analysis and report on survey results disaggregate by the colleges will follow, and all results will be posted on the Faculty Senate website.

For questions, please contact:

Janet Fairman Associate Research Professor Center for Research and Evaluation

janet.fairman@maine.edu