

November 26, 2008

**To:** MSU Faculty

**From:** Cathy Whitlock and Jerry Johnson

**Re:** MSU Interdisciplinary Research/Creativity Survey Results

In September 2008, the MSU Interdisciplinary Research/Creativity Survey was sent out to all tenured, tenure track, and research faculty at MSU, including the extension locations. The intent of the survey was to inventory the interest and capabilities at MSU for interdisciplinary research and other creative efforts, especially those that include a human or social science dimension. We received 231 responses from the 604 faculty that were sent the survey.

**Key findings from the Survey**

- The high response rate is a good indication of faculty interest in interdisciplinary research initiatives. This interest extends to all colleges and both junior and senior faculty.
- Many respondents have had previous success with internal and external grants in interdisciplinary research, which suggests that we have a pool of faculty who can take on leadership and mentoring roles in this area.
- Areas of widest research interest were: health issues; environment and natural resources; cultural/arts/history. We expect that other interdisciplinary areas are also significant.
- Perceived barriers to pursuing interdisciplinary research were lack of communication among faculty at MSU; lack of time and heavy teaching loads; possible P&T penalties; and unfamiliarity with funding opportunities.

**As a result of the findings, we discussed several action items with the Provost and VP Research. Several of these items are now in the process of implementation:**

- We have created an interdisciplinary listserv for communication within different interest groups. If you provided an e-mail contact, you are on the listserv. To be added to the list, contact Audrey Thurlow (athurlow@montana.edu).
- We are identifying faculty leaders to help us expand campus-wide interdisciplinary efforts. Please send us nominations of qualified faculty.
- We will convene a one-day retreat this spring for faculty leaders to discuss new initiatives, approaches, and challenges for expanding interdisciplinary research at MSU.
- MSU will begin an interdisciplinary seminar series to better communicate research/creativity interests and activities on campus.
- The VP Research Office will bring new interdisciplinary funding opportunities to the attention of likely research teams and assist in proposal development as needed.
- Discussion of Promotion and Tenure materials is planned to address faculty concerns that interdisciplinary research is not rewarded in P&T decisions.
- We will identify and encourage in-house funding opportunities that allow faculty to develop interdisciplinary research areas.

Other actions items will be forthcoming in the months ahead, but please let us hear your suggestions and comments (whitlock@montana.edu; jdj@montana.edu).

## MSU Interdisciplinary Research/Creativity Survey Results

### Which college are you in?

College	Percent	Count
Letters & Science	38%	62
Agriculture	19%	31
Nursing	9%	15
Engineering	13.5%	22
Arts & Architecture	5.5%	9
Education, Health & Human Development	10.4%	17
Business	3.1%	5
MSU Library	1.2%	2

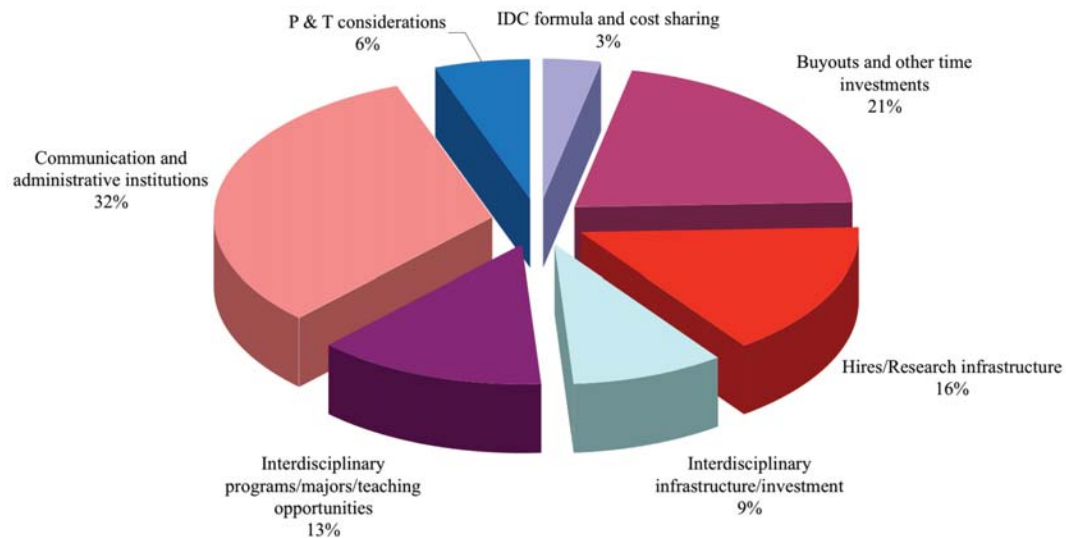
We received responses from all colleges, although Letters and Science represented almost 40% of respondents. Forty departments were represented including several centers, Extension on and off campus as well as several off campus nursing faculty. The academic rank of the respondents was slightly skewed toward junior faculty by two or three percentage points. One might imagine younger faculty, less committed to an ongoing research program and looking to expand their external funding activities, would be overrepresented. However, it appears that faculty across the board are expressing a desire to engage in more interdisciplinary research activity.

### What skills and experience do you bring to an interdisciplinary research effort?

	Percent	Count
Written successfully funded internal grants. (i.e. BEST)	55.0%	88
Written successfully funded external grants. (i.e. NSF, NIH)	64.4%	103
Experience working with interdisciplinary research groups	69.4%	111
Experience working with interdisciplinary creative projects	39.4%	63
Budgeting experience	44.4%	71
Excellent writing skills	60.0%	96
Organizational ability	65.6%	105
Other	14.4%	23

Faculty display a breadth of expertise with respect to writing proposals. Notably, many cite experience already working in an interdisciplinary capacity. Many have written successful internal and external grants. The responses suggest that MSU faculty possess the expertise and capacity to organize and write successful external grants.

## What are the areas of expertise and interest?

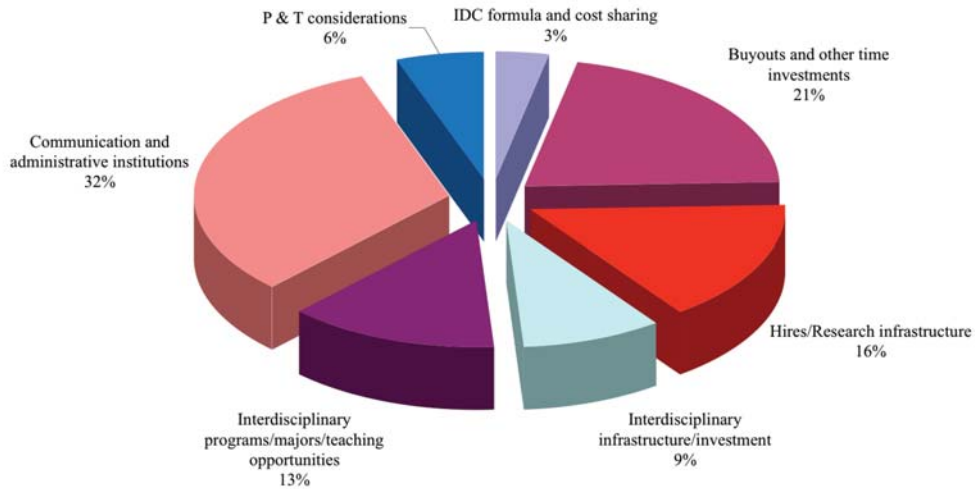


The list of expertise and interest areas was long and diverse. No one department or discipline seemed to dominate the response. For example, nine faculty from HHD and six from Nursing responded to the survey; there is clearly a desire for the two departments to work together on issues of health. Several others from additional departments also expressed interest in working on health-related initiatives. A broad array of natural resources/ecological/economic/social sciences was also identified as a potential area of collaboration. If we include those who express an interest on land use and land use change, the total climbs to thirty-nine respondents. Only three respondents limited their area of interest to ecology and the physical landscape.

The third largest area of interest was in the culture/arts/historical area. The respondents who identified this area came from the Arts, Literature, and History departments. Some of these people may also be interested in collaborations with other initiatives that have a health or resource-based theme (e.g., the study of aesthetics to land use planning and community design).

Two areas are of further interest for capacity building across disciplines: data management (6%), and energy-related research (4%) also offer exciting possibilities for collaboration with other groups. Those interested in interdisciplinary data management issues could contribute to projects that generate large amounts of data. Likewise, energy-related research often requires collaboration in the areas of ecological and land use issues, agricultural considerations, as well as issues of materials science.

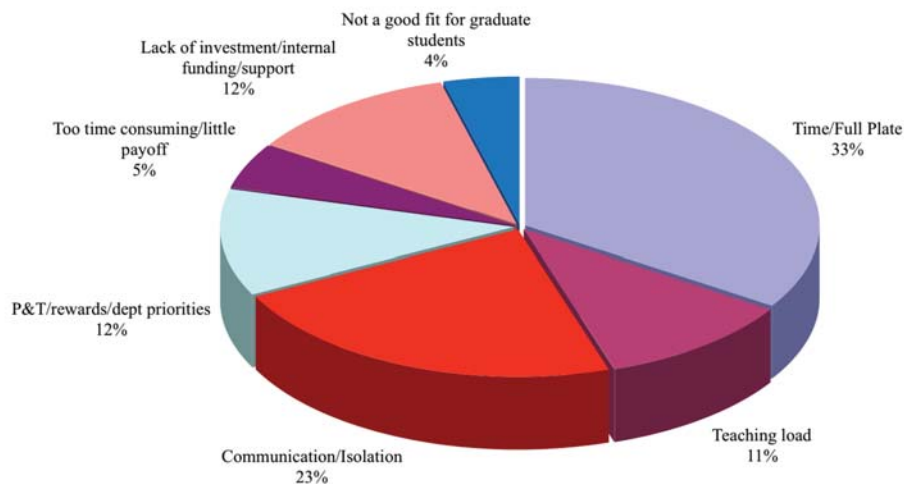
**What areas of academic infrastructure are most in need of enhancement and investment?**



There is a clear call for greater communication on campus of ongoing research, who is doing what sort of research, potential funding opportunities for interdisciplinary projects, and for greater administrative support at all levels (dept, college, university). One suggestion was to place disciplines that could work together in closer proximity in order to encourage informal communication/collaboration. Many wished to know more about presentations in other disciplines. Many respondents simply desire to know what is taking place across campus by those who are engaged in potentially collaborative research.

Many felt that more interdisciplinary teaching, programs, and majors would encourage faculty working across disciplines; others suggested that spending could be directed to those who would engage in interdisciplinary work. Finally, specific issues related to P & T calculations, cost sharing and IDC sharing, and BEST style buyouts are in need of attention.

**What are the barriers to participating in interdisciplinary research?**



We asked respondents to list barriers they felt might preclude them from being active participants in interdisciplinary projects. The overwhelming response was simply not enough time. Most felt they had to balance teaching, personal research agendas, and responsibilities to their departments and disciplines. Virtually no one stated they did not want to engage in collaborate work; in fact, several cited that they are

already engaged in such projects. The need for better communication and the sense of isolation felt by off-campus faculty ranked second as a barrier. Many reiterated that they do not know what is possible because they do not have a way to meet and learn from others across campus. Many faculty have full teaching loads and limited possibility of a buy-out.

Several respondents (12%) voiced concern that P&T standards and departmental priorities are significant barriers, i.e., that departments do not recognize the inherent value in engaging in interdisciplinary work. A few stated that the effort was too time consuming for the payoff that might result, and five felt that it would not benefit their graduate students to work outside the discipline.

Twelve percent stated that investment in people (buyouts, summer funding), data acquisition, and leadership on proposals (buyout for coordination/proposal writing) were all tangible items that would facilitate more collaboration across disciplines.

The data contained in the survey allows building a listserve of all respondents – email, phone, interest, expertise that could be searchable by interest and expertise. When a potential funding source is identified we could sort and send it to the appropriate faculty. This would complement the existing funding opportunity function by including RFP announcements they might not normally see. The list could be maintained and augmented with personnel changes.

## **Conclusions**

There is clearly an unmet desire among many (200+) faculty to engage in more interdisciplinary and collaborative research. The most significant finding is a lack of communication among faculty so they can understand what others across campus are doing and engaging them. Faculty feel isolated from one another in terms of potential projects. They also feel that there is not an effective clearinghouse and university institution to champion interdisciplinary proposals. Many respondents seek resources to free up time, including buyouts, leadership on projects, and administrative support. Reassurance is needed that the time spent on collaborations will be recognized in P&T evaluations.

The survey identified several viable areas for collaborative research across disciplines: health, natural resources; agricultural and land use issues, and there are opportunities to combine some of the sciences, social science, and humanities themes.