

NOTES FROM JUNE 26, 2014 MEETING OF THE I²SL UNIVERSITY ALLIANCE GROUP

Group Purpose: The goal of the University Alliance Group is to work with I²SL to better address the issues, concerns, and ideas related to sustainability at academic research institutions and to serve as an avenue to consolidate and communicate these items through a unified front in an effort to motivate changes to systems that can improve the energy and environmental sustainability of academic research institutions.

Present Focus of Group: The present focus of the group is on the topic of connecting sustainability to federally supported research at universities where the goals are to gather information, learn, and raise awareness about places in the system where connections between funding of research and sustainability are lacking and to find ways that this group can help influence change by working in a collaborative and cooperative manner with stakeholders including federal agencies.

Attendees: Kathryn Ramirez-Aguilar (CU-Boulder), Phil Wirdzek (I²SL), Brenda Petrella (Dartmouth), Randy Smith (Duke), Allen Doyle (UC Irvine), Amorette Getty (UC Santa Barbara), Matt Williams (University of Florida), John Ullman (John Hopkins), Abrey Batchelor (University of Washington), Sarah Lowder (UNC) and others

Lead: Kathy Ramirez-Aguilar, Univ. of Colorado-Boulder

Items Presented and Discussed at Meeting:

- I. Four areas where sustainability connections to the funding of research are lacking include:
 - 1) Granting agencies (such as NIH and NSF) do not require or encourage scientist to take resources use into consideration or trash generation when designing proposed research or in the spending of grant dollars.
 - i. Exceptions to this include some funding for new construction or renovation of lab facilities
 - ii. NIH is coming out with a guide for energy efficient equipment purchasing which they are expected to use to encourage their grantees to purchase energy efficient equipment with grant dollars
 - iii. GSA with the help/support of NIH created lab space with energy efficient tips on their Sustainable Facilities Tool (www.sftool.gov) site which includes a "Procure Tab" where a "Biomedical Equipment & Supplies" have recently been added (there are not many items listed at this point but there is potential).
 - 2) Universities do not connect their occupants with their costs for energy use, water use or trash generation
 - i. Some universities are working to address this issue for electricity including UC Berkeley, CU-Boulder, etc. (IF YOU KNOW OTHERS, PLEASE SEND THEM TO KATHY).
 - 3) Purchasing of lab equipment and supplies with federal grant dollars does not generally take resource use (energy & water) or solid waste generation into consideration because it is not required by most university or federal procurement rules and is has not in general been part of the culture of science community since scientists are not connected with their consumption financially.
 - i. HHS does have a Code of Federal Regulations (CFR) on the books (Title 45, 74.44 (a) (3) (vi)) requiring institutions to have written procurement procedures in

place that “shall provide for, at a minimum, that: Solicitations for good and services provide for...preference, to the extent practicable and economically feasible, for products and services that conserves natural resources and protects the environment and are energy efficient”

1. But this CFR is not enforced or encouraged by HHS and it is not followed and few university procurement offices are even aware of it.
 - ii. Some universities procurement offices have been working to address this such as the Univ. of California system (IF YOU KNOW OTHERS, PLEASE SEND THEM TO KATHY).
 - 4) Federal government does not ask or encourage universities to conserve energy, water or reduce solid waste generation as part of the Facilities and Administrative (F&A) rate (a.k.a. ICR- Indirect Cost Recovery) negotiations between universities and federal government
 - i. These funds cover the non-research cost that universities provide to support research such as utilities, building space and maintenance, IT needs, administrative positions, etc.
 - ii. CU-Boulder has a rate of 52.5% which means that if a scientist is awarded a \$200,000 grant, the federal government will provide \$105,000 on top of that grant for F&A costs (71% to the university and 29% to the department).
 - iii. Rates vary from university to university. For example, Princeton has a rate of ~63%.
 - iv. Negotiations take place every 3-4 years between the federal government and university ending with an audit-like visit by a federal agent (s) to the university
 - v. Significant work is done by individuals at the university to analyze and create documentation to support a proposed F&A rate by the university
- II. There is also a lack of a rating system (such as Energy Star) for energy efficient equipment selection.
 - Energy Star may be available for lab grade refrigerators and freezers in the coming years.
- III. Undesirable consequences from missing connections between sustainability and federal funding of research include:
 - More consumption of energy and water than necessary to support research
 - Because labs are large consumers on university research campuses (at CU-Boulder, in 2010-2011, labs occupied 20% of building sq. footage, but consumed 43% of the energy), the expectation is that there is significant savings to be had through energy and water efficiencies.
 - Reduced funding for research: Since more federal funding is required to pay for utilities, this means that there is less money for research
 - Universities are paying larger utility bills than necessary (It is unlikely that F&A (ICR) funds are covering all research related utility costs)
 - Federal Tax Dollars designated for research are not being used as efficiently as they could again because more federal funding is required to pay for utilities meaning there is less funding for research.
 - Research’s impact on climate change is greater than necessary since more consumption is occurring than necessary to conduct this research
- IV. The group has contacts with various federal agencies that care and are willing to have conversations with our group about this topic including OMB (Office of Management and Budget for the President), HHS, NIH, NSF, DOE, and GSA.

- In fact, DOE Better Buildings recently held a case competition focused on this topic.
- V. There was discussion about the culture on university campuses about F&A (ICR) rates: scientists want the rate to be as low as possible and campus leader/administrators want the rate to be as high as possible.
- VI. The point was made during the call that F&A funds cannot be collected on purchases of ULT freezers, but fees that scientist need to pay to store samples in centralized freezer facility such as a freezer farm serving a university.

Questions and suggestions from meeting:

1. Does F&A (ICR) funds that a university receives from the federal government cover all utility costs that result from research facilities on campus (including equipment still plugged in after a grant that purchased that equipment has long ended)?
 - a. The question is difficult to answer and likely would need a study to be conducted to really know what % range of utility costs are generally being covered by the govt. Based on conversation, what has been learned is that the government attempts to be fair in covering the utility costs that they create. However, it is unlikely that that government is covering all those utility costs that federal grants were responsible for creating over time. Lab space that is not being funded by federal grants during the auditing process (which only takes place every 3-4 years) is not supposed to be included in the F&A (ICR) negotiations. But that space may have previously been under federal grants and still has equipment plugged in and running from those previous grants. Also, during the auditing process the government generally looks for places where research floor spaces can be discounted from the process whereas the university tries to keep as much space as possible in for consideration. It is also impossible to predict what grants will come in from the federal govt over the 3-4 year period that the current F&A (ICR) rate is in place and thus how effectively utility costs will be covered by that F&A rate.
 - b. If anyone has more information on this topic, it would be greatly appreciated.
2. Given the vast amount of public dollar committed to F&A, wouldn't a more efficient research program reduce the level of F&A spent, possibly increasing money for research (reducing the F&A budget)?
 - a. Ideally yes. But university leaders and administrators will not want to see their F&A rates go down. Scientist prefer lower F&A rates, but university leaders do not. Perhaps a compromise would be needed for such an idea to work.
3. Can the government consider the level of F&A required by a research institution when prioritizing its grant approval? Can this be a criteria for award?
 - a. The granting agencies report that they need to award funding based on science merit alone. Thus F&A rate is not supposed to influence selection of federal grant awards.
4. Suggestion was made that because of the sensitive nature of the F&A (ICR) rates, it may not be the best first place for this group to start with its efforts...that perhaps encouraging granting agencies to make connections with sustainability in the spending of federal grant dollars may be a better place to start. But certainly the group can see how discussion go with federal government representatives about their ideas on how this group can help influence change by working in a collaborative and cooperative manner with stakeholders including federal agencies
5. Suggestion was made to have Grant Officers to participate on these calls. Certainly if members of the group have Grant Officers that they would like to invite, that would be great.

Next Steps:

1. Attend July 11, 2014 webinar where student group winners of the DOE Better Buildings Alliance case competition “Greening the Granting Process for Research Institutions” presented their solutions.
 - a. A link to the webinar has not been provided yet, but will be shared with the group once it ready
2. Set-up a conference call meeting to create an agenda and prepare for a near future meeting with representatives from various federal agencies including OMB, NIH, NSF, & HHS.
3. Conference call meeting with between the I²SL University Alliance Group and Federal Agency Representatives
4. Face to face meeting of the University Alliance Group for those attending the September 2014 I²SL Conference in Orlando, FL: Tuesday, Sept 23, 5 p.m. - 6:30 p.m.