

**AHS Roundtable Discussion
Open architecture/interdisciplinary science buildings
NERA-NEED-CARET, July 2015, Portsmouth, NH**

- How do you determine who gets in to new spaces on campus?
 - Clearly defined, transparent criteria or a series of discussions with PIs?
 - Is there consideration for the “best” combination of PIs, or is it a simple matter of the highest performers (or greatest flight risks) getting the space?
 - Are there provisions for young faculty that lack a track record? Is some space set aside for recruitment as well as reward/retention of proven faculty?
- What is the succession plan as faculty leave, are hired new, or simply vacate their space as their research declines or goes in a different direction?
- For lab spaces that extend across college lines (whether open architecture or not):
 - What is the governance structure, i.e., to whom does the lab manager/coordinator report?
 - What is the business plan for operating the facility, i.e., F&A return from grants, bench fees, college assessments?
- How do you measure the ROI on such spaces? F&A, patents, citations, all of the above?
- Relative to undergraduate research and training (quoting from an email): We pride ourselves on the extent and quality with which we provide such experiences, and I’m sure some of you have similar priorities and achievements. What has been your experience relative to this aspect, as one part of the overall research and experiential opportunities spectrum within open-concept versus traditional ‘compartment’ laboratory spaces?

Previous responses from NERA members:

WVU:

In designing our new building our policy was no more single purpose stand-alone labs, we clustered by type (genetics, biochemistry, food science, hort, etc) with four to five labs in each cluster. We made exceptions for 3 labs, the meats lab for health purposes, the rumen fermentation lab is a cluster of two, isolated with negative air pressure, and a soils lab where the professor uses a lot of undergraduates in her work. We argued about the last one but finally gave in, due to the number of students she uses and, of course, the dirt and dust you would expect in a soils lab, even with proper ventilation and dust capture systems.

Tim

Penn State:

The 297,000 square foot Millennium Science Complex is Penn State’s newest premier research building that houses two institutes (Huck and MRI), both have college affiliates. They have unofficial policies in place that they hope to formalize this year. The labs are all open architecture. I received the following information from the Huck Institute.

- 1) All space is only guaranteed for 1 year. July 1 through June 30th.
- 2) Space is designed based on thematic research. Example (infectious disease studies are on the first and second floor while neuro-engineering and biomedical is on the 3rd floor.
- 3) Each year, the space is reviewed based on needs, total grants, # of grads supported, # of post docs, and research associated with the PI.
- 4) We do not count Undergrads in space allocation

- 5) We evaluate researchers to make sure sharing Huck equipment is compatible and won't impact someone's research experiments. (contamination)
- 6) Lastly, we look for compatible PIs that may have opportunities to work together.

The biggest challenge we experienced at first was sharing equipment, training of equipment, and location of equipment. We assigned a PI per floor as the spokesman to help gather and provide feedback. In the past 2 years, we have not had any issues and in most cases the PIs work it out themselves. I can honestly say, we have less issues in Millennium than we do in our other two buildings (Wartik and LSB). Since we began doing our interdisciplinary analysis of PIs, the most collaborative are the ones in Millennium, which is what the intent of the building was for.

Gary