



May 23, 2005

Mark A. Emmert, President  
 University of Washington  
 Office of the President – Box 351230

RE: Report of findings on Regional Biocontainment Lab-Level 3 Facility Siting

Dear President Emmert:

The joint Faculty Senate / Provost RBL siting committee, which we co-chair, has had extensive discussions and reviewed as much available information as practical with regard to the three options outlined in our charge letter (see attachment). We previously agreed to move the June 1 reporting deadline up to May 17 to allow for better distribution to the campus community and here are our findings.

The accompanying profile of advantages and disadvantages captures the essential points that describe the institutional, scientific and social considerations most relevant to understanding whether or not to build a new facility and where. To interpret the information it is necessary for us to define several conditions, as well as provide general explanations and advice on the issues and assumptions of greatest interest. There are also a number of complex factors that would need to be further analyzed should the University wish to fully understand the consequences of any of the three courses of action. These issues are currently beyond the reach of the working group given the resources and time available.

We were assisted in our mission by several members of the campus community, by consultants and by several of our members observing the open public forums that took place over the course of our deliberations. These forums have been profiled by Vice Provost Steve Olswang in a separate report.

Let us briefly outline a number of points that we feel qualify our findings and assist in interpreting the "pros and cons" across the range of site-related issues.

1. The "use of existing facilities / no new building" option does not meet requirements of the grant regardless of how the issues have been profiled. NIH conditions require a stand-alone facility, and funds cannot be used for renovations. The existing labs and structures cannot be converted to the specialized RBL requirements mandated by the grant.
2. The off campus option is here defined as "near off campus" or "campus adjacent." This possible location is unknown, as are its land acquisition costs (if not currently university owned), jurisdictional restrictions, if any, neighborhood factors and numerous other variables. We concluded that simply shifting the siting to another urban or semi-urban location accomplished little to counter public criticism of safety and security, and true remote locations would likely disable the research program entirely. As indicated in the profile, the RCE researchers require nearby or on campus access to multiple facilities, collaborations, clinical activities, and non RCE laboratories. Hence, we used an undesignated, but reasonably close location off the main campus to enable us to address many of the more important points that compared the differences between the proposed on campus site (45S), and equivalent off campus location.
3. Public and community concerns over site selection, whether on or off campus, have been summarized in Vice Provost Olswang's report. It should be noted that nine RBLs have been constructed to date at various sites across the nation with apparent satisfactory resolution of community concerns.

4. Grant funding in the area of infectious diseases at the University of Washington exceeds \$100 million annually of which approximately \$11 million is directly associated with the RCE. The University successfully competed for a Regional Center for Excellence in biodefense and emerging infectious diseases two years ago. A specialized facility in which to conduct the RCE's activities (i.e., an RBL) would allow ongoing programs to succeed and future programs to develop. Failure to develop such facilities would likely jeopardize future funding for the RCE and would significantly impact infectious disease research at the University of Washington.
5. The NIH / RBL proposal is well documented on behalf of the Medical School from most points of view, but it should be noted that similar details of the current needs and "opportunity risks" associated with site 45S with regard to the College of Ocean and Fishery Sciences are less well understood. For example, a detailed analysis of the relocation and replacement costs needed to move and house the existing Oceanography, Marine Affairs and Sea Grant researchers and programs that already occupy the site, as a part of the additional costs beyond federal funding, does not exist.
6. With regard to "opportunity risks" another associated element for consideration involves site 47S. Here again, the long-term consequences of the loss of this site to Arts and Sciences future research and instructional plans are not well understood and the criteria for building site assessment have not been sufficiently documented. In our profile we occasionally refer to both sites and make every attempt to distinguish between them and the two campus units where necessary because the two sites are technically different in the master plan.
7. In reaching some of our conclusions, we briefly profiled the other existing and planned national RBL sites with regard to on or off campus location. Of nine RBLs providing information, five are on main campus sites, two are on nearby branch campus locations, one is a more distant branch campus and one is off campus and free standing. Proximity may be varied, but it is none the less important for the reasons identified in the attached profile of advantages and disadvantages.
8. Security and biosafety are of paramount importance in addressing the advantages and disadvantages in all three siting options. The ease of responsible official oversight and the issue of police jurisdiction, specifically UWPD direct authority, would appear distinctly critical to the success of the RBL. These numerous conditions reflect complex interpretations of regulatory code and statutes which impact design, operations, maintenance and costs, and are described in more detail in the siting profile.

In addition to the above explanations that are site specific, many committee members feel there are a number of policy issues surrounding these discussions that bear examination.

- A. The Campus Master Plan Policy effectively allows for flexibility and opportunity to shape campus and program growth, but the current policy fails to incorporate a process to consider the consequences of funding based decision-making. Our discussions frequently questioned how the impact of development on increasingly scarce open space could be understood without the guiding presence of a long-term strategic plan or vision. As such, these kinds of fragmented negotiations, where impacted units are not consulted before decisions are announced, will inevitably continue to generate resentment and conflict between affected units of the university community. The policy needs amplification and larger campus conversation on future development.
- B. The NIH profile of the RBL agreement suggests special federal expectations for use of the RBL in the case of an emergency. Therefore, further details of federal government use of the facility warrant written assurances that the possible uses of the lab would be consistent with best university research practices.

- C. It should be noted that a number of scientists across the nation question whether this particular kind of directed infectious disease research is in the best interest of public health policy. The committee presents no opinion, we merely point out the debate surrounding the political versus scientific arguments associated with the NIH plans. The NIAID response to this criticism points out that \$1.5 billion of new research monies have been provided by this program for the study of emerging infectious diseases.
- D. The use of campus buildings in core academic locations touches on one last issue and that is optimal use of facilities. The proposed lab would be one of a very few university facilities operated in a highly restrictive manner, requiring extensive safety instruction and security clearance before students could work in the RBL laboratories. However, other parts of the facility and program will offer expanded opportunities for specialized training as both a campus and regional resource.

The working group has reached a surprising degree of consensus on most of these issues and the profile of pros and cons. We are relieved to have met a tight deadline with what we think is a comprehensive and detailed assessment of the questions involved. Our inability to dig deeper into the details of costs, management, location and program impact, limits certain conclusions that can be drawn from our report, but hopefully positions you to evaluate the likely outcomes, benefits and risks of the essential conditions involved.

We both are available to assist in unraveling any of the interpretive knots that may have been created in our summary, should that prove beneficial.

On behalf of the group members:

Marilyn E. Cox, Director of Capital Planning  
David W. Emery, Research Associate Professor, Medical Genetics, Chair, Institutional Biosafety Committee  
Ashleigh Fleischman, ASUW Representative  
G. Ross Heath, Professor, School of Oceanography, Chair, Faculty Senate  
Edward Miles, Professor, School of Marine Affairs  
Vicky Stormo, Police Chief, University Police  
Blake Trask, GPSS Representative  
John Wingfield, Professor, Department of Biology  
Karen VanDusen, Director, Environmental Health & Safety

Sincerely,

Walter Stamm, Co-chair  
Professor and Head  
Division of Allergy & Infectious Disease

Douglas Wadden, Co-chair  
Professor of Visual Communication Design  
Past Chair, Faculty Senate

/nlb

Attachments



## UNIVERSITY OF WASHINGTON

OFFICE OF THE PROVOST

REVISED  
April 6, 2005

### *Joint Faculty Senate/Provost Working Group on RBL-3 Siting*

Walter Stamm, Professor and Head, Division of Allergy & Infectious Disease, *Co-chair*  
Douglas Wadden, Professor, Design; Past Chair Faculty Senate, *Co-chair*  
Marilyn E. Cox, Director of Capital Planning, Office of Capital & Space Planning  
Alison Cullen, Associate Professor, Evans School of Public Affairs  
David W. Emery, Research Associate Professor, Medical Genetics  
G. Ross Heath, Professor, School of Oceanography; Chair, Faculty Senate  
Edward Miles, Professor, School of Marine Affairs  
Vicky Stormo, Police Chief, University Police  
John Wingfield, Professor, Dept. of Biology  
Karen VanDusen, Director, Environmental Health & Safety  
Blake Trask, GPSS Representative  
Ashleigh Fleischman, ASUW Representative  
*Staff:* Nancy Bradshaw, Staff Assistant, Faculty Senate

Dear Colleagues:

Thank you all for agreeing to serve on this working group to advise President Emmert on the proposed Regional Biocontainment Lab-Level 3 (RBL-3) facility. More specifically, the charge is to:

- Provide general advice on the proposed RBL-3 and address responses to questions raised about the facility.
- Develop a comprehensive set of pros and cons (scientific, social, and institutional) for three alternative responses to the UW's needs and aspirations for biological safety level 3 (BSL-3) space:
  - No action (creation of BSL-3 space as needed within existing facilities).
  - Construction of the RBL-3 on campus (including a full assessment of site-related issues).
  - Construction of the RBL-3 off campus (again including a full assessment of site-related issues).

The working group should take advantage of experiences gained at other academic institutions that have constructed or considered constructing free-standing BSL-3 facilities

Joint Faculty Senate/Provost Working Group on RBL-3 Siting  
April 6, 2005  
Page Two

both in urban and rural areas. All three options should be fully developed (i.e., the analysis should not favor any particular option). Please consult broadly within the UW and with others who have an interest in this decision.

We ask you to produce a brief but comprehensive summary of the three options and provide general advice as appropriate, to give the President a robust basis for making a decision on the future of the proposal currently before the NIH. We would very much appreciate receiving your report by June 1, 2005.

Sincerely,

David B. Thorud  
Acting Provost

c: President Mark Emmert

## USE OF EXISTING FACILITIES; NO NEW BUILDING

### Advantages

1. *Proximity to colleagues/collaborators, non-Regional Center of Excellence (RCE) projects, specialized equipment, library, lectures, classes, teaching, and other resources*
2. *Close to clinical labs, hospital, isolation procedures/facilities*
3. *Easy to meet obligations of responsible official re: oversight, inventory control, incident investigation, emergency plan, 24/7 response with notification from UWPD, transportation*
4. *Cyber security easy to implement*
5. *Access to occupational health clinical services and infectious disease experts quick and efficient for staff*
6. *Within jurisdiction of UW police who have specialized knowledge of academic and security systems of UW*
7. RCE work continues with known standard operating procedures and registration
8. Close working relationship between responsible official and jurisdictional police department and Seattle Fire Department
9. No need to devote UW resources to fundraising for remaining \$35 million required to build the Regional Biocontainment Lab (RBL)
10. Less publicly visible, reduces "dread" factor; may be perceived as responsive to some community concerns
11. Lesser cost as a more limited facility
12. Maintains options for master plan sites
13. Lesser displacement of existing and/or proposed UW facilities than other options, for example: College of Ocean & Fishery Sciences proposal and Arts & Sciences proposal
14. Responds to formal written letters of City University Community Advisory Committee (CUCAC) and Northeast District Council (NEDC)

### Disadvantages

1. Existing facility cannot accommodate an RBL, and does not satisfy criterion for RBL
2. Limits available space for RCE and endangers future funding for RCE and other NIH sponsored infectious disease research
3. Limits current and future RCE program scope; some projects precluded (robotic manipulation of microbes, primate aerobiology, vaccine pilot plan)
4. Biosafety Level-3 (BSL-3) conversion expensive, difficult, asbestos abatement
5. Facilities cramped, design options limited
6. Restricts recruiting to UW program
7. Less effective collaboration than having researchers concentrated in one facility
8. No federal dollars available for facility development
9. Movement of research materials in public corridors is less secure
10. Operational protocol culture of RCE inconsistent with existing building uses
11. Continuing concern/fear of inadvertent infection in worker and transmission to public
12. Facility in multiple use area with easy access by non-research faculty, students, visitors
13. Less complete security/safety, higher risk of theft including terrorism
14. In an emergency, depending on entry point, responders could tie up traffic on Pacific
15. More difficult for responsible official to control in an emergency
16. Increased difficulty in managing security systems distinct from typical building systems
17. Less regional laboratory/designated expertise for public health emergencies as per RBL grant requirements
18. Using existing facilities would limit program growth of other research programs and displace some existing research
19. Limited flexibility and long term growth
20. Anticipate more operations and maintenance costs due to age of space
21. No redundancies in facility design
22. Security mandates mean more infrastructure modifications and oversight
23. Vulnerable to emergency in neighboring space

## NEW BUILDING ON CAMPUS

### Advantages

1. **State-of-art facilities; flexible design, full range of technology applications for research**
2. **Facilitates program expansion and recruitment**
3. **Full intent of RCE research can be realized**
4. **Safer transfer procedures and easier transport oversight accommodated**
5. **Structural redundancies included to maximize safety and security**
6. **Reduced risk of worker infection due to use of robotics**
7. **Reduced risk of public contact within facility**
8. **Security systems part of original building design and easier to manage**
9. **Provides flexibility for and opportunity for expansion of infectious disease research programs including federal funding for needed expansion of Biosafety Level-2 and Biosafety Level-3 facilities**
10. **Structural integrity, target hardening, security designs, treatment facilities and redundancies are more effective and will minimize health and environmental risks of concern to public**
11. **No sharing of space/public areas with uncontrolled visitors, faculty, students**
12. **Will minimize traffic impacts in the event of an emergency, depending on placement**
13. **Provides regional resource in the event of a public health emergency**
14. *Proximity to colleagues/collaborators, non-RCE projects, specialized equipment, library, lectures, classes, teaching, and other resources*
15. *Close to clinical labs, hospital, isolation procedures/facilities*
16. *Easy to meet obligations of responsible official re: oversight, inventory control, incident investigation, emergency plan, 24/7 response with notification from UWPD, transportation*
17. *Cyber security easy to implement*
18. *Access to occupational health clinical services and infectious disease experts quick and efficient for staff*
19. *Within jurisdiction of UW police who have specialized knowledge of academic and security systems of UW*
20. **Quicker response by UWPD, greater familiarity with facility and coordination of emergency responders well established**
21. **Easy to coordinate facility and UW emergency plan as required**

### Disadvantages

1. **Additional effort required for Center for Disease Control registration and new standard operating procedures**
2. **Increased cost: fund raising necessary, not highest University priority for funding opportunity**
3. **Program expansion will drive additional support requirements for biosafety and responsible official work**
4. Depending on site chosen, could displace 50 – 60 College of Ocean and Fishery Sciences (COFS) researchers from specialized facilities and equipment, limits COFS recruiting, removes COFS faculty from collegial interactions
5. Fear of community infection in area of building; “dread” factor leads to community opposition
6. Perceived as a more visible target for terrorist attack
7. Potential perception that UW unresponsive to community views and could lead to increased community distrust of UW activities
8. Parcel 45S located within shoreline zone, RBL at this location uses a scarce marine-oriented parcel for activity that could be conducted elsewhere
9. Cost of replacement space might be significant
10. Opportunity cost to use land for proposed Ocean and Fishery Sciences or Arts and Sciences’ buildings with potential loss of funding and research
11. Security oversight means extra infrastructure
12. Concerns expressed in public forums re: waterways, location near communities, and private businesses

## NEW BUILDING NEAR OFF CAMPUS

### Advantages

1. **State-of-art facilities; flexible design, full range of technology applications for research**
2. **Facilitates program expansion and recruitment**
3. **Full intent of RCE research can be realized**
4. **Safer transfer procedures and easier transport oversight**
5. **Redundancies part of structure to maximize safety and security**
6. **Reduced risk of worker infection due to use of robotics**
7. **Reduced risk of public contact within facility**
8. **Security systems part of original building design and easier to manage**
9. **Provides flexibility for and opportunity for expansion of infectious disease research/program including federal funding for needed expansion of Biosafety Level-2 and Biosafety Level-3 facilities**
10. **Structural integrity, target hardening, security designs, treatment facilities and redundancies are more effective and will minimize health and environmental risks of concern to public**
11. **No sharing of space/public areas with uncontrolled visitors, faculty, students**
12. **Will minimize traffic impacts in the event of an emergency, depending on placement**
13. **Provides regional resource in the event of a public health emergency**
14. Scientific mission can be accomplished based on comparisons to other RBLs that are off campus
15. Potential synergies with other off-campus biotech research facilities
16. May address concerns of some who don't want such research on main campus
17. No disruption of other existing UW programs
18. Could be located to allow future expansion capability
19. Does not restrict institutional goals, future fundraising, or proposed facilities for Arts & Sciences or Ocean & Fishery Sciences
20. Cost of land acquisition might be offset by lesser cost of off-campus design requirements, and avoiding need to replace existing program space
21. Off site location would not be subject to limitations of campus master plan
22. With UWPD: Within jurisdiction of UW police who have specialized knowledge of academic and security systems of UW, greater familiarity with facility and coordination of emergency responders well established (Only for sites contiguous with the major institutional boundary)

### Disadvantages

1. **Additional effort required for Center for Disease Control registration and new standard operating procedures**
2. **Increased cost: fund raising necessary, not highest University priority for funding opportunity**
3. **Program expansions will drive additional support requirements for biosafety and responsible official work**
4. More removed from colleagues/collaborators, non-RCE projects, specialized equipment, library, lectures, classes, teaching, and other resources
5. More time needed to reach patients
6. More difficult to reach other sites of practice or activity, e.g. clinics, non-RCE research, clinical labs and specialized resources of hospital
7. Responsible official requirements for oversight, inventory control, transportation less efficient with similar requirements on main campus, increasing time for responsible official
8. Cyber security not easily covered by campus
9. Additional difficulty in controlling transport, transfer of materials, waiting for responsible official
10. Incident investigation by responsible official less efficient and timely
11. Access to occupational health clinical services and infectious disease experts more difficult for staff, causing more time through public spaces to reach clinic support
12. Still located in dense population center; community concerns would simply shift location to off-campus site(s)
13. No central facilities support
14. Cost of land acquisition
15. May limit recruiting of some faculty who prefer on campus location
16. No control of surrounding development
17. Risk jeopardizing grant, since off-campus option not in original application
18. Less proximity to UW police
19. Without UWPD: Jurisdiction negotiations required if UWPD involved
20. Could result in non-UWPD jurisdiction
21. If non-UWPD, untrained police, different police and emergency responders unfamiliar with site and UW staff, processes, and procedures
22. Longer response time for local police
23. 24/7 notification of responsible official not possible through local police, thus reducing response time
24. No control over access systems by law enforcement
25. Alarms and control not part of UWPD
26. Additional training required for emergency responders
27. Can't coordinate facility emergency plan with entity plan as required since jurisdictional oversight would not be consistent
28. Increased security costs
29. Requires working relationship with jurisdictional police authority