9 April 2015

Dear Anita

The Department of Wood Science and Engineering thanks the review panel for their report (particularly Susan Anagnost and Kevin Chung who traveled to OSU for the review). As noted in the report major challenges facing the program are a declining enrollment related to an increasingly competitive funding environment and a lack of stand-alone graduate level courses.

In response to the report and its recommendations the WSE department has identified the following goals for the next 3 years:

- Increase the number of graduate students in the WSE department
- Increase the size of the WSE faculty
- Development of a plan for recruiting students (particularly US students from diverse backgrounds) to the program
- Improvement in our ability to track the progress of WSE students
- Creating new graduate level courses
- Development of a non-thesis masters option in wood science and technology
- Raise the profile of the WSE department across campus
- Development of an advisory board for WSE

**Growing our graduate student population and faculty**

We believe that the achievement of these goals will be strongly supported by initiatives currently underway in the College of Forestry. The most important of these is the $60 million Forest Science Complex construction project that will see a new Peavy Hall and a new lab for WSE (the Center of Excellence for Advanced Wood Products Manufacturing and Design). OUS funding ($30 million) has been secured and the college is well on its way to raising the additional $30 million required to complete the project. The design process has commenced and is being led by a collaboration of 2 architectural firms (Michael Green Architecture, Vancouver and Miller-Hull, Seattle).
Construction should start mid-2016 and it is expected the new buildings will be completed August 2017 (the lab may be completed earlier).

When completed the Center of Excellence for Advanced Wood Products Manufacturing and Design will position OSU to be a key player in the development of the next generation of tall wooden buildings in North America. New markets for high-value engineered wood products are emerging and will redefine the relationship between the wood products industry and building design professionals. This will create new research opportunities for WSE and require us to collaborate more broadly. We will be working with a number of new industry / government research partners (construction, development, code compliance for example) and are in the process of developing a new partnership with the University of Oregon School of Architecture and Allied Arts and strengthening our relationship with OSU College of Engineering.

Funding to support the new center and activities in WSE will be critical to the future of the department. We have already secured federal funds ($1 million / year) through the Agricultural Research Service (ARS) that will be used to support research activities and graduate students within the department and the center of excellence (the funding essentially replaces the WUR funding that supported the WSE department in the past).

It is expected that as interest in innovative new wood products and building with wood grows this will become an area of research increasingly supported by traditional funding sources. This has already started to occur with USDA-NIFA where WSE faculty members were successful in the latest round of funding with a CLT related proposal. As our expertise and reputation grows the expectation is that we will be extremely competitive as opportunities arise with organizations, in addition to the USDA, such as the Binational Softwood Lumber Council, Oregon BEST and Department of Defense (interest related to portable wooden structures).

WSE is about to interview candidates for an architecture position within the department. This is the first step in increasing the size of our faculty. The new position represents an opportunity to greatly broaden our perspective / areas of research, it will allow us to better participate in the evolution of tall wooden buildings and will greatly assist with our efforts to better collaborate with UO faculty. In addition, we are presently working to secure support from Oregon legislature that will be used to provide positions for new scientists that will build on existing research capacity within the department.

With an expected increase in funding and a number of new scientists working on related research, opportunities for graduate students in WSE will increase and this should see WSE in a strong position to achieve its goal for increasing the number of students in our program.
Development of a recruiting plan

Assuming ongoing ARS funding we will also be able to actively recruit students with confidence (we have been unable to do this since the loss of WUR funds and the transition within the department to largely funding students from grants). WSE will be in a position to advertise opportunities at meetings frequented by students and to also advertise opportunities more broadly. The WSE department has an excellent national and international reputation and our international student population is already quite diverse. However it was noted by the review team that we should increase the diversity of our US student population and we will work to attract US citizens with diverse backgrounds which will be the major priority of the recruiting strategy that we develop. We believe that our efforts to recruit graduate students will also be supported by the interest (in both the US and abroad) generated by the new CoF buildings.

Tracking WSE students

Tracking the progress of WSE students as they work to complete their degree is an area that we have already worked to improve since our review. For all students currently in WSE key milestones such as program of study on file, WSE required courses completed, research plan submitted etc., are now being tracked by the department for the first time. In addition, faculty will be asked to complete a yearly evaluation with each of their students (Appendix 1) that should help student success. We will continue to use, and adapt if necessary, our method for tracking student progress and will promote the uptake of yearly evaluations. In addition, we are attempting to work more closely with faculty and students to ensure that graduation requirements are clear.

New graduate level courses

We recognize the importance of providing new graduate-level course options for our students. One issue limiting the number of graduate courses we offer is the number of students available and interested in taking specialized courses. We expect that this will change and we will develop new courses in response. One new course has already been developed on modelling (John Nairn), development of another on strand-based composites is almost complete, a course on biodeterioration (Jeff Morrell) has intermittently been offered as a special topics course in the past and may be converted to a regular offering, while interest also exists in developing a course on wood coatings though this could be incorporated into the biodeterioration course. Discussions have also been held on possibly offering courses on nanocellulose and adhesion which could be cross-listed and would have broad appeal to students in a number of colleges. Another possibility is an advanced course on wood identification.

E-campus presents an interesting option for offering specialized graduate-level courses. Recently I was part of an accreditation team visit to an equivalent program at Virginia Tech and they have
the same problem regarding graduate level courses. It was proposed that specialized courses
offered by faculty at both universities could be offered online and taken by students at either.
One concern is how would tuition be managed between the two campuses but this could be
balanced if a similar number of students took courses at both universities.

Non-thesis option

We also expect an increase in graduate student numbers in response to a one-year coursework
Master’s program in Wood Science and Technology (see Appendix 2) that we are interested in
developing. A certificate option was recommended by the review committee but faculty felt that
it would not be possible to define certificate programs for the forest products industry that would
improve employment prospects or assist with promotion (unlike the College of Business, for
example, were certificates align with specific work related roles). We believe that there is a large
potential pool of students who work in the forest products industry but have degrees in other
fields and do not have a deep knowledge of wood as a material. As a result it is more difficult for
these people to excel in their positions. We also believe that there is a substantial population of
potential overseas students whose families own forest products related operations who could
benefit from having a stronger background in wood as a material.

The program would begin in Fall term for those with an adequate language foundation and one
term earlier for those who need some additional English language instruction. All students would
begin with a one week field tour similar to that taken by those in our undergrad program.

We would need to devote resources to recruiting, particularly for the Asian market and would
need to discuss options with the graduate school as to how this program would be supported.

Raising our profile across campus

We believe that the growth of WSE will lead to improved recognition across the OSU campus.
WSE already partners with faculty in a number of different disciplines; however, we will seek to
develop relationships with faculty whom we have not typically collaborated with, for example
faculty in food science. This may be achieved at an informal lunch where interested faculty would
be invited to attend and give a brief presentation about their research. In addition, we will work
to invite faculty from other departments to speak at our monthly wood lunches and to also speak
at our graduate seminar series (held every Wednesday afternoon of each term). It was suggested
that the department consider offering a colloquium series to provide opportunities for students
to present their research and to interact with colleagues across campus and our graduate seminar
series could be better promoted to fulfill this role.

The College of Forestry also holds the Western Forestry Graduate Research Symposium
(http://gradsymp.forestry.oregonstate.edu/) each year. Students from each of the 3 departments
in the college present their research and the symposium fills a role similar to the suggested colloquium; however greater effort could be made to invite students / faculty from other colleges.

**WSE advisory board**

Development of an advisory board for WSE has been discussed within the college. Presently an advisory board has been developed for the Institute of Working Forests Landscapes (see [http://www.forestry.oregonstate.edu/research/institute-working-forest-landscapes-0](http://www.forestry.oregonstate.edu/research/institute-working-forest-landscapes-0)) and several members (highlighted in bold in Appendix 3) could also serve in an advisory capacity for WSE. An alternative would be to identify a separate advisory board. Presently it is unclear which approach to pursue but WSE will work to identify the most suitable path forward in the coming year.

**Three year performance metrics**

A list of our goals and our 3-year performance metrics follows:

1. Increase the number of graduate students in the WSE department
   
   **Metric:** Number of students in program compared to 2014/15

2. Increase the size of the WSE faculty
   
   **Metric:** Number of departmental faculty / research associates compared to 2014/15

3. Development of a plan for recruiting students (particularly US students from diverse backgrounds) to the program
   
   **Metric:** New recruitment plan for graduate students developed and being implemented

4. Improvement in our ability to track the progress of WSE students
   
   **Metric:** Percentage of students with key milestones tracked
   
   **Metric:** Our ability to track students successfully completing their degrees (4 and 8-year graduation rates)

5. Creating new graduate level courses
   
   **Metric:** Number of new courses developed

6. Development of a non-thesis masters option in Wood Science and Technology
Metric: Number of students in the new program

7. Raise the profile of the WSE department across campus

Metric: Development of new collaborations among WSE faculty and faculty across campus

8. WSE Advisory board

Metric: An advisory board actively engaged in shaping the future of WSE

The WSE department is committed to achieving these goals in the next 3 years. Please let me know if you have any questions.

Regards

Laurence Schimleck

Department Head and Professor
Wood Science and Engineering
Appendix 1: Department of Wood Science & Engineering
Graduate Student & Assistant Annual Evaluation

Name of Student: ___________________________ Period of Evaluation: __________ to __________

Name of Evaluator: _________________________ Date of Evaluation: _______________________

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<thead>
<tr>
<th>Duties/Responsibilities % of Time</th>
<th>Performance Feedback</th>
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Explain any performance to address and a plan of action:

Other evaluative information:

Use additional pages and attach any supporting material. Letters or other documents may not be anonymous.

Evaluator Date Employee* Date

Department Head Date

*Employee: Your signature indicates that you have received a copy of this evaluation. Any written rebuttal must be submitted within 30 days.
Appendix 1: Department of Wood Science & Engineering
Graduate Student & Assistant Annual Evaluation

As a practical matter, all Wood Science graduate students should be evaluated by their major professor, committee or work supervisor each year. For some, the evaluation is required by the Collective Bargaining agreement as described below. For others, an evaluation is a matter of good professional practice. If a student is supported by an hourly wage or with an assistantship, they should receive a written evaluation of their performance as part of the reappointment decision process. For unsupported students, the evaluation is a formal means to ensure that they are making satisfactory progress toward their degree.

It makes sense to have a common policy of annual written evaluations for all students in the Department of Wood Science & Engineering because of the variety of graduate appointments and positions we maintain. This evaluation must be completed and on file in the Department office at least 30 days prior to any planned reappointment or re-employment.

Article 15–EVALUATION

Section 1. Each unit employing Graduate Assistants has the right to conduct periodic evaluations of the employee’s job performance. The unit may establish job performance criteria and the frequency and format of evaluation appropriate for the employee’s work assignment. Evaluations will be performed no less than once each academic year. Employees shall have access to all evaluative material unless otherwise restricted by this Article. Upon appointment, Graduate Assistants shall be notified in writing of the evaluation process and criteria.

Section 2. The evaluation may include written input provided by students, clients or others who have direct knowledge of the employee’s performance. If the written input includes a numerical rating, then a summary of the average rating scores may become a part of the Graduate Assistant’s personnel file. Anonymous evaluative material may not be kept in a Graduate Assistant’s personnel file.

Section 3. The supervisor or another faculty member designated by the employing unit may also conduct one or more site visits to the employee’s classroom or workplace for the purpose of evaluation. Upon request by the Graduate Assistant, the supervisor or a designated faculty member will conduct a site visit to an employee’s classroom or workplace. A Graduate Assistant may request additional evaluations on particular performance issues at any time.

Section 4. The employee shall be provided with a timely copy of the written evaluation by the supervisor. The employee shall sign the copy to be placed in the personnel file as an acknowledgment that the employee has received and read the evaluation. Within thirty (30) days of receiving the evaluation, the employee has the right to submit a written rebuttal for inclusion in the personnel file.

Section 5. As a result of the evaluation process, the academic unit may require that specific deficiencies in the work performance be remedied. If the deficiencies are not remedied within a reasonable period of time, the employing unit may initiate disciplinary procedures as specified in Article 17.
Appendix 2: Master’s program in Wood Science and Technology

The program would begin in Fall term for those with an adequate language foundation and one term earlier for those who need some additional English language instruction. All students would begin with a one week field tour similar to that taken by those in our undergrad program.

Proposed courses

Summer Term:

WSE 565 (3) Field trip

Fall term:

WSE 520 (3) Wood Science I
WSE 561 (4) Processing I
WSE 507 (1) Beginning seminar
One elective (4)

Winter Term

WSE 521 (4) Wood Science II
WSE 562 (4) Processing II
WSE 575 (4) LCA

Spring Term

WSE 522 (4) Wood Science III
WSE 553 (3) Global trade
WSE 555 (4) Marketing and innovation
WSE 507 (1) Seminar

Summer Term

WSE 503 (6) Project
STAT 511 (4)
Teaching Resources: The program primarily builds upon existing WSE courses. We will need to find approximately 8 credits of standalone grad courses. The standalone courses would also be available for our regular students, meeting one of the suggestions in the graduate review.
Appendix 3: Institute for Working Forest Landscapes Board Membership

• **Board Chair:** Clark Binkley, Chief Investment Officer, Greenwood Resources, Inc.

• **Theme Leads:**
  – **Healthy People and Communities:** Diane Daggett, Oregon State Director, The Trust for Public Land
  – **Competitive and Innovative Products:** Grady Mulbery, Vice President of Manufacturing, Roseburg Forest Products
  – **Intensive Managed Forests:** Greg Johnson, Director of Production Forestry - West, Weyerhaeuser
  – **Resilient Ecosystems:** Tom Spies, Research Forester, USFS, PNW Research Station

• **Members:**
  – John Audley, President, Sustainable Northwest
  – Hans-Erik Blomgren, Associate / Structural Engineer, ARUP
  – Liz Dent, State Forests Division Chief, Oregon Department of Forestry
  – Scott Hayes, Vice Chair, Oregon Tree Farm System
  – Randy Hereford, Forest Manager, Starker Forests, Inc.
  – Russ Hoeflich, Vice President and State Director, The Nature Conservancy
  – David Keltner, Principal, THA Architecture Inc.
  – Alan Knokey, Vice President, USNR
  – Jeff Light, Forest Hydrologist, Plum Creek Timber Company
  – Lee Miller, President, Miller Timber Services
  – Dave Rumker, Managing Director of Timberland Management, Campbell Global
  – Evan Smith, Vice President, Conservation Ventures, The Conservation Fund
  – Sally Sovey, Branch Chief, Planning, Sciences, & Resource Management, USDI, BLM
  – Jake Verschuyl, Biodiversity Research Coordinator, NCASI
  – Bettina von Hagen, CEO, Ecotrust Forest Management Inc.