

University of Washington Department of Electrical Engineering

Ten-Year Review – May 2012

Submitted by

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Executive Summary

The Department of Electrical Engineering offers a high-demand, high-value undergraduate degree, a revenue-generating Master's Program that helps professional engineers upgrade their skills, and its faculty and students conduct world-class research in several traditional and emerging areas of electrical engineering. The Department has attracted talented, successful and highly visible junior faculty. It has also made a strategic investment in the area of sustainable energy that is already starting to bear fruits. On the negative side, cultural silos, opaque decision making, the lack of external input, a liberal leave policy, and a dysfunctional building all contribute to frustration and even anxiety among faculty and students. There is, however, a prevailing sense of optimism and that a bright future awaits the Department under leadership of the new Chair.

Principal recommendations to the Department

- *Improve collegiality and sense of community at all levels* – Inclusive and transparent decision making, the empowerment of graduate students and improvements in space quality and usage would go a long way in building a community from what is currently perceived as a collection of isolated groups and cultures.
- *Redefine strategic thrusts* – Two of the strategic research thrusts identified during the departmental strategic planning process should be rethought: the *Medical and Molecular Systems* thrust artificially regroups two unique strengths that should be decoupled, while the *Big Physical Data* thrust feels diffuse despite exciting elements.
- *Form and use an Advisory Board* – The department should rapidly form and convene an Advisory Board composed of both academic and industrial leaders. The board should play an important role in branding the department, defining strategic areas for research investment, modernizing the undergraduate curriculum, and helping with fundraising.
- *Reconsider graduate-student recruiting* - The department should consider guaranteeing three years of funding to its incoming class of entering graduate students, perhaps temporarily reducing the number of admissions while working on this transition and on development efforts.
- *Revisit faculty leave policy* – Corrective action is needed to prevent concurrent faculty leaves and buyouts from depleting teaching capability in critical curricular areas.
- *Improve development* – The Department should formulate a long-term development plan that begins by tracking and celebrating its alumni. Alumni associations in industry and academia should also be tapped to boost the Department's image and as a source of funding and fellowships.
- *Improve diversity* – While it has very good gender diversity, the Department should take steps to improve underrepresented minorities participation at all levels.
- *Improve interactions with Computer Science and Engineering* – The Department has much to gain by developing strong connections with Computer Science and Engineering and interactions should be mended and strengthened through shared teaching, research and social activities

- *Improve the website* – The Department should improve the value of its website to students by creating resource pages and encouraging instructors to keep class material posted.

Principal recommendation to the university

- Electrical Engineering is a rapidly evolving field and course corrections may be needed before the Department's next ten-year review. We therefore recommend that an informal review be conducted by the College of Engineering within five years of this report.

1. Introduction

Our Committee was charged with conducting the ten-year review of the Department of Electrical Engineering on November 3, 2011 (*Appendix 1*). The Graduate School made available to us extensive documentation from the 2001-2002 review, along with 2011-2012 review documents that included an informative departmental self-study and a report from the Graduate and Professional Student Senate (GPSS). We conducted the departmental site visit on May 21-22, 2012. The process involved presentations by the Chair and faculty leadership, closed interviews with undergraduate students, graduate students, staff, and junior faculty, and a tour of the building that showcased select teaching and research laboratories (*Appendix 2*). Additional information including copies of all presentations, departmental strategic plan, and data on diversity and research funding per faculty, was requested by and provided to the Committee during the site visit. A GPSS report from a focus group meeting with five Electrical Engineering graduate students was also forwarded to the Committee on May 25, 2012.

Based on this body of information, we formed a picture of the Department that is presented in this report, which is endorsed by all Committee members. The first two sections highlight departmental strengths and weaknesses, while the third section lists our recommendations. These recommendations are also summarized in the Executive Summary.

2. Strengths

The Department of Electrical Engineering is one of ten departments in the College of Engineering and is poised to play a significant role in the success of the College. That contribution can only be realized through innovative leadership, continued academic and research excellence, and the successful execution of the Department's strategic plan. During the program review, we identified several strengths that will be strategic assets to the department as it pursues its mission. These strengths are summarized as follows:

Leadership of the new Chair

Prof. Vikram Jandhyala was elevated to department chair in September 2011. The Committee applauds this selection. Since assuming chairmanship, Prof. Jandhyala has worked with the faculty to conduct a SWOT analysis and formulate a strategic plan for Electrical Engineering; he is in the process of reactivating and restructuring the departmental Advisory Board and Industrial Affiliate program; and he is perceived by junior faculty as an energetic unifier that will move the Department forward.

Undergraduate program

With a total enrollment of 465 students, 350 applicants in 2011 and an acceptance rate of 37%, the Electrical Engineering BS degree is a very desirable and high-demand degree. The curriculum has a well-designed track system that offers flexibility while maintaining breadth and depth. The Committee was impressed by the large number of capstone projects; by the fact that students could increase their marketability by completing multiple such capstones; by the high number of undergraduates involved in research (48%); and by the large fraction of students

performing industrial co-ops (17%). The Committee also noted that gender diversity was very good relative to other Electrical Engineering departments and that undergraduates interviewed praised the quality of advising and were happy with their learning experience.

Professional Master's program

The Professional Master's Program (PMP) was launched in 2008. About 100 students are currently enrolled and 40-50 new students are admitted yearly, although a drop in enrollment is expected as a result of market saturation. The PMP appears to be well designed and administered. It fulfills a need for local professional engineers seeking to update or upgrade their skills while providing a direct revenue stream to the department. There are good ideas to maintain relevance in a changing environment (e.g., the inclusion of a Certificate in Sustainable Energy and plans to take some of the courses online). However, maintaining high enrollment numbers may be challenging in the future, and it is important to resist the temptation of accepting poorly qualified applicants.

Scholarship

The Department carries world-class research in several traditional and emerging areas of electrical engineering. Of note, junior faculty are highly visible and have been very successful at securing Young Investigator and Early Career awards from a number of agencies.

Other

The Department has good gender diversity. The staff is very collegial and feels appreciated and respected.

3. Weaknesses

While many aspects of Electrical Engineering are strong and provide a sound basis for growth, the Department also has several liabilities which will require attention both in the short term and over the years ahead.

Departmental vision

The Department has identified three research “thrusts” – *Sustainable Energy*, *Medical and Molecular Systems and Devices*, and *Big Physical Data* – as part of its recent strategic planning process. The *Sustainable Energy* thrust was clear, focused and compelling. The Department has invested heavily in this area over the past few years and it shows. The *Medical and Molecular Systems and Devices* lumps two unique departmental strengths, a well-established and highly respected medical robotics program, and an emerging effort in the area of synthetic biology. However, there does not appear to be any obvious overlap between these two programs and the Committee was left confused as to why they had been grouped under a single umbrella. The *Big Physical Data* thrust contains some very exciting elements, but felt diffuse and it was not clear how it was going to be unifying or synergistic.

Departmental decision-making and culture

A number of departmental processes (e.g., investment decisions, allocation/retention of research and office space, and allocation of TA-ships) lack transparency. Assistant Professors felt that their opinions were sometimes not taken into consideration; that the department was top heavy; that the strategy to build a pool of junior faculty was unclear; and that cultural “silos” interfered with collegial interactions and consensual decision-making. Although this is causing frustration, there was also a sense of optimism and a feeling that cultural changes were afoot under the leadership of the new Chair.

Building

The Department is housed in a fairly new but largely dysfunctional architectural project. The building is sterile, disorienting, and neither the floor plan nor the current space usage is conducive to collaborations and interactions between students, faculty and staff. Individual laboratories seem appropriate.

Job advice and placement

The lack of help in job advice and job placement was one of the chief complaints brought to the Committee by undergraduate students. In fact, students had been actively discouraged to organize a career fair by the Department. Unlike Computer Science & Engineering, which was viewed as a desirable but non-inclusive model, the Department does not appear to have any point person, process or committee to counsel students in their job search and/or to help them find employment.

Undergraduate program

Several weaknesses may ultimately jeopardize the quality of the undergraduate program. These include curriculum teaching gaps caused by faculty leaves and attrition, a need for updating/reorganizing the curriculum, a need for covering emerging and frontier areas of Electrical Engineering (this has been partially addressed with new courses in energy and synthetic biology), and problems with TA preparedness, effectiveness, ability to communicate and interest in teaching the classes they have been assigned to.

Graduate program

The graduate admission process and the mechanisms by which students are selected by their advisors appear to be suboptimal and somewhat haphazard. There are insufficient funds to support all graduate students under RA- or TA-ship and the mechanism by which TAs are assigned and the timing of the announcements causes anxiety and frustration in the graduate population. Graduate students are not encouraged to build strong technical synergies with other groups and are often unaware of the research performed and of the resources available behind closed doors. Finally, the Department employs graduate students as instructors in graduate-level qualifying courses when the faculties that normally teach them are on leave. This option should be exercised with care, as there was consensus that such courses were of low quality.

Other

There is no tracking of undergraduates after graduation, which hinders assessment of program effectiveness and impairs development activities. There were a low number of under-represented minorities (URM) in students, faculty and staff.

4. Recommendations

Improve collegiality and sense of community at all levels

The Department should strive to build an *esprit de corps* that is inclusive of faculty, staff, graduate and graduate students. This could be achieved by bringing about a number of changes such as: improving transparency in the assignment of fellowships / TA-ships, new faculty searches, and space assignment; remodeling parts of the building to increase appeal and foster interactions; opening unused/underused space to students to allow for interactions between different research groups; establishing a seminar series in which graduate students present their research to their peers; empowering graduate student by allowing them to invite a few seminar speakers every year; rewarding and celebrating outstanding students, staff and faculty; and rethinking building access (open keying?), space utilization and its allocation process.

Redefine strategic thrusts

The *Medical and Molecular Systems and Devices* and *Big Physical Data* research thrusts should be re-evaluated with input from an Advisory Board (see below). There could be more than three research thrusts and strategic directions do not need to be inclusive of all departmental research activities. Because the Department already has good visibility in the medical robotics and synthetic biology areas, the two programs that had been amalgamated to form the *Medical and Molecular Systems and Devices* should be decoupled and pursued independently. The *Big Physical Data* thrust should be refined and restructured.

Form and use an Advisory Board

The Department should quickly establish and convene an Advisory Board composed of both academic and industrial leaders. The board should play a major role in helping the Department brand itself; in helping identify and define strategic investment areas; in helping evaluating and modernizing the undergraduate curriculum while reinforcing the core; and in assisting with development activities.

Reconsider graduate-student recruiting

The quality of graduate students is a critical ingredient for improving the stature of the Department, but national competition is fierce for the best students. The Department should consider granting all admitted students three years of guaranteed funding under the form of departmental funds, fellowships, TA-ships, RA-ships or other mechanisms. In the long term, the Department should pursue development activities to increase the number of graduate

fellowships, but in the short term it could simply admit fewer students and support all of them longer. In addition, the Department should consider supplementing TA-ships to RA-ship levels and rethinking the graduate admission process to make it more efficient.

Revisit faculty leave policy

Multiple buyouts, sabbaticals and professional leaves have led to faculty depletion in certain curricular areas. The Department should revisit its faculty leave policy to determine how to best address these problems without compromising the quality of the undergraduate and graduate curricula.

Improve development

The Department should work on development with the long-term goals of providing the entering graduate class with a full year of support and of endowing minority fellowships. To this end, it would be helpful to track alumni; to broadly publicize departmental and alumni successes; to start a departmental award recognizing “star” alumni; to work with the Advisory Board and the College of Engineering to prioritize development efforts; and to use alumni associations to promote the Department’s image, establish fellowships or collect unrestricted funds.

Improve diversity

While gender diversity is commendably high, the Department has a low percentage of underrepresented minorities (URMs). Possible approaches to increase these numbers include: hiring URM faculty; establishing a visitation day targeted to the recruitment of URM graduate students; awarding fellowships to URM students; and working with industrial affiliates and CoE development to endow/support such URM fellowships.

Improve interactions with Computer Science and Engineering

Electrical Engineering and Computer Sciences are part of a single department on many campuses as there are natural synergies between the disciplines. Even though the EE and CSE building are connected by an atrium, and even though junior faculty have been jointly hired under the ExCEL (Experimental Computer Engineering Laboratory) program, relationships between the two departments appear tenuous. In fact, some students and faculty report being treated as “second class citizens” by CSE. We recommend that relationships be mended and strengthened by e.g., offering/developing jointly listed courses, increasing the number of joint projects/proposals, and conducting common social activities.

Improve the website

As part of its improved communication campaign, the Department should enhance the value of its website by creating resource pages that serve as central repository of information on user facilities, fellowships, seminars, etc. The Department should also encourage instructors to let students retain access to materials posted on the course websites (syllabi, notes, etc), perhaps under UW NetID protection.

Appendix 1: Charge Letter



UNIVERSITY OF WASHINGTON

Undergraduate Academic Affairs

&

The Graduate School

November 3, 2011

Department of Electrical Engineering Review Committee

Francois Baneyx, Professor, UW Chemical Engineering (Committee Chair)

Dan Weld, Professor, UW Computer Science & Engineering

Gary S. May, Dean, College of Engineering and Professor, School of Electrical and Computer Engineering, Georgia Institute of Technology

Bill Samaras, Principal Engineer, Datacenter and Connected Systems Group, Intel Corporation

RE: Charge to Review Committee for the 2011-2012 Department of Electrical Engineering Review

Dear Review Committee:

Thank you once again for agreeing to serve on the committee to review the degree programs offered in the Department of Electrical Engineering at the University of Washington: the Bachelor of Science in Electrical Engineering, Master of Science in Electrical Engineering, and Doctor of Philosophy (Ph.D.). The review is conducted in accordance with state legislative mandate under the direction of the Graduate School. It is conducted in coordination with the Office of Undergraduate Academic Affairs, College of Engineering Dean's Office, and the Office of the Provost. The Academic Affairs and Planning Office in the Graduate School will coordinate the review.

Committee Charge

In general, the committee's charge in this review is to assess the quality of the undergraduate and graduate degree programs in the department and to provide its faculty with constructive suggestions for strengthening those programs. These reviews provide the University with a clearer understanding of each program's quality, educational value, role within the University and community, role within the academic discipline, and resource requirements.

As background information, the Department of Electrical Engineering was last reviewed in 2001-2002. Documents related to the prior and current departmental program reviews are available on the following website <https://catalyst.uw.edu/workspace/gsacad/25138/>.

For the 2011-2012 review, the possible recommendations range from suspension of student entry into the department's degree programs to a recommendation for continuing status with a subsequent review in 10 years. Shorter terms can be recommended if the committee deems it appropriate. Equally important to this status recommendation, the review can offer the department and the administration an independent assessment of the "health" of the unit and advice on how it can be improved.

Self-Study and Site Visit

The Electrical Engineering self-study and draft of the site visit agenda are due **February 1, 2012** and will be made available to the review committee shortly after receipt by the Graduate School. After reviewing the department's self-study, the committee may wish to request additional information or initiate its work before the site visit to ensure a thorough and rigorous review. Based on our experience, we suggest that the external reviewers be relied upon as content experts who can evaluate the quality of the unit from a national perspective. They are also likely to be able to comment on recent developments in the field and their incorporation into the department. We encourage the committee to communicate with Dr. Vikram Jandhyala, Department Chair, so that he knows the committee's interests and expectations, particularly for the site visit, and to communicate with other key faculty, if time permits. UW committee members may conduct interviews prior to the site visit as they deem appropriate.

The two-day site visit on **May 21-22, 2012**, will include discussions with faculty, students, staff, and any other constituents the department or committee feels would be useful. The site visit will culminate with an exit discussion, divided into two portions. The Associate Dean of the Graduate School, Associate Dean of Undergraduate Academic Affairs, Dean of the College of Engineering, and representatives of the Graduate School Council will participate in the exit discussion. The first portion of the discussion will include departmental representatives, while the second portion, the executive session, will include only the review committee and administrators. We will request the committee's formal recommendation regarding the continuance of the degree programs early in the second portion of the exit interview. We will also ask the committee to describe its plan for completing the written report in a timely manner.

The Graduate and Professional Student Senate (GPSS) participates actively in the program review process. The GPSS sends surveys to current graduate students, and a GPSS representative may join the graduate student meeting during the site visit. GPSS will distribute its survey findings in advance of the site visit and may issue an independent report to the Graduate School based on its findings.

Review Committee Report

We request that the review committee submit its written report within 4 weeks of the site visit. Specifically, the **written report is due June 19, 2012**. A written response will then be provided by the unit and is due on **July 18, 2012**. When the response is available, the report and response will be considered by the Graduate School Council. The Dean of the Graduate School will then write a letter outlining the review and recommendations to the Dean of the College of Engineering for his consideration and action, with copy to the Provost.

Please note that upon completion of program reviews, the primary review documents become public documents and are placed on the Office of the Provost's web site. These documents include the self-study, the review committee report, the unit's response to the report, and the Graduate School Dean's letter to the Dean of the College of Engineering.

Specific Considerations for the Self-Study

The most important objective of the review is an assessment of the academic and educational quality of the unit. Important questions include:


- 1) Are they doing what they should be doing?
- 2) Are they doing it well?
- 3) How can they do things better?
- 4) How should the University assist them?

In addition to the standard (Part A) questions from the academic program review guidelines, the department should address the issues it has outlined in the unit-defined questions for Part B, attached below (page 4). In addition, the department should consider the following topics and clarifications as discussed in the charge meeting. The department may contact the review committee chair if it has questions about what written documentation would be most useful to the committee as it does its work.

- 1) In addition to the department's opportunities for growth, what might the department de-emphasize as it moves forward?
- 2) Is there a strategic area where the department should "bet the farm" and invest in heavily?
- 3) What opportunities exist for the department to pursue a cross-departmental BS/MS degree?

Thank you for your time and effort. Please contact David Canfield-Budde, Academic Program Specialist, at dacan@u.washington.edu with any questions you may have about the review.

Sincerely,



Gerald J. Baldasty
Vice Provost and Dean



James Antony
Associate Vice Provost and Associate Dean for
Academic Affairs

cc: Douglas J. Wadden, Interim Provost and Executive Vice President, Office of the Provost
Ed Taylor, Dean, Undergraduate Academic Affairs
Matt O'Donnell, Dean, College Engineering
Vikram Jandhyala, Chair, Department of Electrical Engineering
Ann Marie Borys, Associate Professor, Architecture
Tom Lee, Professor and Associate Dean, Foster School of Business
David Canfield-Budde, Academic Program Specialist, The Graduate School
GPSS President

Part B Self Study Questions

Submitted by Electrical Engineering, University of Washington
For 2011-2012 Academic Program Review

1. What unique research strengths should we build upon?
 - a. What synergies in the university and region can our department leverage?
 - b. What strategic areas should our department pursue?
 - c. How do we enhance collaborative research and impactful large-scale innovation?
 - d. What is the core competence of Electrical Engineering, what is our Electrical Engineering identity? How do we maintain this core and identity while also responding sensibly to the imperatives for interdisciplinarity?
 - e. What is our role and our place in the college and the university?
2. What strategies should we follow for our degree programs?
 - a. Is there a role for a daytime masters only?
 - b. Should we further enhance professional programs, including international and online education?
 - c. What changes should we make to our PhD program?
 - d. How do we structure an integrated BS-MS program
3. What are other pathways for revenue generation that permit the Department to be less dependent on State funding while maintaining a high quality of research and education
 - a. What is the role of startups and commercialization
 - b. Service teaching and professional degree programs
 - c. Streamlining processes and systems in the department

Appendix 2: Site Visit Schedule



UNIVERSITY OF WASHINGTON
Department of Electrical Engineering Program Review
May 20-22, 2012
Paul G. Allen Center, Room AE 108
AGENDA

Sunday, May 20

<u>Time</u>	<u>Event</u>	<u>Location</u>
6:00 p.m.	Review Committee Working Dinner	Chloe Bistrot (3515 NE 45th Street; 206.257.0286)

Monday, May 21

<u>Time</u>	<u>Event</u>	<u>Location</u>
7:30 – 8:30 a.m.	Breakfast with Vikram Jandhyala	Portage Bay Café (4130 Roosevelt Way NE, 206.547.8230)
9:00 – 10:00 a.m.	Update on Department Development Vikram Jandhyala, Professor and Chair Bruce Darling, Professor and Associate Chair for Education Jenq-Neng Hwang, Professor and Associate Chair for Research John Sahr, Professor and Associate Chair for Advancement and Infrastructure	Paul Allen Center, AE 108
10:00 – 11:00 a.m.	Undergraduate Program Rich Christie, Undergraduate Program Coordinator Brenda Larson, Lead Undergraduate Counselor Stephanie Swanson, Undergraduate Counselor Eve Riskin, Undergraduate Research Coordinator	Paul Allen Center, AE 108
11:00 – 11:15 a.m.	BREAK	
11:15 – 12:00 p.m.	Undergraduate Students and IEEE / HKN Officers	Paul Allen Center, AE 108
12:00 – 12:30 p.m.	Senior Staff Pam Eisenheim, Interim Administrator Andrei Stabrovski, Former Interim Administrator Sekar Thiagarajan, Computing Manager Erin Olnon, Professional Programs Manager Karen Fisher, Manager of Program Operations	Paul Allen Center, AE 108
12:30 – 1:30 p.m.	Lunch for the Review Committee and Former Chairs Howard Chizeck, Professor Bruce Darling, Professor Leung Tsang, Professor	UW Club, Colleen Rohrbaugh Room
1:30 – 2:00 p.m.	Break and Walk to Site Visit Room	Paul Allen Center, AE 108
2:00 – 3:00 p.m.	Graduate Program Bruce Darling, Professor and Associate Chair for Education Lih Lin, Professor and Graduate Program Coordinator Scott Latiolais, Lead Graduate Counselor Sarah McDonald, Former Advising Coordinator	Paul Allen Center, AE 108
3:00 – 3:45 p.m.	Graduate Students and GSA Officers (may include GPSS Representative)	Paul Allen Center, AE 108
3:45 – 4:00 p.m.	BREAK	
4:00 – 4:45 p.m.	Professional Master's Program Les Atlas, Professor and PMP Coordinator Erin Olnon, Professional Programs Manager Blake Hannaford, Professor and member of the PMP Committee Joshua Smith, Associate Professor and member of the PMP Committee	Paul Allen Center, AE 108
4:45 – 5:15 p.m.	Building and Facilities Tour	Electrical Engineering Building
6:00 p.m.	Review Committee Working Dinner	Eva Restaurant (2227 North 56th Street., 206.633.3538)



UNIVERSITY OF WASHINGTON
Department of Electrical Engineering Program Review
May 20-22, 2012
Paul G. Allen Center, Room AE 108
AGENDA

Tuesday, May 22

<u>Time</u>	<u>Event</u>	<u>Location</u>
9:00 – 9:30 a.m.	Research Overview Vikram Jandhyala, Professor and Chair Jenq-Neng Hwang, Professor and Associate Chair for Research	Paul Allen Center, AE 108
9:30 – 10:00 a.m.	Sustainable Energy Rich Christie, Associate Professor Mohamed El-Sharkawi, Professor Daniel Kirschen, Professor Miguel Ortega-Vazquez, Research Assistant Professor Shwetak Patel, Assistant Professor	Paul Allen Center, AE 108
10:00 – 10:30 a.m.	Medical and Molecular Systems and Devices Karl Bohringer, Professor Howard Chizeck, Professor Blake Hannaford, Professor Eric Klavins, Associate Professor Georg Seelig, Assistant Professor	Paul Allen Center, AE 108
10:30 – 10:45 a.m.	BREAK	
10:45 – 11:15 a.m.	Complex System Design and Big Physical Data Les Atlas, Professor Jenq-Neng Hwang, Professor Vikram Jandhyala, Professor Sumit Roy, Professor Joshua Smith, Associate Professor	Paul Allen Center, AE 108
11:15 – 12:00 p.m.	Assistant Professors Maryam Fazel, Assistant Professor Kai-Mei Fu, Assistant Professor Shwetak Patel, Assistant Professor Chris Rudell, Assistant Professor Georg Seelig, Assistant Professor	Paul Allen Center, AE 108
12:00 – 1:00 p.m.	Review Committee Working Lunch	Paul Allen Center, AE 108 (Boxed lunches delivered to site visit room)
1:00 – 2:45 p.m.	Private Review Committee Planning Session	Paul Allen Center, AE 108
2:45 – 3:00 p.m.	BREAK	
3:00 – 3:45 p.m.	Exit Discussion Rebecca Aanerud, Associate Dean, The Graduate School Douglas Wadden, Executive Vice Provost Deborah H. Wiegand, Assistant Dean, Undergraduate Academic Affairs Matt O'Donnell, Dean, College Engineering Vikram Jandhyala, Chair, Department of Electrical Engineering John Sahr, Associate Chair, Advancement and Infrastructure Bruce Darling, Associate Chair, Education Jenq-Neng Hwang, Associate Chair, Research Ann Marie Borys, Associate Professor, Architecture, Graduate School Council Tom Lee, Professor, Foster School, Graduate School Council David Canfield-Budde, Academic Program Specialist, The Graduate School	Paul Allen Center, AE 108
3:45 – 4:30 p.m.	Exit Discussion, Executive Session (without departmental representatives)	Paul Allen Center, AE 108
4:30 – 5:00 p.m.	Review Committee Debriefing (review committee only)	Paul Allen Center, AE 108