Graduate School Assessment Annual Activities Report 2013-2014

A. Background and Overview

Ongoing assessment of graduate programs takes place largely at the program-level and is designed to meet the distinctive needs of the program, the degree, and the discipline. The Graduate School supports program-level assessment through activities such as program approvals and reviews by the Graduate Faculty Executive Committee (GFEC), providing assessment resources and opportunities, benchmarking of data, continuous improvement of data access and tools, and the deliberative review of policies in concert with other units.

The Graduate School also plays a role in offering assessment activities and opportunities directly to students and postdocs. The Graduate School strives to evaluate its own programs, workshops, and services it provides to students and programs. Also, the Graduate School serves as the assigned administrative school/college for two graduate programs with respect to program review, assessment, and accreditation compliance: Biophysics and Cellular and Molecular Biology.

Thus, this Assessment Annual Activities Report encompasses activities done at the program level, student and postdoc level, internally, as well as with the two graduate programs for which the Graduate School serves as the assigned administrative college. In all these realms, the Graduate School continues to emphasize the importance of the student experience and student learning.

B. Description of Graduate School Assessment Activities

1. Graduate Faculty Executive Committee (GFEC) Activities

   **Program Reviews:** The committee completed 12 ten-year program reviews as well as reviewed the requested follow-up reports of eight previously completed ten-year program reviews. These numbers signal an extremely productive year for program review activities.

   **Program Proposals:** The committee reviewed and approved 17 actions for new programs or program changes (excluding discontinuations/suspensions). An additional seven actions were reviewed and approved related to discontinuations or suspensions. These numbers signal an extremely productive year for program proposal activities.

   **Review and Development of Academic Policy:** The committee reviewed and approved policies in five major categories to move campus into compliance with institutional accreditation criteria and to address other related impacts: minimum graduate residence credit requirement, minimum graduate degree credit requirement, minimum graduate course work (50%) requirement, prior course work criteria, and maximum credits per
term. Although prompted by the Higher Learning Commission’s (HLC) institutional accreditation criteria, these policy changes were utilized as another avenue to ensure the integrity of our graduate degrees and the quality of the graduate student experience. The committee also reviewed and approved the creation of an exception pathway based on specialized accreditation to allow undergraduate credits to count toward a graduate degree. The review and approval of all these policies represent a robust and comprehensive review of existing policies and practices which, in turn, led to thoughtful and responsive changes to graduate academic policy.

2. Assessment Resources/Opportunities for Students and Programs

**Individual Development Plans:** The Graduate School took steps to partner with other campus offices and to build a repository of resources around individual development plans (IDPs) for students, postdocs, advisors/mentors, and programs. IDPs are valuable tools to help graduate students and postdoctoral researchers assess their skills, interests, and strengths; make a plan to meet academic and professional goals; and communicate those intentions with advisors/mentors. IDPs are continually revisited and refined and also serve as a way to record progress and accomplishments.

**Professional Development Activities and Resources:** The Graduate School and partners across campus offer a variety of events for graduate students and post-docs around the following topics: career, ethics, financial education, presenting and publishing, research, teaching, work-life balance, writing, etc. These events are key assessment and learning opportunities to succeed academically and professionally. In addition, the Graduate School’s professional development webpages offer a variety of resources including planning guides, skills development tools, and career support resources to support professional goals.

**Graduate Program Handbook Template:** In response to the absence of a program handbook during several program reviews, the Graduate School coordinated a comprehensive graduate program handbook template. The template includes several areas directly linked to student learning and a positive student experience: articulation of program learning goals, program advising, program requirements, program expectations, grievance procedures, student involvement, professional development and career planning, etc. The existence of a thoughtful and thorough program handbook has been deemed a key criterion to the success of graduate programs and its students. In fact, the exercise of reviewing the program handbook template against a program’s existing (or absent) handbook is an excellent assessment activity to determine areas of strength and weakness.

**Outreach Efforts to Graduate Programs:** The Graduate School piloted a summer seminar series intended to increase graduate students’ access to career planning expertise at the program level, by building basic career development knowledge and referral skills in graduate program coordinators. Additionally, we funded two graduate program coordinators to attend an intensive 120-hour online/hybrid career development training. Assessment of the series and the training is currently underway.

The Graduate School is also increasing its outreach work, in an effort to better publicize professional development opportunities. This outreach includes explicit messaging that
the Graduate School embraces diverse career outcomes, both within the tenure-track and in various other sectors outside of the academy.

3. Data Reporting and Access Activities

*National Data Reports/Directories*
- Council of Graduate Schools (CGS) *International Graduate Admissions Survey (Phase I, II, and III)*
- *Survey of Earned Doctorates (SED)*
- Council of Graduate Schools (CGS)/Graduate Records Examination (GRE) *Survey of Graduate Enrollment and Degrees*
- National Science Foundation (NSF)-National Institutes of Health (NIH) *Survey of Graduate Students and Postdoctorates in Science and Engineering*
- The Graduate School administers the Association of the American Universities Data Exchange’s (AAUDE) Graduate Education Doctoral Exit Survey. This data is provided to the Provost’s Office so it can be shared with AAUDE to provide further opportunities for analysis with peer institutions.
- ACT’s Graduate/Professional School Survey
- Peterson’s Annual Survey of Graduate and Professional Institutions

*Campus Data Surveys/Reports*
- Exit Surveys: The Graduate School continues to administer the internally developed master’s student exit survey. It also manages the completion of two doctoral exit surveys: *Survey of Earned Doctorates (SED)* and the American Universities Data Exchange’s (AAUDE) Graduate Education Doctoral Exit Survey. The new electronic warrant system and internal business practices help with the effective administration and completion rates of these surveys.
- Program Profiles: The Graduate School continues to annually create Graduate Program Profiles. These Profiles are available on the web and provide helpful program-specific data to prospective students, graduate programs, GFEC members, and the University community. An exciting addition this past year was doctoral completion rate data as well as doctoral time to degree data generated for the AAUDE by the Provost’s Office. Profiles are created at the overall program level, plan level, and the subplan level (named option) and include data on admissions, enrollment, funding, diversity, degree production, time to degree, and completion rates. Aggregate profiles are also created for each academic division and the Graduate School as a whole.
- Postdoc Survey: The *Graduate School Strategic Plan 2012-2017* charged a work group to explore the professional development needs of approximately 800 postdocs employed at UW-Madison. In March 2014, the work group distributed a survey to all postdocs at UW-Madison holding titles of research associate, postdoctoral trainee, or postdoctoral fellow. In addition to professional development, the survey identified some broader issues pertaining to climate, PI/mentor relationships, benefits, HR resources, governance, length of time in postdoc appointments, and career counseling. The work group used the survey, in addition to other information, to develop recommendations aimed at improving professional development opportunities for postdocs at UW-Madison.
Solutions to Improve Data Access and Assessment Efforts

- **Electronic Warrant System:** The Graduate School successfully completed an electronic warrant system for programs to use in lieu of the old paper warrant system. Not only will this system allow for greater efficiency and accuracy of the data elements documented on a warrant, but a future enhancement will also allow committee membership data to be retrievable in the Data Warehouse.

- **New Online Application:** The Graduate School continues its efforts to implement a new Graduate School online application that is integrated with ISIS. Throughout the entire application development process, attention has been placed not only enhancing the user experience but also on optimizing data integrity and access of collected data inputs. The thoughtful design and natural integration with ISIS will greatly benefit future data collection and analysis.

- **Query Library:** The Graduate School continues its efforts to improve and add to the collection of graduate-related queries in the Query Library. A Query Library workgroup has been formed which includes both Graduate School and graduate program representatives.

- **Campus Data Groups:** The Graduate School continues to participate in the campus Data Integrity Group (DIG) to explore campus dataview issues or initiatives. It also participates in campus conversations around the utilization of Tableau (a data visualization tool).

C. Learning Goals

1. **Graduate Programs with Graduate School as the Administrative School/College**

   The Graduate School is the assigned administrative school/college for two graduate programs: Biophysics; and Cellular and Molecular Biology. In this role, the Graduate School requested assessment plans, learning goals, and assessment activities reports from these two graduate programs (please see appendix). These materials were reviewed by the Graduate School Academic Planning Council (GS APC) at its September 2014 meeting. The GS APC moved to approve the materials provided by Cellular and Molecular Biology. However, since no materials were provided by Biophysics the GS APC is taking steps to ensure they also provide materials for a future GS APC meeting.

2. **GFEC Subcommittee on Graduate Student Learning Goals**

   In response to the Higher Learning Commission’s accreditation requirement as well as broader efforts to emphasize student learning and to be transparent regarding degree deliverables, the GFEC created a subcommittee to develop campus-level learning goals for graduate students. The subcommittee was charged in November 2013 and continues it work. It has developed drafts for overarching learning goals for master’s programs, doctoral programs, graduate certificates, and capstone certificates. Other goals of the committee is to consider how these overarching learning goals will articulate with program learning goals, share them with campus stakeholders, and map out an implementation plan that includes assessment workshops in cooperation with the Provost’s Office and the inclusion of program learning goals in the Graduate Catalog.
D. Description of Assessment Strategies, Methods, and Analyses Used to Assess Learning Goals

1. GFEC-Related Activities

*Program Approvals*
The Graduate School recognizes that the examination of local assessment plans/efforts can continue to be better incorporated within the evaluation of program approvals at GFEC. Nevertheless, the GFEC is improving its efforts of making sure that new program proposals have program learning goals as well as an assessment plan. It’s clear that programs still struggle to identify assessment strategies that provide evidence (or highlight the absence) of student learning around program learning goals. Or alternatively, they have assessment strategies already present in their program, but fail to make the link that it is an assessment strategy to evaluate student learning with respect to their learning goals.

*Program Reviews*
With respect to program reviews, several factors continued to be highlighted in the overall evaluation of programs such as job placement and preparation; sufficient program resources and student financial support; right-sizing of programs; effective communication to students and across program subdisciplines (including but limited to a comprehensive program handbook); distinctiveness from other campus programs; student diversity; an evaluation of possible differential rates of persistence/success; a constructive and equitable program/department climate; appropriate admissions policies/structures; effective program governance and administration; strong student advising/mentoring (including but not limited to annual student meetings); and clarity of program mission or identity.

The GFEC program review representatives are increasingly focused on the student experience and value the input received directly from students at program review site visits. There is a growing shift to recognize program reputation and scholarship but to also make sure factors that impact the student experience are closely examined. It is noted that more attention can and should be placed on student learning goals and related assessment strategies during the program review process. There is hope that with the adoption overall graduate student learning goals and the implementation of program learning goals as a requirement for the next Graduate Catalog cycle will facilitate this area of program review.

*GFEC Subcommittee on the Higher Learning Commission (HLC)*
As noted, the GFEC reviewed and approved policies in five major categories to move campus into compliance with institutional accreditation criteria and to address other related impacts. These five major policy categories were presented only after the thoughtful and deliberative work of the GFEC Subcommittee on the HLC. The
subcommittee met eight times and was charged in March 2013 and continued its work through October 2013.

Subcommittee representatives met at least once with academic planning faculty and staff in each school/college with graduate programs as well as several other stakeholders on campus including those in Academic Planning and Institutional Research (APIR), University Council for Academic Affairs and Assessment, and Educational Innovation Points group. Several customized data reports were created to analyze campus trends and issues of concern as well as to allow for a comparative analysis with peer institutions.

The divisional mix of the subcommittee, the numerous outreach meetings to schools/colleges, several consultations with campus stakeholders and with individual program faculty and staff, as well as specific data reports tailored to HLC criteria all led to a comprehensive and robust approach to the ultimate development of the five major policy categories: minimum graduate residence credit requirement, minimum graduate degree credit requirement, minimum graduate course work (50%) requirement, prior course work criteria, and maximum credits per term.

2. Graduate School Implementation of HLC-Related Policies

Upon the approval of the five major policy categories by GFEC, the Graduate School created a comprehensive KnowledgeBase article providing details on the approved policies, the implementation process and template, frequently asked questions, who to contact, useful queries in Query Library, degree data by school/college, and other related resources.

The Graduate School sent notification and reminder emails to both school/college academic planners as well as graduate program leadership about the process and timeline. Not all schools/colleges submitted the templates for the programs on-time, but eventually all templates were received. These templates were also used for submission of content for the Graduate Catalog.

Schools/colleges were asked to vet these templates, but some schools/colleges did not assume this role. To ensure proper vetting, the Graduate School reviewed all templates for compliance and compatibility with the Graduate Catalog. This review exercise was a major undertaking. However, beginning September 2014, the Graduate Catalog will have a comprehensive satisfactory progress chart for every graduate program on campus that lists more detailed degree requirements than ever before. These charts will serve as a valuable advising resource for students, programs, and campus partners.

3. Evaluation Surveys for Graduate School Professional Development Workshops

The Graduate School uses various tools and processes to assess its professional development workshops and other events designed for graduate students and
postdoctoral scholars. An evaluation survey is distributed to all workshop participants electronically following the workshop via Qualtrics survey. Surveys include questions related to level of participant’s understanding of topic before/after the workshop, listing of particular knowledge gained through the workshop, likelihood of using the information provided, overall satisfaction, and suggestions for improvement. Additional information is requested, such as academic degree status (Master’s, PhD dissertator, Postdoc, etc.), degree goal, and ideas for other professional development workshop topics, so the Graduate School can continue to gain insight into who actually attends the workshops vs. who registers, and the interests of attendees.

4. Annual Reports for Program Assessment and Fund Allocation

**Graduate Research Scholars (GRS) Programs**
The Graduate School reviewed quantitative and qualitative data on the Graduate Research Scholar (GRS) programs to which it allocates Advanced Opportunity Fellowship funds for the purpose of recruiting underrepresented students to graduate programs. GRS programs submitted annual reports to the Graduate School describing the process by which fellowship awards are made and outlining the design and outcomes of its community-building and professional development activities. The annual reports are used to monitor the quality of the programs and to determine the next year’s allocation of funds.

**Divisional Fellowship/Funding Process for Programs**
Graduate programs applying for recruitment funding are asked to submit reports containing quantitative and qualitative data on the quality of their graduate program, their recruitment activities, and their use of the previous year’s funding allocation. Allocations have typically been used to provide fellowships to incoming students, to fund campus visits for prospective students, to provide one-time research awards to incoming students, to develop recruitment materials, and to send faculty, staff, or students to recruitment conferences. Faculty committees review the reports and use the information to determine annual allocations.

5. Graduate Preparatory Programs

The Summer Research Opportunities Program (SROP) and the TRiO Ronald E. McNair Post-baccalaureate Achievement Program, both graduate school preparatory programs, aim to encourage applications from well-prepared, diverse, low-income and first-generation college students who want to pursue graduate studies at UW-Madison. The UW-Madison SROP represents a partnership between the Graduate School and the various Schools and Colleges and the McNair program is housed within the Graduate School.

**Summer Research Opportunities Program (SROP)**
Using the Student Assessment of Learning gains (SALG) survey tool to measure program impact, Integrated Biological Sciences-Summer Research Program found that
The SROP experience helps students gain significantly in their knowledge of the nature of research, the jobs of researchers, career paths of faculty, what graduate school is like, and career options in the sciences. Further, in most SROP programs, students interact with a variety of mentors. The Psychology Research Experience Program surveyed mentors upon completion of the program and found that the graduate student mentors gain a number of skills through the experience of mentoring.

The TRiO Ronald E. McNair Post-baccalaureate Achievement Program

Regular feedback from students designed to evaluate the effectiveness of program services as well as exit surveys administered at the time of graduation, indicate that through their participation in the McNair Program, Scholars had increased their awareness of personal values, attitudes, interests and abilities regarding graduate school, careers that require a graduate degree, and how to fund their graduate education. Scholars indicated that exposure to research and other scholarly activities had improved their research, writing and presentation skills and they felt more self-assured about working directly with faculty. Results from program evaluation are used to improve services provided to students. In 2012 the McNair Program was renewed for five years (2013 to 2017).

E. Summary and Use of Key Findings for Continuous Improvement

1. GFEC-Related Activities

Recent efforts of GFEC to provide detailed feedback regarding proposals and reviews are greatly facilitating continuous improvement of campus programs. In nearly every case, the GFEC is requesting that programs provide a written follow-up report to GFEC, present a follow-up report in person to GFEC, or meet with an associate dean in the Graduate School and provide relevant documentation of progress. This completion of the feedback loop has helped build a culture and expectation of continuous improvement among GFEC members and graduate programs. In addition, it has generated several positive changes for programs including improved program handbooks, advising practices, program governance structures, etc.

The recent policy changes triggered by HLC accreditation requirements also provided an opportunity to assess the landscape of our graduate programs on several measures. While policies were changed or created in response to HLC accreditation requirements, others were also created or modified based upon data discoveries or policy gaps. For example, we learned GPA was not significantly impacted when students enrolled in 15 credits per term and that peer institutions had a similar or higher credit allowance per term. In turn, the maximum number of credits allowed per term was increased from 12 credits to 15 credits. Again, our findings informed our policy decision-making.

Finally, the Graduate School is the assigned administrative school/college for two graduate programs: Biophysics; and Cellular and Molecular Biology. In the summer of 2014, they were asked to submit assessment materials for their programs to the Graduate School. These materials were reviewed by the Graduate School Academic
Planning Council (GS APC) at its September 2014 meeting. The GS APC moved to approve the materials provided by Cellular and Molecular Biology. However, since no materials were provided by Biophysics the GS APC is taking steps to ensure they also provide materials for a future GS APC meeting.

2. Graduate School Implementation of HLC-Related Policies
   As the Graduate School received HLC templates and content for the Graduate Catalog, it used these transmissions as another opportunity to review compliance and understanding of the new policies. When there were issues, the Graduate School asked clarifying questions and requested additional details. Ultimately, these exchanges led to greater understanding of the new policies among campus stakeholders and improved transparency to general public regarding program requirements within the Graduate Catalog.

   Additionally, as finer details of the policies were documented in the context of each program’s unique curriculum, special circumstances were presented that warranted additional attention. One such circumstance was how to handle undergraduate credits from specialized accredited programs. This circumstance was reviewed by GFEC and an exception pathway was created for programs meeting specific criteria. This demonstrates how the Graduate School continues to be responsive to (or continuously improve) its policies in cases with a strong rationale as well as compliance within the spirit of new Graduate School policy and HLC accreditation requirements.

3. Evaluation Surveys for Graduate School Professional Development Workshops
   The evaluation surveys provide valuable information about the usefulness of professional development workshops. In the past, we have learned:

   - Students and postdocs appreciate and continue to request professional development opportunities related to careers, e.g., strategies and materials for the job search; interviewing; careers beyond the professoriate, including how skills learned during graduate school can transfer.
   - There is a need among those who have recently achieved dissertator status for information about managing this transition.

   Thus, we have accomplished or will accomplish:

   - Explicit identification of learning outcomes, inclusion of learning outcomes in the promotion of workshops and events, and direct assessment of those learning outcomes in evaluation surveys
   - Redesign of the Graduate School website, and particularly the professional development pages, will better organize and expand information related to: 1) creating a plan for achieving academic success and goals for the future, 2) developing the skills needed to achieve these, and 3) planning for a career (e.g., career exploration, applying for jobs, postdoctoral training)
   - Continued development of collaborations with campus career services offices
   - Continued coordination of an event for new dissertators
F. Planned Assessment Activities

The Graduate School is committed to continuing and building upon its existing assessment activities. Here are some highlights of some planned assessment activities for 2014-15:

1. Redefined Role of Assistant Dean for Academic Planning and Assessment
   A search is currently underway to hire a new assistant dean for academic planning and assessment. Prior to the search, the position description was updated to encompass responsibilities around assessment and student learning. One possible initiative for the new assistant dean in this realm it to revisit the Graduate School’s assessment plan and coordinate that plan and related assessment activities with other graduate education units.

2. Graduate Student Placement Tracking Work Group Summary Report
   Over the 2013-14 academic year, a graduate student placement tracking work group met and explored various alternatives for acquiring data on students post-graduation. A great deal of groundwork and valuable information was collected and it has been deemed beneficial to assemble and document all this information into a summary report. In turn, when the Graduate School is ready to take next steps with this initiative they know what avenues have already been explored as well as which tools and strategies are most recommended.

3. Graduate Program Learning Goals for Next Graduate Catalog
   The GFEC Subcommittee on Graduate Student Learning Goals will continue its work in 2014-15. As a result of their work of identifying global learning goals for graduate students, the next step will be to ask programs to articulate learning goals for their graduate programs. In turn, these learning goals will be documented in the next cycle of the Graduate Catalog. This major initiative will not only bring our institution into compliance with institutional accreditation requirements, it will also beneficial in several other ways: provide a mechanism for programs to reflect on the purpose of their programs; offer programs a starting point for assessment activities; provide transparency to prospective and enrolled students on the goals of the programs; offer students a means to explore how achieved program goals transfer to a variety of careers; and present GFEC and program reviewers a means to evaluate the success and quality of a program.

G. Acknowledgements

2013-14 GFEC Membership:
Martin Cadwallader, Chair, Vice Chancellor for Research and Dean of the Graduate School
Steve Ackerman, Graduate School, Associate Dean of Physical Sciences
Michael Bell, Community and Environmental Sociology
Duncan Carlsmith, Physics
Cynthia Czajkowski, Neuroscience
Aparna Dharwadker, Theatre and Drama/English
Norman Drinkwater, Oncology
Ted Golos, Comparative Biosciences
Mary Louise Gomez, Curriculum and Instruction
Robert Howell, German
Lea Jacobs, Graduate School, Associate Dean of Arts and Humanities
Daniel Kleinman, Graduate School, Associate Dean of Social Studies
Gloria Mari-Beffa, Mathematics
Lisa Martin, Political Science
Donna Paulnock, Graduate School, Associate Dean of Biological Sciences
Jose Pincheira, Civil and Environmental Engineering
Pamela Potter, Music/German
Stephen Quintana, Counseling Psychology
Kevin Shinners, Biological Systems Engineering
L. Fernando Tejedo-Herrero, Spanish and Portuguese
Susan Thibeault, Surgery

Graduate School Participation: The following individuals actively participated in one or more of the above activities:

Wendy Crone, Associate Dean for Graduate Education
Judy Bauman, Director of Admissions
Eileen Callahan, Director of Graduate Student Professional Development
Sarah Castello, Senior Disclosure Specialist
Alissa Ewer, Assistant Dean for Professional Development and Communications
Amy Fruchtmann, Assistant Director of Graduate Student Professional Development
Steve Hahn, Assistant Dean for Admissions and Academic Services
Kelly Haslam, Assistant Dean for Academic Planning and Assessment
Michelle Holland, Student Services Coordinator
Maya Holtzman, Assistant Director of McNair/SROP Programs
Elena Hsiao-Ching Hsu, Degree Coordinator
Jennifer Martin, Academic Planning Specialist
Kathi Matthews-Risley, Director of Communications
Mary Butler Ravneberg, Policy and Planning Analyst
Dorothy Sanchez, former Assistant Dean for Diversity, Inclusion, and Engagement
Linda Scholl, Fellowships Director
Randy Tackett, International Examiner
Nicholas Tincher, Information Technology Interim Director
Alexandra Walter, Degree Coordinator

Respectfully submitted to the provost, September 24, 2014
Appendix List

Appendix A: Handbook Template: https://kb.wisc.edu/ GSAdminKB/page.php?id=34123

Appendix B: Individual Development Plan resources: http://grad.wisc.edu/pd/idp

Appendix C: Working Draft of Graduate Student Learning Goals

Appendix D: Assessment Materials from Cellular and Molecular Biology
Date: September 19, 2014

To: School/College Academic Planners, Department Chairs, Directors of Graduate Study, Graduate Studies Committee Chairs

CC: Graduate Faculty Executive Committee (GFEC), Wendy Crone, Daniel Kleinman, Eileen Callahan, Kelly Haslam, Jocelyn Milner

From: Graduate School Faculty Executive Committee (GFEC) Subcommittee on Learning Goals: Duncan Carlsmith (chair), Mary Louise Gomez, Fernando Tejedo-Herrero, Susan Thibeault

RE: Graduate Learning Goals Related to the Higher Learning Commission’s (HLC) Criteria for Institutional Accreditation Revisited

First the Graduate School Faculty Executive Committee (GFEC) Subcommittee on Learning Goals would like to thank you for the feedback we received in response to the request we sent back in April. We were able to incorporate many of the comments and suggestions we received and we obtained some additional feedback from members of the University Council on Academic Affairs and Assessment (UCAAA) during a spring meeting of that committee and subsequent individual meetings with key members.

As you will recall, the Graduate Faculty Executive Committee (GFEC) is responding to changes in the criteria for accreditation adopted by the Higher Learning Commission (HLC). The HLC is the federally recognized accrediting agency of degree-granting higher education organizations for the North Central region of the U.S. Compliance with federal requirements by both institutions and the HLC is necessary to ensure that institutions accredited by the HLC are eligible for federal financial aid.

The new criteria of the HLC includes several changes that will affect our campus and these changes have implications for several policies. Although prompted by the HLC’s criteria, these efforts are seen as one of the many ways in which our campus ensures the integrity of its degrees and the quality of the student experience. A Core Component in the Criteria for Accreditation is “The institution articulates and differentiates learning goals for its undergraduate, graduate, post-baccalaureate, post-graduate, and certificate programs.” The campus previously adopted Essential Learning Outcomes for undergraduates, but a similar overarching framework for post-baccalaureate learning goals has not yet been developed.

In 2015 we will be seeking an articulation of learning goals from each individual graduate program for inclusion in the Graduate Catalog (the attached timeline provides information on these plans). To facilitate these future efforts and provide an overarching framework for campus, our GFEC subcommittee has developed an overarching set of learning goals for the master’s degree, doctoral degree, graduate certificates, and capstone certificates.

Attached you will find a revised draft of learning goals that will be considered by GFEC in its November meeting. These are intended to encompass both professional and research-based degrees and were designed to provide basic expectations while being flexible enough to apply to all graduate programs across the disciplines. To develop this draft, the GFEC subcommittee has consulted reports developed in

Graduate School

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Dean's Office 608-262-1044 Graduate Education 608-262-2433 Research 608-262-5835 Accounting 608-262-5835 Human Resources 608-262-5802
Fax: 608-262-5134 Fax: 608-265-9505 Fax: 608-262-5134 Fax: 608-262-1534 Fax: 608-262-5235
the U.S. and Canada on learning goals/outcomes and looked at examples of post-baccalaureate learning goals/outcomes in place at peer institutions.

The GFEC subcommittee is seeking your further input as these learning goals are finalized. We would appreciate receiving any feedback you have about these drafts by November 3rd.

Contacts:

Duncan Carlsmith, Chair of the HLC Subcommittee of the Graduate Faculty Executive Committee (Professor of Physics), duncan@hep.wisc.edu

Wendy Crone, Interim Dean, Graduate School (Professor of Engineering Physics), wcrone@grad.wisc.edu

Eileen Callahan, Director of Graduate Student Professional Development, Graduate School, ecallahan@grad.wisc.edu
### Learning Goals (9/10/14)

<table>
<thead>
<tr>
<th>Master’s Level</th>
<th>Doctoral Level</th>
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<tr>
<td><strong>Introduction</strong></td>
<td>Regardless of whether an individual is awarded a master’s degree, the doctoral level learning goals are inclusive of the master’s level learning goals. Research-based doctoral programs culminate in a dissertation. Professional doctoral programs culminate in a project or performance. Additionally, students receiving a doctoral degree from the Graduate School in both research-based and professional programs are expected to achieve the following learning goals by the end of their degree work.</td>
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| **Knowledge** | • Articulates challenges, frontiers and limits with respect to theory, knowledge or practice within the field of study.  
• Formulates ideas, concepts, designs, and/or techniques beyond the current boundaries of knowledge within the field of study. |
| • Articulates, critiques, or elaborates the theories, research methods, and approaches to inquiry or schools of practice in the field of study.  
• Identifies sources and assembles evidence pertaining to questions or challenges in the field of study.  
• Understands the primary field of study in a historical, social or global context. | |
| **Skills** | • Creates research, scholarship or performance that makes a substantive contribution.  
• Demonstrates breadth within their learning experiences.  
• Communicates complex or ambiguous ideas in a clear and understandable manner.  
• Evaluates the implications of the discipline to broader social concerns. |
| • Selects and/or utilizes the most appropriate methodologies and practices.  
• Evaluates or synthesizes information pertaining to questions or challenges in the field of study.  
• Communicates clearly in ways appropriate to the field of study. | |
| **Professional Conduct** | • Fosters ethical conduct and professional guidelines. |
| • Recognizes and applies principles of ethical conduct. | |

### Certificates

A certificate program is a designated set of for-credit courses focused upon a specific topic or theme. The certificates are distinguished by the enrollment status of students pursuing the certificates: Graduate Certificates are earned by students enrolled in a graduate program and Capstone Certificates are earned by post-baccalaureate University Special (non-degree) students.

Students receiving a **Graduate Certificate** are expected to achieve the learning goals at the master’s or doctoral level and the following: Demonstrates an understanding of a body of knowledge focused on a specific topic outside or as an extension of the major field of study.

Students receiving a **Capstone Certificate** in order to enter the field of practice, or acquire additional certification, or continue one’s research, or to solve problems are expected to achieve the following learning goal: Articulates the key concepts, methodologies, or theoretical concepts in a specialized area of study.
GFEC Subcommittee on Learning Goals - Draft Timeline (as of 9/10/14)

**Spring 2014**
Develop drafts of overarching (university-level) learning goals for master’s programs, doctoral programs, graduate certificates, and capstone certificates. Solicit feedback on drafts from key stakeholders (School/College Academic Planners, Department Chairs, Directors of Graduate Study, and Graduate Studies Committee Chairs), UCAA members, and GFEC.

**Summer 2014 - Early-September 2014**
Revise drafts of overarching learning goals.

**Mid-September 2014**
Solicit feedback on revised drafts from School/College Academic Planners, Department Chairs, Directors of Graduate Study, and Graduate Studies Committee Chairs. Include proposed framework for development of program-level learning goals. Share expected timeline that seeks to have program-level learning goals included in the next Graduate Catalog and coordinates with Provost Office assessment expectations.

**Mid-October 2014**
Work with Provost’s Office to develop information about current assessment methods utilized by programs.

**November 2014**
Present overarching learning outcomes, framework for development of program-level learning goals, and program-level implementation timeline to GFEC.

**December 2014**
Adopt overarching learning outcomes, framework for development of program-level learning goals, and program-level implementation timeline by GFEC.

**February 2015**
Announce GFEC action to School/College Academic Planners, Department Chairs, Directors of Graduate Study, Graduate Studies Committee Chairs. Work with Provost’s Office to provide information about current assessment methods utilized by programs.

**February – July 2015**
Coordinate with Provost’s Office on assessment plan development with connections to program-level learning goals. Coordinate with Provost’s Office to provide workshops to programs.

**April 2015**
Reiterate deadlines associated with GFEC action to School/College Academic Planners, Department Chairs, Directors of Graduate Study, and Graduate Studies Committee Chairs.

**September 2015**
Deadline for programs to submit learning goals for the Graduate Catalog to the Graduate School and Assessment Plan and Annual Assessment Report to Provost’s Office.
July 10, 2014

TO: Leadership of Biophysics M.S./Ph.D. Graduate Programs  
Leadership of Cellular and Molecular Biology M.S./Ph.D. Graduate Programs

FROM: Wendy Crone, Associate Dean of Graduate Education

RE: Annual Call for Program Assessment Plans, Learning Goals, and Assessment Activities

CC: Kelly Haslam, Assistant Dean, Graduate School

The Graduate School serves as the assigned administrative school/college for your graduate program with respect to program review, assessment, and accreditation compliance. This memo specifically pertains to program requirements around assessment and accreditation compliance.

The UW-Madison Assessment Plan calls for every academic unit to have an assessment plan and engage in at least one assessment activity each year. These efforts are critical for maintaining academic excellence across our programs as well as at the institutional level. In addition, to meet the requirements outlined by the Higher Learning Commission (HLC), it is important that student learning goals for each program degree level (master’s, doctoral, certificate) are articulated.

As the assigned administrative school/college for your graduate program, the Graduate School is requesting the following three items no later than August 15, 2015:

1. **Graduate Program Assessment Plan** – Every graduate program should have an assessment plan in place. If your graduate program already has one in place, please update as appropriate and submit it. If your graduate program does not have one in place, please submit a development plan by August 15, 2015 detailing steps and a timeline of how you plan to submit an assessment plan no later than January 16, 2015. Here are some available resources regarding assessment plans:
   a. UW-Madison Assessment Manual:  

Graduate School

Bascom Hall     University of Wisconsin-Madison     500 Lincoln Drive     Madison, WI 53706-1380

**Dean's Office**  **Graduate Education**  **Research**  **Accounting**  **Human Resources**
608-262-1044     608-262-2433     608-262-5835     608-262-5835     608-262-5802
Fax: 608-262-5134     Fax: 608-265-9505     Fax: 608-262-5134     Fax: 608-262-1534     Fax: 608-262-5235
b. Sample Assessment Plan for “Jurassic Studies”:

2. Graduate Program Learning Goals – Every graduate program should have student learning goals for each program degree level (master’s, doctoral, certificates). If your graduate program already has program learning goals articulated, please update them as appropriate and submit them. If your graduate program does not have any program learning goals articulated, please submit a development plan by August 15, 2015 detailing steps and a timeline of how you plan to submit a first draft no later than January 16, 2015.

The Graduate Faculty Executive Committee is actively working on developing a set of overarching learning goals for graduate programs. Ultimately, there will be a future requirement for all graduate programs to have learning goals in the next Graduate Catalog with an anticipated submission deadline of September 2015.

Student learning goals should be identified in terms of what students know and are able to do at the end of the degree program. These should be observable, measureable, and student/learner specific (rather than statements focused on content delivery or faculty) and should also make clear the difference in expectations across degree levels (e.g. M.S., Ph.D. degrees within the same program would not all have the same student learning goals).

3. Assessment Activities Report – Every graduate program should engage in at least one assessment activity each year. This could take a variety of forms: program review, continuous improvement efforts, assessment planning, implementation of assessment activities (surveys to entering, continuing, or exiting students; surveys to alumni or employers; development of rubrics, evaluation tools, summative assignments/exams for the program; curriculum and/or syllabus review, etc.), focused analysis of assessment activities, etc.

Please submit a 2013-14 assessment activities report for your program no later than August 15, 2014. Describe at least one area of focus as well as the assessment strategies, methods, and analyses used. In addition, summarize the key findings (evidence/results) and how the program plans to use this information (e.g. program enhancements, program redesign, etc.). Finally, briefly outline your planned assessment activities for the coming year.

Here is a summary of the three submission requirements due no later than August 15, 2014:

1. Submission of current/update assessment plan OR of a development plan detailing steps and a timeline of how you plan to submit an assessment plan no later than January 16, 2015.
2. Submission of current/updated program learning goals OR a development plan detailing steps and a timeline of how you plan to submit a first draft no later than January 16, 2015.

Assessing student learning provides valuable information that can inform curricular planning and development, teaching and pedagogical practices, and improvements for the student experience. Further, evidence-based assessments foster collaboration within and across programs and provide clarity about learning expectations. We look forward to receiving your materials.
PROGRAM IN CELLULAR AND MOLECULAR BIOLOGY
PH.D. PROGRAM LEARNING GOALS AND ASSESSMENT ACTIVITIES
REPORT

Graduate Program Learning Goals and Objectives:

The overriding goal of the program is for students to acquire the ability to perform, design, critique, write about, and speak about research in the fields of cell biology and molecular biology. Knowledge and skills goals will be met through courses and thesis research.

Assessment Activities Report:

- **Surveys to Graduating Students**
  - Graduating students are asked about what resources they found helpful as they prepared to finish their degrees, and are asked to share a few words of advice regarding their experience in the program to share with current or prospective students.

- **Surveys to Current and Incoming Students**
  - The program surveys incoming and current graduate students to learn about what professional development opportunities/topics they’re interested in learning about. The program then incorporates as many of these ideas as possible into the professional development events that take place about once per month throughout the year.

- **Meeting with Senior Graduate Students and First Year Graduate Students**
  - The program chair and student services coordinator meet with senior students as well as first year graduate students (separate meetings) to determine their needs and touch base about how things are going. Based on feedback from these groups, the program works to provide assistance or opportunities for them.

- **Curriculum Review**
  - The program is in the process of conducting a large review of all the courses that CMB students take for credit in the program. They’re being evaluated for breadth, depth, and content and are being assessed to make sure they meet the training needs of students in the program.

- **Annual Trainer Review**
  - 1/5 of the faculty trainers are reviewed each year by the program coordinating committee to assess that they are contributing to the program and development of students.

Planned Assessment Activities:

The program plans to utilize the above items in the upcoming year and may develop a more in-depth survey to graduating students.
The Cellular & Molecular Biology (CMB) graduate program at the University of Wisconsin-Madison provides students the opportunity to work with more than 180 CMB faculty trainers in over 40 academic departments. CMB faculty trainers are grouped into eleven areas of research strength: Cancer Biology, Cell Adhesion & Cytoskeleton, Cellular & Molecular Metabolism, Developmental Biology & Regenerative Medicine, Immunology, Membrane Biology & Protein Trafficking, Molecular & Genome Biology of Microbes, Plant Biology, RNA, Transcriptional Mechanisms and Virology. Coursework and research experience allows students to obtain a solid foundation in Cellular and Molecular Biology that is tailored to the professional objectives of each student. All of the information in this assessment plan is made available to CMB students and faculty through the CMB website (http://www.cmb.wisc.edu).

A. Educational Goals and Objectives
The overriding goal of the program is for students to acquire the ability to perform, design, critique, write about, and speak about research in the fields of cell biology and molecular biology. Knowledge and skills goals will be met through courses and thesis research.

1. The course requirements are as follows:

   Course Requirements Overview (11 total credits required)
   Eleven credits of coursework, not including 990 research credits, are required to complete the CMB course requirements. At least seven credits must be a combination of the core curriculum in molecular biology and cell biology to gain a depth and breadth of understanding in the subject area. Three credits of the CMB course requirements may come from either the core curriculum or the additional courses list. In addition, one credit must be fulfilled through the required ethics course. All CMB course requirements must be completed by the end of the student's second year, before completing the Preliminary Exam and obtaining dissertator status. A list of CMB course descriptions can be found in the Core Curriculum and Additional Courses sections of the CMB Handbook.

   Course Requirements (10 credits required)
   • Seven credits must be from the CMB Core Curriculum, with at least one course from both the molecular biology AND cell biology course lists
   • Three credits may be from either the Core Curriculum OR Additional Courses lists
   • EXCEPTION: Effective Fall 2012, MD/PhD students are only required to take 3 credits from the Core Curriculum or the Additional Courses list
   • For a list of course descriptions, see the Core Curriculum and Additional Courses sections of the CMB Handbook

   Ethics Course Requirement (1 credit required)
   • One credit Oncology 675 (*effective Fall 2013, Oncology 675 is the only course available to satisfy the ethics requirement)
   • Any request to take an alternate ethics course will be reviewed by the CMB Curriculum Chair
2. The thesis research requirements will be established by a thesis advisor and thesis committee:

Thesis Advisor Overview
The Thesis Advisor will assist the graduate student throughout the duration of their PhD studies. Upon choosing a Thesis Advisor, the student should formulate goals and expectations when starting in a permanent lab home. The student and Thesis Advisor should work together to ensure that mutual goals and expectations are met.

Purpose of a Thesis Advisor
• Monitor and guide the student's progress toward their PhD degree
• Provide the student with advice about how and when to meet the degree requirements of the program
• Help the student decide on appropriate coursework during their PhD studies
• Act as the head of the student's Thesis Committee
• Help the student establish the members of their Thesis Committee

Selecting a Thesis Advisor
• Consider the amount of contact, pressure, support, and direction the student might prefer
• Attend CMB faculty trainer talks during Advising and Orientation Week where each CMB faculty trainer will discuss research being conducted in his/her lab
• Review each faculty trainer's lab information found on their website and arrange a time to meet with faculty trainers of interest to discuss questions and obtain more information about their lab
• Ask for copies of grant proposals or published papers about the faculty trainer's research
• Interview other CMB graduate students in the faculty trainer's lab

Student-Thesis Advisor Concerns
If a problem between a student and Thesis Advisor develops, the following steps should be taken:
• The student and Thesis Advisor should discuss and attempt to resolve any differences, request changes within a specified time period, note concerns on the Progress Report form, follow up with a letter to the student, and send a copy of the letter to the CMB Office
• If either party is not satisfied with the result, they may present the situation to a member of the Thesis Committee and notify the CMB Office
• If the problem is not readily resolved, the student or Thesis Advisor may seek the guidance of the CMB Program Chair or the Coordinating Committee
• If a solution suggests a laboratory change, the Thesis Advisor may be expected to fund the student for a one month rotation
• The Employee Assistance Office (EAO) at UW-Madison is available to faculty trainers and graduate students as a useful resource when dealing with student-Thesis Advisor concerns

Thesis Committee Overview
After joining a thesis lab, students are required to form a Thesis Committee. The Thesis Committee Approval form, available on the CMB Forms section of the CMB website, must be filled out and submitted to the CMB Office by March 15 of the student's first year. Failure to do so will result in a hold being placed on the student's registration.

**Purpose of a Thesis Committee**
- Guide the student through the process of earning their Ph.D. degree and meeting all CMB Program requirements
- Assist the student in developing as an independent scientist in the student’s area of research
- Provide the student with an array of ideas and opportunities regarding the direction of their research and thesis project
- Evaluate the student’s research proposal, attend Curriculum Certification, Preliminary Exam, annual Progress Report, and Thesis Defense

**Composition of a Thesis Committee**
- A Thesis Committee consists of five faculty members, including the Thesis Advisor
- Three committee members, including the Thesis Advisor, must be faculty trainers in the CMB Program
- Two committee members must be outside the student’s direct area of expertise
- For more information, see the Graduate School Academic Policies and Procedures website

**Formation of a Thesis Committee**
- The student must consult with the Thesis Advisor to determine members of the Thesis Committee
- Fill out the Thesis Committee Approval form, available on the CMB Forms section of the CMB website
- Obtain signatures of all Thesis Committee members on the form and submit it to the CMB Office by March 15 of the student's first year
- If a member of the student’s Thesis Committee changes, submit a revised Thesis Committee Approval form with the signature of the new member and the Thesis Advisor (other members do not need to sign revised form)
- If a student and Thesis Advisor wish to form a committee that does not fulfill one or more of the requirements listed above, they need to request an exemption from the CMB Program
- If a student changes Thesis Advisors, they must form a new Thesis Committee within three months of joining the new lab and turn in a new Thesis Committee Approval form to the CMB Office

**Chair of Thesis Committee Meetings**
- At each yearly meeting, a member of the Thesis Committee will serve as the chair of that particular meeting
- The chair of the committee meeting cannot be the Thesis Advisor
- The chair will be a floating chair and can be different at each committee meeting

The duties of the Thesis Committee Chair will be to maintain the pace of the meeting and provide written feedback to the student on the corresponding CMB form

**B. Instruments and Methods for Assessment**
1. Progress in coursework will be assessed as follows:

**Curriculum Certification Overview**
Once the student has formed a Thesis Committee, they must hold a Curriculum Certification meeting to discuss their research area and choose appropriate coursework to complete the CMB course requirements. The Curriculum Certification meeting is not a formal research presentation and the student is usually not expected to present papers or research findings. Students will discuss the format of this meeting with their Thesis Advisor prior to the meeting to establish clear expectations. The meeting must be scheduled by May 17 and completed by August 31 of the student's first year. Failure to do so will result in a hold being placed on the student's registration.

**Requirements to Complete**
Prior to the Curriculum Certification Meeting:
- Schedule Curriculum Certification meeting with committee members
- Send an email notification with the scheduled date to the CMB Office by the May 17 deadline (failure to do so will result in a hold being placed on the student's registration)
- Complete the Curriculum Certification form, available on the CMB Forms section of the CMB website

At the Curriculum Certification Meeting:
- Bring copies of the Curriculum Certification form
- Bring a current grade report, available at My UW
- Establish the Chair of the Curriculum Certification meeting (see the Thesis Committee section of the CMB Handbook)
- Obtain signatures of committee members on the Curriculum Certification form
- At least three members of the committee must be present at the meeting, including the Thesis Advisor
- If necessary, the student should meet individually with the rest of the committee to get their input and signatures after the meeting

Submit the Following Materials:
Submit the signed Curriculum Certification form to the CMB Office by the August 31 deadline (failure to do so will result in a hold being placed on the student's registration)

**Satisfactory Academic Progress**
- A grade of "B" or better must be achieved in each course to maintain satisfactory academic progress in the CMB Program
- Any grade of "BC" or lower will not count towards the CMB course requirements
- If a student receives a "BC" or lower, they must repeat the course to achieve a higher grade or substitute a different course to satisfy the CMB course requirements

**Graduate School Academic Guidelines**
- In order for a PhD degree to be awarded, the Graduate School requires:
- A minimum of 32 credits taken in graduate level courses: 12 of these will satisfy CMB course requirements and the remaining credits can be 990 research credits
• Maintain a minimum graduate GPA of 3.0 in all graduate-level coursework
• Courses with grades of “P” (Progress) count toward the credit requirements only if they are research credits
• Courses taken pass/fail, audited, or with grades of “D” or “F” will not be counted toward Graduate School credits
• A student may be placed on probation or suspended from the Graduate School for unsatisfactory grades
For more information, see the Graduate School Academic Policies and Procedures website

2. Progress in thesis research will be assessed as follows:

Preliminary Exam Overview
The Preliminary Exam is taken within two years after entering the CMB Program, following successful completion of the CMB course requirements. It is important to view this exam not so much as a hurdle, but more as an important educational exercise. The Preliminary Exam must be scheduled by May 17 and completed by August 31 of the second year. Failure to do so will result in a hold being placed on the student's registration.

Shortly after submitting the signed Preliminary Exam warrant, students should expect to receive an email from the Graduate School confirming dissertator status for the following semester and admission to candidacy for the PhD degree. Dissertator status is a university fee status in which the student has completed all necessary PhD requirements, except the dissertation. To reach dissertator status, a student must complete all CMB course requirements and pass the Preliminary Exam. For more information on dissertator status, see the Graduate School Academic Policies and Procedures website.

Goals of the Preliminary Exam
To determine if the student can:
• Think independently through a research proposal
• Identify a realistic experiment for the PhD dissertation
• See possible pitfalls in the long-term planning of a research proposal
• Develop a logical attack on a specific problem (i.e. which experiment comes first, second, etc.)
• Present the proposal with clarity in written form, using the NIH format listed in the Preliminary Exam Research Plan (see below), scaled to the candidate's dissertation time frame
• Present the proposal successfully
• Defend the proposal and think on his/her feet

Preliminary Exam Research Plan
Proposal Content:
• Students must consult with others, including their Thesis Advisor when writing the proposal
• Subject matter must coincide with the student's anticipated thesis research
• Extensive preliminary data is NOT necessary for the exam
• The proposal must be prepared in a format similar to a NIH postdoctoral grant application
• Recommended format and page limit:
  The length of the entire proposal may not exceed 20 pages
Specific Aims:
• State the broad, long-term objectives
• Describe concisely and realistically what the specific research is intended to accomplish and any hypotheses to be tested
• One page is recommended

Background and Significance:
• Briefly sketch the background of the present proposal
• Critically evaluate existing knowledge
• Specifically identify the gaps in knowledge that the project is intended to fill
• State concisely the importance of the research described in the proposal by relating the specific aims to the broader long-term objectives
• 2-3 pages are recommended

Preliminary Studies:
• Provide an overview of the preliminary studies that have been conducted in regard to the proposal
• Provide other information that establishes the experience and competence of the student in relation to the proposed project

Experimental Design and Methods:
• Outline the experimental design and the procedures intended to accomplish the specific aims of the project
• Detail the means by which the data will be collected, analyzed and interpreted
• Describe any new methodology and its advantage over existing methodologies
• Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims
• Provide a tentative sequence or timetable for the investigation
• Point out any procedures, situations, or materials that may be hazardous to personnel and precautions to be exercised

Literature Cited:
• Each citation must include the title, names of all authors, book or journal, volume number, page numbers, and year of publication
• Make every attempt to be judicious in compiling a relevant and current list of literature citations; it need not be exhaustive
• This does not count as part of the 20-page total limitation
• Figures that are critical to the proposal should be included within the 20-page limit
• The student will have the opportunity to present other figures at the oral exam

Requirements to Complete
Prior to the Preliminary Exam:
• Complete the CMB course requirements
• Schedule Preliminary Exam with committee members
• Send an email notification with the scheduled exam date to the CMB Office at least three weeks prior to the date in order to obtain the Preliminary warrant
• The CMB Office will request a warrant from the Graduate School and notify the student when it can be picked up in the CMB Office
• It is recommended that the written proposal draft be submitted to the Thesis Advisor
• It is recommended that the Thesis Advisor read it and provide feedback such that the student has time to make revisions before going out to the rest of the committee
• Circulate the final proposal to the Thesis Committee at least two working weeks prior to the exam
• Complete a Preliminary Exam form, available on the CMB Forms section of the CMB website

At the Preliminary Exam:
• Establish the chair of the meeting (see the Thesis Committee section of the CMB Handbook)
• The student presents a brief oral presentation describing their research proposal (approximately 20 minutes)
• After the presentation, the student responds to questions by the Thesis Committee, which correspond to the proposal itself and any related material
• Obtain decision and signatures of all Thesis Committee members on the Preliminary Exam form and warrant
• The exam is usually completed within two hours

Submit the Following Materials:
Submission will be based on the Thesis Committee's decision of the outcome of the Preliminary Exam:
Pass
• Submit the signed warrant, signed Preliminary Exam form, and a copy of the final research proposal to the CMB Office

Written Revisions
• Submit the signed Preliminary Exam form to the CMB Office
• Complete recommended written revisions of Preliminary proposal as suggested by the Thesis Committee
• Obtain signatures of Thesis Committee members on the warrant after written revisions have been completed
• Submit the signed warrant, signed Preliminary Exam form, and a copy of the revised research proposal to the CMB Office

Written Revisions and Repeat of Oral Defense
• Submit the Preliminary Exam form to the CMB Office
• Complete recommended written revisions and reschedule to repeat the Preliminary Exam
• Obtain a new decision and signatures of all Thesis Committee members on the new Preliminary Exam form
• Submit the signed warrant, the new Preliminary Exam form, and a copy of the revised research proposal to the CMB Office

Fail
• Discuss results and recommendations with the Thesis Advisor and Thesis Committee
• Submit the Preliminary Exam form, unsigned warrant, and a copy of the research proposal to the CMB Office and inform them of the committee's recommendations

Extension Request
• Under special circumstances, the CMB Program will consider a six-month extension for the Preliminary Exam
• The student and the Thesis Advisor must justify the reasons for an extension in writing to the CMB Office
• The CMB Curriculum Chair and/or the CMB Program Chair will review the request for consideration

If the Preliminary Exam is not completed by the end of the six-month extension, the student's academic standing in the CMB Program may be jeopardized.

**Seminar Requirements Overview**
The goal of the seminar requirement is to give each student training and experience in oral presentations. Students are required to give an oral presentation beginning the second year of the CMB Program and each year thereafter. Second and third-year students can give either a Journal Club Presentation or Formal Research Seminar, while fourth, fifth, and sixth-year students must give a Formal Research Seminar. A Journal Club Presentation is a presentation about literature pertaining to a specific research topic. A Formal Research Seminar is a presentation given by a student regarding their independent research topic. The requirements can be satisfied through a number of seminar series within individual CMB focus groups and departments across the UW-Madison campus. Additionally, certain courses may also satisfy the seminar requirement. Students should consult with their Thesis Advisor as to the appropriate seminar presentation opportunity. The yearly seminar requirement must be completed by the August 31 deadline. Failure to do so will result in a hold being placed on the student's registration.

**Requirements to Complete**
• Students should discuss Journal Club or Formal Research options with their Thesis Advisor
• At least three CMB faculty trainers must be present at the seminar and must sign the Seminar Requirement form, available on the CMB Forms section of the CMB website

**Journal Club Presentation:**
• Journal Club Presentations can be completed by second and third-year students
• It is expected that the student will attend the Journal Club on a regular basis
• The presentation must be a 30-minute campus talk

**Formal Research Seminar:**
• Formal Research Seminars must be completed by fourth, fifth, and sixth-year students
• Provides a training component in which student presenters are provided with critical feedback on their research presentation
• The presentation must be a 10-minute national talk or 30-minute campus talk
• A joint lab meeting may count as a Formal Research Seminar if the presentation is at least 30-minutes and at least three CMB faculty trainers are present

Submit the Following Materials:
Submit the signed Seminar Requirement form to the CMB Office by the August 31 deadline (failure to do so will result in a hold being placed on the student's registration)

**Yearly Progress Report Overview**
All students are required to conduct a yearly Progress Report meeting with their Thesis Committee after passing the Preliminary Exam. This meeting ensures that the student is making satisfactory research progress toward their PhD and provides a mechanism for the student to identify areas of strength and weakness in their development as an independent scientist. The Progress Report meeting must be scheduled by May 17 and completed by August 31 of the third, fourth, and fifth year. Failure to do so will result in a hold being placed on the student’s registration.

**Requirements to Complete**
Prior to the Progress Report Meeting:
• Schedule the Progress Report meeting with the Thesis Committee
• Send an email notification with the scheduled meeting date to the CMB Office by the May 17 deadline (failure to do so will result in a hold being placed on the student's registration)
• Prepare a presentation of the research progress
• Obtain and complete the first section of the Progress Report form, available on the CMB Forms section of the CMB website
• Submit the Progress Report form to the Thesis Advisor

At the Progress Report Meeting:
• Establish the chair of the Progress Report meeting (see the Thesis Committee section of the CMB Handbook)
• Give a presentation describing the past year’s accomplishments
• The presentation and Progress Report will be discussed by the student and the Thesis Committee
• At least three Thesis Committee members must be present at the meeting and must sign the Progress Report form
• If necessary, the student should meet individually with the rest of the committee to get their input and signatures after the meeting

Submit the Following Materials:
• Submit the signed Progress Report form to the CMB Office by the August 31 deadline (failure to do so will result in a hold being placed on the student's registration)

**Time To Degree**
The CMB Program desires and expects its students to graduate in a timely fashion, as this is in the best interests of the individual students and the program as a whole. However, it must be recognized that different students progress at different rates, and any given student may encounter unexpected problems beyond their control that extend their time to degree. To ensure that these competing factors are balanced, the CMB Program Coordinator will automatically bring to the attention of the Coordinating Committee (CC) any students who are entering their 8th year in the CMB Program. The CC will examine such situations and determine on a case-by-case basis whether or not there are extenuating circumstances that merit continuation of the student in the CMB Program. If the CC determines that there are no extenuating circumstances, the CC will intervene as appropriate based on each individual case. Options for intervention include, but are not limited to, a terminal MS degree for the student.

**Thesis Defense Overview**

The Thesis Defense is a presentation of the student's independent research topic, an overview of the experiments completed, and a summary of the analyzed data and results. Most students are able to complete their PhD within five to six years after entering the CMB Program. The Thesis Defense must be completed within five years after completion of the Preliminary Exam. For more information on this policy, see the Graduate School Academic Policies and Procedures website.

Requirements to Complete

At Least Three Weeks Prior to the Thesis Defense:
- Schedule the Thesis Defense with the Thesis Committee
- Send an email notification with the scheduled date, defense location, defense time, thesis title, and listing of thesis committee members to the CMB Office
- The CMB Office will then request a warrant from the Graduate School
- Upon approval, the Graduate School will issue the warrant to the CMB Office electronically
- When the warrant has been received from the Graduate School, the CMB Office will email the warrant directly to the student
- Read through the Graduate School's page on "Completing Your Degree" [http://grad.wisc.edu/currentstudents/degree/](http://grad.wisc.edu/currentstudents/degree/)
- Follow the instructions outlined in the Graduate School publication to submit Thesis Defense: Dissertation Submission for PhD Students
- If changes in the Thesis Committee are made after a warrant has been requested, then a new request must be made to the Graduate School for approval and issuance of a new warrant

At Least Two Weeks Prior to the Thesis Defense:
- Submit a copy of the Thesis Defense to all members of the Thesis Committee
- The CMB Office will create a Thesis Defense flyer and distribute this announcement to the current CMB faculty trainer and graduate student email list, publish it in the weekly e-newsletter, and post it on the calendar of events on the CMB website
- Notify your departmental payroll coordinator of the date you are expecting to defend and deposit your thesis

At the Thesis Defense:
- All five committee members must be present
• Give a presentation about the research
• Defend and answer questions asked by the Thesis Committee
• Obtain signatures of all Thesis Committee members on the Thesis Defense warrant

Following the Thesis Defense:
• Submit Thesis Defense electronically
• Contact the Graduate School (262-2433) to schedule an appointment for the final review
• All corrections and revisions of the Thesis Defense must be made before submitting your Thesis Defense
• For more information, see Dissertation Submission for PhD Students

Submit the Following Materials:
• To the CMB Office:
  A copy of the warrant, signed by all Thesis Committee members
  The Forwarding Address form
• To the Graduate School:
  Thesis Defense warrant
  Survey of Earned Doctorates (SED) certificate of completion
  Graduate School Doctoral Exit Survey (DES) certificate of completion

3. Faculty trainers will be assessed as follows:

**Trainer Review Overview**
• The CMB Program reviews 1/5 of the current affiliated faculty trainers each year based on the first letter of their last name
• All current faculty trainers will be reviewed once every five years, as an ongoing process
• Recently admitted faculty trainers may be reviewed sooner than five years based on where their last name falls in the rotation
• The CMB faculty trainer submits a Faculty Trainer Review form and a current NIH biosketch as requested by the CMB Office
• The faculty trainer review usually takes place in May or August/September at the Coordinating Committee meeting
• The Coordinating Committee will review the completed form and consider the following:
  How appropriate the current research area of the faculty trainer is in relation to the CMB Program
  Research quality, as judged by a continuing record of productivity and extramural funding relating to cellular and molecular biology
  Participation in various CMB Program functions
  Track record of training graduate students and the training environment provided in the lab
• Faculty trainers will be informed of the Coordinating Committee's decision within one month of when the Coordinating Committee meeting takes place
• Faculty trainers whose research focus, research quality, or CMB Program participation is determined to be unsuitable for the CMB Program will receive a letter from the Coordinating Committee stating they have been removed from the CMB Program as a faculty trainer
• Faculty trainers may challenge their removal by submitting a timely appeal to the Coordinating Committee.
• A removed faculty trainer may also apply for reappointment at any time following removal.
• The reappointment process is similar to the original review process, however, the Coordinating Committee may request supplemental information if necessary.

The Coordinating Committee will apply somewhat more rigorous standards for reappointment than for the initial appointment of a new faculty trainer.

C. The Feedback Mechanism

The Chair, Coordinating Committee, and Student Services Coordinator are constantly assessing whether the CMB Program is achieving the stated goals. The Coordinating Committee consists of the program Chair, Student Services Coordinator, Chairs of each of the eleven focus groups, Chairs of the Admission, Recruiting, Curriculum, and Advising & Orientation committees, and three student representatives. The Coordinating Committee meets each month during the academic year to assess the program and implement changes to improve the program. The Chair meets yearly with students to discuss the program. The Student Services Coordinator reviews the yearly evaluations of each student and reports issues to the Chair. Graduating students are asked in a survey to evaluate their experience in the program and provide advice on improving the program. On the basis of these review mechanisms the Chair will provide the program and the university with an annual report. (2014 report attached).

D. Timetable for Implementation

The assessment plan is in place.
CMB Annual Report
2013-2014 Academic Year

Summary of Student Accomplishments:

Number of Students Graduated:
21 (18 PhD, 3 MS)
7 will defend in August 2014

All first year CMB students successfully found lab homes after conducting rotations.

Student Publications:


Student Awards and Honors:

Windgassen, Tricia, Class of 2013, Lab of Jim Keck
National Science Foundation Graduate Research Fellowship Award

**Craig Barcus, Class of 2010, Lab of Linda Schuler**
SVM-Phi Zeta Award for Research Excellence by a Graduate Student at the Vet School

**Suyong Choi, Class of 2009, Lab of Richard Anderson**
Predoctoral Fellowship for American Heart Association

**Kevin Cope, Class of 2013, Lab of Jean-Michel Ane**
NSF Graduate Research Fellowship Honorable Mention

**Asuka Eguchi, Class of 2010, Lab of Aseem Ansari**
Jump Start Award

**Xin Gao, Class of 2011, Lab of Emery Bresnick**
American Society of Hematology Abstract Achievement Award

**Chris Hooper, Class of 2010, Lab of Shigeki Miyamoto**
F31 NIH Predoc Award

**Ryan Kessens, Class of 2013, Lab of Mehdi Kabbage**
NSF Graduate Research Fellowship Honorable Mention

**Sanghee Lee, Class of 2008, Lab of Wade Bushman**
Vilas Conference Presentation Funds

**Sarah Neuman, Class of 2011, Lab of Arash Bashirullah**
3rd Place Poster Award at the Genetics Society of America 55th Annual Drosophila Research Conference

**Jarred Rensvold, Class of 2009, Lab of David Pagliarini**
Wisconsin Distinguished Graduate Fellowship

**Xiaolin Zhang, Class of 2008, Lab of Jennifer Reed**
Changes to the Program:

There were a few significant changes that took place in the CMB Program during the 2013-2014 academic year. These changes are outlined below.

- Changes in program leadership and administrative staff
  - David Wassarman from the Department of Cell and Regenerative Biology assumed the role of CMB Program Chair in summer of 2013. He took over for Bill Bement who had served as Program Chair for seven and a half years.
  - Jessica Karis became the new student services coordinator for the program in August of 2013. Jessica succeeded Michelle Holland who had been with the program for nine years.
- Student seminar series
  - The CMB student-led seminar series was revitalized after a brief break. New student leaders took on the planning role and coordinated the series to take place monthly during the fall and spring semesters.
- Individual development plans and professional development
  - CMB students are required to meet yearly with their thesis committees to discuss progress. Students fill out progress report forms and have their committee members sign off on these forms at the yearly meeting. There has been an increased effort within the program and campus to facilitate and enhance professional development opportunities for graduate students. In response to this, CMB edited the yearly progress report forms, adding a section about professional/career development. In addition to the conversation with committee members about progress on their research project, the conversation at the meeting now features a professional development component as well. The program is encouraging professional development by putting on a series of professional development events (organized by the student professional development committee) and connecting current graduate students with CMB alumni who are working in various fields/jobs of interest.
- Work with Graduate School
  - CMB also began working with the Graduate School (and other affiliated programs) to develop an individual development plan template. CMB is working to be a leader in helping the graduate school incorporate IDPs for other graduate programs across campus.
• Course review
  o The Program is currently undertaking a review of all courses currently listed to fulfill CMB Program requirements. Courses are evaluated for rigor, breadth, and content. Some courses may be removed or added from the listing, but this will be determined in August 2014.

Proposed Changes to the Program:

There are some planned changes for 2014-2015, which are outlined below.

• Focus Groups
  o The program is broken into eleven focus groups highlighting research strengths and areas within the program. There is a proposal to add a 12th focus group in “Systems Biology” and will be reviewed by the CMB Coordinating Committee in the Fall of 2014.

• Individual Development Plans
  o The program plans to implement use of the IDP form developed and recommended by the IDP working group coordinated by the Graduate School.