

REPORT OF THE WSCUC VISITING TEAM
EDUCATIONAL EFFECTIVENESS REVIEW
In Partial Fulfillment of the Requirements for
INITIAL ACCREDITATION

To the Graduate School of Biomedical Sciences at
Sanford-Burnham Medical Research Institute

March 11 and 12, 2015

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The team evaluated the institution under the 2013 WASC Senior College and University Commission Standards of Accreditation and prepared this report containing its collective evaluation for consideration and action by the institution and by the Senior College and University Commission.

The formal action concerning the institution's status is taken by the Commission and is described in a letter from the Commission to the institution. This report and the Commission letter are made available to the public by publication on the WASC website.

TABLE OF CONTENTS

Page numbers

SECTION I. OVERVIEW AND CONTEXT

A. Description of the Institution and Visit	4
B. The Educational Effectiveness Review Self-Study: Quality and Rigor of the Review and Report	6
C. Response to Previous Commission Issues	9

SECTION II. EVALUATION OF THE INSTITUTION'S SELECTED ISSUES

Assessment and Program Review	9
Faculty Governance and Development	14
Financial Support for the Educational Mission	18
Diversity of Students and Faculty	20
Student Success	23

SECTION III. COMMENDATIONS AND RECOMMENDATIONS

APPENDICES

MSBS Degree	
Credit Hour and Program Length Review	
Student Complaints Review	
Marketing and Recruitment Review	
Transfer Credit Review	
Compliance Audit	

SECTION I. OVERVIEW AND CONTEXT

A. Description of the Institution and Visit

The Sanford-Burnham Medical Research Institute (SBMRI) was founded in 1976 as the La Jolla Cancer Research Foundation, dedicated to biomedical research as an independent institution. Its current major programs of research in cancer, neurosciences and stem cells, diabetes and obesity, infectious and inflammatory diseases, and diseases of childhood are served by technology centers focused on chemical genomics, stem cell research, nanomedicine, and translational research. By SBMRI's account, the institution places among the top twenty-five organizations worldwide for research impact, with the National Institutes of Health (NIH) granting the institution funding that places it among the top recipients of independent research institutions nationally.

SBMRI's financial base and breadth of scientific inquiry have expanded considerably as the institution has received a series of large donations, with transformative gifts leading to the institution's current name, including \$10 million from Malin Burnham and an anonymous donor in 1996, and \$20 million (2007) and \$50 million (2010) from the same donor, T. Denny Sanford. A recent anonymous donation of \$275 million dollars, to be distributed over ten years, supports among other goals SBMRI's advancement in translational research, which "translates" basic sciences discovery into new drugs and therapies.

The graduate educational program of SBMRI is operated exclusively at the Torrey Pines mesa of La Jolla, with additional SBMRI research facilities located near Orlando, FL, at Lake Nona. In 2006, the Graduate School of Biomedical Sciences (GSBS) at SBMRI began the PhD program in Biomedical Sciences, which leverages the scientific organization of the Sanford-Burnham Medical Research Institute by virtue of what the institution calls the SBMRI “matrix organization.” All enterprises within the institution are interdependent and interrelated in their funding and administration, such that the educational program receives support, resources, and other forms of overhead from all related scientific and administrative departments. At the time of the 2015 visit, the GSBS had awarded nineteen PhD degrees, and 29 students were currently enrolled in the program. Fifty of the institution’s 60 La Jolla faculty (headcount) were involved in the graduate program, either as administrators, mentors (thesis advisors), instructors, or combinations of these roles. Neither online nor distance learning modalities are offered as part of the program.

The institution was granted eligibility from WASC in October 2010 to pursue initial accreditation for the Graduate School of Biomedical Sciences (GSBS). The Capacity and Preparatory Review visit (CPR) for candidacy took place in March of 2009, with the Educational Effectiveness Review (EER) for candidacy taking place in March of 2011, including a post hoc Compliance Audit review. The Commission granted candidacy for the graduate school in June of 2011 through the end of June 2015, with a request that several issues be addressed in the Capacity and Preparatory

Review report. In March of 2014, the CPR visit for Initial Accreditation was conducted, and the Commission scheduled the EER visit for spring of 2015, with an emphasis on particular areas for continued attention and development. The institution has undergone no substantive change reviews. During the present visit, the Educational Effectiveness Review for Initial Accreditation, the team completed an additional appendix to record its response to the institution's request to award a master's degree in the case that a student completed all degree requirements for the PhD except for the successful conduct and defense of a dissertation. The team also reviewed all required appendices and found that the relevant materials and policies have been kept current and remain in a satisfactory status at the institution.

B. The Educational Effectiveness Review Self-Study: Quality and Rigor of the Review and Report

The institution was forthright in its communication with the team – in its presentation of the self-study report and throughout the visit – and the team appreciated the institution's responsiveness and thorough fulfillment of the team's requests for information, documents, and access to the institution's leadership, faculty, administration, and students. (CFR 1.8) The team concluded that the institution's self-study report maintained fidelity to the educational effectiveness evidence the team was able to verify during its visit. The self-study report organized its exposition and findings systematically, by concentrating on most of the focus areas outlined by the Commission letter, with an emphasis on the more

elaborate structures and processes that the institution could introduce following the CPR recommendations. In light of how brief a period of time had passed between visits, the team found this approach to be largely practical and constructive. Three major report sections focused on the following: “Implementing Programmatic Change” (the institution’s progress regarding program review and learning outcomes assessment); “Faculty Engagement and Development” (description of the institution’s faculty governance structures as well as faculty development efforts); and “Allocation of Resources and Future Growth” (elaboration on the financial picture of the institution, its growth in administrative personnel dedicated to the educational program, and other resource considerations). The team noted that the report offered only brief discussion of the efforts between visits to address diversity issues; however, during the visit, the team learned more about the status of the institution’s programs targeted at diversifying the student population. The institution’s status and the leadership’s perspective on this issue are described in the report below.

The team found that the institution’s educational effectiveness was well represented by the narrative of the report, by the faculty and administration effort that responded to the Commission’s letter, and by the demonstration that assessment and program review are valued and are suitably informing the decisions made regarding the educational program. Furthermore, the team not only appreciated the institution’s involvement in the assessment of student work and an understanding of its place in program evaluation but also recognized the participation of each GSBS

population in the EER review and visit process, with the leadership, faculty, administrators, and students investing themselves extensively in the undertaking. The report itself – its evidence and emphasis – was a product of faculty membership in the various leadership bodies of the academic program, ranging from the Graduate Program Executive Committee (GPEC) to the committees formed, such as the Curriculum Committee and the Admissions Committee, as well as external advisory bodies. The faculty's preparation for and enthusiasm in meetings with the team, as well as their service as part of the report's preparation, speak volumes for the health and sustainability of the educational operation at SBMRI.

The educational effectiveness of the GSBS is documented by the institution in its self-study report by: 1) the program review and learning outcomes assessment processes that it has successfully implemented; 2) the functioning of the program's governance with its newly established faculty participatory body as well as its Graduate Program Executive Committee; and 3) its commitment to providing the necessary resources to support an educational model that promotes the tutorial method of instruction to guide students to the most recent scientific advances that are relevant to their unique areas of interest. In summary, the team concluded that the GSBS has gained from an institutionalization of its formerly informal processes and activities, and that it has advanced its faculty's ownership of the educational enterprise, its use of data and evaluation in continuous improvement efforts, and its commitment of resources – financial and personnel – to guarantee the sustainability of the program. With the ongoing development of institutional processes

through cycles of review, the GSBS aspiration to create the leading scientists of tomorrow demonstrates every prospect of unqualified success.

C. Response to Previous Commission Issues

In its letter of July 7, 2014, the Commission emphasized areas for continued attention and development as well as stated parallel expectations for the institution's ability to demonstrate capacities and effectiveness along four areas relevant to the Standards. The team focuses on presenting in Section II of this report its observations in detail regarding SBMRI's self-study of these four topics:

- Assessment and Program Review
- Faculty Governance and Development
- Financial Support for the Educational Mission
- Diversity of the Students and Faculty

SECTION II – EVALUATION OF THE INSTITUTION'S SELECTED ISSUES

Assessment and Program Review

Assessment

In the year between the CPR and EER Initial Accreditation visits, the GSBS has created a solid set of program learning outcomes (PLOs) and a coherent curriculum map that clearly indicates the alignment between course and program outcomes. Syllabi provided to the team illustrate an understanding of the need for course learning outcomes, and conversations with faculty indicated a clear appreciation of the use of rubrics. Staff and faculty have conscientiously eliminated any confusion about assessment methods with a glossary of terms and a program review policy. The team was impressed with the collection of evidence at the course level and the initial self-study completed in fall 2014, followed by an external review. The GSBS faculty and administration have established a strong foundation for program assessment. (CFRs 2.3, 2.4, 2.5, and 2.6)

Conversations with faculty disclosed a sincere commitment to sustaining assessment practices, and any previous concerns held by the team about the obligations felt by “volunteer faculty” were dispelled. Importantly, a number of faculty explained that they had found real value in assessment practices, particularly in the annual student reports and in the use of rubrics. Although the information collected has involved a small ‘n,’ the faculty examined student performance at the course level. For example, they compared the course performance of students entering with previous master’s training and those entering with undergraduate degrees and found no significant difference. Another result of program assessment has been the realization of a need to track student publications following graduation. This insight also emerged as a result of participating in a group of graduate-only institutions (GOIs) and attempting to benchmark results from these different

institutions. The team commends the institution's lead role in establishing this group and urges continuing participation and reflection on comparisons. (CFRs 2.4, 2.10, 4.1, and 4.4)

In addition, GSBS has recognized the importance of co-curricular student work and has begun the inclusion of co-curricular aspects of the program in annual assessment. The team encourages faculty and administrators to focus assessment efforts on qualifying exams, student publications, and dissertations, as these represent key milestones at which student learning outcomes are most clearly manifested. Given the extensive information collected at the course level within the assessment management system and the solid curriculum map, faculty should be able to connect any strengths and weaknesses perceived in qualifying exams and dissertations to improvements that might be made at the course-level. The team urges the faculty to develop rubrics further and to utilize them, particularly with regard to the qualifying examination and theses. (CFRs 2.4 and 2.11)

Although the program review policy sets out plans to assess one outcome per year in the five years between program reviews, GSBS has not outlined the specific direct and indirect evidence that will be used to evaluate each outcome. Given that significant numbers of students are now at qualifying exam and dissertation stages of study, the team encouraged faculty to use these work products as direct evidence as much as possible. The program already demonstrated a history of collecting indirect evidence from faculty and students, and the team was confident that over the next five years both direct and indirect evidence will be collected and evaluated by faculty during the course of annual assessment. In discussions with students, the team was impressed by the students' appreciation for faculty

efforts to listen to student input, to offer feedback to students, and to provide students with individual guidance. The hiring of an additional staff member to support faculty development (among other responsibilities) provides some reassurance that faculty will continue to receive support for their assessment efforts. (CFRs 2.5 and 3.1)

The faculty is developing mentee-mentor guidelines that are tailored to the GSBS model of highly individualized interactions, and faculty expressed interest in creating peer evaluation assessments, having visiting speakers, and exploring contemporary approaches to science teaching. Faculty appeared acutely aware that their graduate students also would benefit from exposure to new teaching methods, since some students will pursue traditional careers as academic faculty – indeed, the faculty already can point proudly to graduates in these roles. The team observed healthy collaboration between GSBS staff and the Office of Training and Academic Services (OTAS) and efforts to provide both GSBS graduate students and SBMRI postdoctoral scholars with robust co-curricular offerings in the form of speakers and workshops. Students noted that requests for attention to internships and information regarding alternative career options are being heeded. In the presence of the team, faculty and administrators discussed plans to build internships in local biotechnology companies into the curriculum. This is another area where the new staff hire will be focusing her attention. (CFRs 2.8, 2.11, 3.3, and 4.4)

Program Review

In the short time between visits, the institution managed to create a program review policy, to perform a self-study involving committees of faculty, and to conduct an external review by a distinguished panel. The institution appears to have taken very seriously the past recommendations by the CPR visiting team and the Commission regarding program review, and it should be commended for its prompt and comprehensive response. (CFRs 2.7 and 2.10)

The External Review Panel expressed some concern about the consistency of tutorials and outcomes within these short, often informal, course arrangements. Student enthusiasm for tutorials was apparent, with several students explaining how important these opportunities were to their learning and to their research. The team urges faculty to collaborate with students at the start of each tutorial to outline anticipated learning outcomes and then to assess results at the end of the tutorial with the students. The team recognizes the tutorial model as a unique strength of the program and one that should be nurtured. (CFRs 2.3 and 2.4)

External reviewers also expressed concern about faculty clarifying the difference between assessment at the program level, teaching evaluation, and student grades. The team noted that the student evaluations were accorded heavy weight. Faculty and students discussed the impact and importance of these evaluations in positive terms; however, the evaluation forms appeared to emphasize teaching elements (e.g., instructor organization and presentation). Mindful of the need for graduate students to take ownership of their learning, the team suggests adding or substituting some questions in course evaluations

that encourage students to reflect on their learning in the class, irrespective of faculty presentation or organization. The team is confident that as the faculty focuses on qualifying exams and theses in their assessment of one PLO per year, the distinction between program assessment, teaching evaluation, and grades will become evident. (CFRs 3.3 and 4.4)

Faculty Governance and Development

Immediately after the CPR visit in the spring of 2014, the institution began the process of forming its faculty senate, the body that – by the fall of 2014 – represented all faculty at SBMRI, regardless of their participation in the educational program as a mentor or instructor at any given time, and had met on more than one occasion to pursue its charge. At the time of the visit, the group had already demonstrated its ability to determine the policy and procedures of the GSBS to date, by opining on language regarding a mentor/mentee guidelines document suggested for adoption at the institution as well as by resolving that individuals from outside the institution must hold adjunct faculty positions to qualify for membership on dissertation committees in the PhD program. The team observes that as the senate's role develops further, it would likely become a decision-making body that, for example, participates formally in the institution's review and approval of proposals for new degree programs, in the event such activity ever becomes necessary. The willingness of faculty to extend themselves further into the program's leadership by way of senate membership and activity did not surprise the team. With GPEC at its

helm, the program had grown and developed through informal mechanisms of communication among faculty and a continuity of the “grassroots” effort that conceived the PhD program. By offering decisions regarding the program’s policy and by expressing their voices when input is requested, faculty were engaged more formally through the faculty senate, and they expressed satisfaction during meetings with the team when asked about their experience with this governance development. (CFRs 3.7 and 3.10)

A feature of the faculty senate that the team recognized as worthy of consideration was how the body was led by the GSBS dean instead of a faculty member elected into a president or chair status. Similarly, the body may be limited to something akin to an advisory status by its narrow participation on GPEC – it elected only “ad hoc” members to the group and conducted its business in the absence of its own structure of committees. When challenged, the team had to consider what qualified the faculty senate as more than an official faculty meeting that took place on scheduled basis. The team offered the GSBS leadership a hypothetical governance model, in which the faculty senate’s position was closer to the shared governance arrangement at many other institutions, with the senate electing its own leaders and its authority and line of report existing alongside the program’s executive leadership. The dean and the faculty with whom the team met indicated they thought the idea worthy of exploration. The team commends the spirit of faculty participation in the educational program’s curriculum, policy, and procedures, and the perspective of the leadership that welcomes faculty’s ownership of the program

through the development of governance arrangements. Toward that end, the team recommends that the GSBS and SBMRI continue to develop their faculty governance structures, to sharpen the distinction between the newly-formed faculty senate and GPEC and to allow the faculty senate to function at times apart from the academic program's management. (CFRs 3.6, 3.7, and 3.10)

Faculty development during the elapsed time between initial accreditation visits has been limited to training in the use of both rubrics to evaluate student work and the LiveText system, in which the institution's assessment data are stored. During the team's meetings with faculty and students, these groups expressed a common interest in training for the use of new teaching methodologies – both groups felt the students could eventually benefit from such development before they began what might be an academic career, and the faculty leadership recognized the value of feedback for current instructors as well as greater exposure to new pedagogy in science instruction for all members of the faculty. Following the program review that was conducted in fall 2014, the institutional leadership responded with an MOU committing resources to the training of faculty. The team commends the institution for recognizing its need to continue the advancement of faculty skills and knowledge in the methods of educating students and assessing their performance. The co-curricular offerings of the OTAS for students and postdoctoral scholars at SBMRI accompany all efforts to enrich and develop the faculty and students at the institution, and the educational program will benefit from such enhancement. (CFRs 2.8, 3.3, and 4.4)

While the faculty at SBMRI who participate in the GSBS have firmly established their commitment to the program – and attest immediately to the mutual gains experienced by all parties involved – the Commission’s letter expressed concern about appropriate faculty incentives for their dedication of time and resources to the academic enterprise. Their “volunteer” status was a point of concern. With the commitment of their research funds to the sponsorship of students in the program, faculty demonstrate their motivation to augment their scientific operation by mentoring students; however, instruction of courses for the program comes over and above one’s responsibilities at SBMRI when it is considered part of institutional service. The institution has defined the percentage of service expected from faculty, by rank, and accounts financially for the faculty effort towards the educational program in this way financially. Furthermore, non-monetary recognition for participation has been implemented: a faculty award ceremony had been introduced, and a new program newsletter published and distributed to highlight the contributions of the program’s faculty. (CFRs 3.1 and 3.2)

When the team posed the question: What exactly is the compensation that faculty members receive for their participation in the program? – the inquiry was met with novel responses, such as the benefit of being compelled to communicate science effectively to fellow scientists. This practice advances the field overall by clarifying its impact and magnifying its potential to garner support and resources from a wider and better-informed audience. The team heard about how graduate students

are willing to take greater intellectual risks in their scientific inquiry, whereas the postdoctoral scholars, who have admirably supported the research operation at SBMRI from before the advent of the education program, may have to keep their eye on what may be their next position and focus on more reliable avenues of productivity. The excitement of the program's students generated a kind of "buzz" that could not be afforded otherwise. The team commends the institution's intrinsic receptivity to the educational program and its benefits to the SBMRI research community. With the highest level of leadership supportive of targeted fundraising to secure additional dedicated funds for the students and the program, faculty described a future at the institution with a broad foundation that sustains the greatest rewards of the program and amplifies them as resources permit. (CFR 3.1, 3.6, 3.7, and 3.10)

Financial Support for the Educational Mission

The 2014 Commission letter indicated the need for SBMRI to provide evidence of "stronger and broader financial support for the academic mission" to demonstrate the sustainability of the graduate program. In addition, the letter noted the need to improve the incentive and reward structure to promote faculty participation in GSBS and to ensure that there is sufficient support for faculty development and innovation.

The EER report summarized the financial health of SBMRI and noted a recent anonymous gift of \$275 million. The graduate program is a small portion of the total operating budget

of SBMRI (approximately 2%) with direct and indirect costs of approximately \$2.7 million. The challenge going forward, however, is that approximately 80% of the total SBMRI budget comes from the federal government in the form of research grants and contracts; the expectation is that the federal funding for scientific research will continue to decrease into the future. Consequently, SBMRI, like many research institutes in this country, must continue to diversify its income streams. (CFR 3.4)

As noted in the EER report, the recent gift consists primarily of unrestricted funds, and it will allow the graduate program to maintain its annual operating budget in the near future. In a conversation with the board chair, the team learned of plans for a capital campaign that would include long-range support for the graduate program through graduate fellowships, endowed professorships, and an endowment associated with the naming of the graduate school that would support annual costs. The leadership of GSBS also emphasized the availability of bridge funds that are designed to support graduate students in cases in which the adviser has lost research funds to support the student's stipend. Currently one student is supported through these funds, and more support is available if needed. (CFRs 3.1, 3.4, 3.6, 3.7, 3.9, and 4.6)

The detailed GSBS budget includes support for professional development; however, these funds appear to be directed towards career-building workshops for graduate students and postdoctoral scholars. The team heard from faculty of their interest in learning about instructional technologies and new pedagogies – hence, the team encourages GSBS leadership to ensure that funds are available to pursue these activities. Regarding other

support for faculty, the team heard from multiple faculty members that they are committed to the graduate program, regardless of whether there is direct support from the graduate program for their salaries; however, several also noted that graduate fellowships and endowed chairs would be investments that they would welcome. (CFRs 3.3 and 3.5)

During the EER visit, the team had the opportunity to meet with the dedicated staff members supporting the graduate program. The team was pleased to hear of the imminent hiring of an additional senior staff member to support faculty development, diversity initiatives, scientific writing, accreditation, student services, and grant writing. Because of the breadth of this position, the team recommends that the GSBS prioritize the responsibilities of this individual and the other staff members so that the graduate office can provide effective support to the program. (CFR 3.1)

During the course of meetings with members of the GSBS, the team heard differing visions for the program in terms of size, scope, and levels of involvement from the faculty. As the program evolves and potentially grows, the team encourages the leadership of GSBS to discuss, strategize, and plan in a manner that benefits SBMRI and ensures sufficient support for the program into the future. (CFR 4.6)

Diversity of Students and Faculty

In response to the CPR report, the Commission “urged clear and supportive messages from the governing board and senior administrative leadership concerning faculty and student

diversity.” Although progress had been made on understanding the value of student body diversity and developing initiatives to enhance student diversity, the CPR visiting team had concerns about the lack of faculty diversity and questions about the strength of institutional commitment to diversity throughout the organization. To address these issues, the EER report indicated further development of their pipeline plans for the Fresno State collaboration; broadened initiatives for under-represented and under-privileged high school students; and participation in graduate career fairs.

The team found little concrete evidence of progress on any of these initiatives, however. The EER report did not include a separate section dedicated to diversity, even though this was one of the areas cited as needing attention. There was a brief section in the Concluding Essay about the existing Fresno State program but no information about long-term sustainability or plans for developing the pipeline further, and discussion during the visit revealed that the Fresno State pipeline program might even go on hiatus due to lack of immediate funding for the upcoming summer. Although there were statements from the institution’s leadership that such pipeline programs are recognized as a critical component of the diversity effort, the team was concerned about the prospect of even a short hiatus in the existing program with no overt evidence of long-term funding for the effort overall. Indeed, the team felt that the pipeline program represents a significant opportunity for increasing diversity that fits well with the institution’s “admit-to-fit” model for admissions – connecting students to faculty through internships and subsequent transition into the graduate program for those who can flourish in the SBMRI model. The team had the opportunity to hear from a student who matriculated into the PhD program from Fresno

State, and the excitement of that student and potential of the program was highly evident. The team urges that the program be continued, expanded, and replicated with adequate financial and administrative support. Of the five under-represented minority students (all Hispanic) who have entered the program since its inception, three joined as members of the last two incoming cohorts, which may indicate a trend toward greater representation of California's diverse population. The team encourages the institution to perceive this recent development – this elevation to 20% Hispanic matriculating students (three of fifteen entrants) – to be the modest beginning of long-term success in attracting diverse students to the PhD program. (CFR 1.4)

The team heard that, going forward, responsibility for outreach to enhance diversity at GSBS will fall to the new educational specialist who will join the program's administration in the near future. Specific plans for such outreach efforts were not articulated, however, and there was some concern about where outreach/diversity would rank among the extensive list of responsibilities assigned to the specialist. Similarly, the team found no mention of how programs (current and future) will be assessed for their success or failure at achieving diversity goals; it wasn't clear how future decisions would be made as to whether to continue or discontinue specific outreach activities or perhaps pursue alternative approaches. The team urges special consideration of how the educational specialist's responsibilities will allow for an expanded effort to attract a more diverse student applicant pool. Further, the team suggests that the GSBS formally monitor and assess its success with ongoing diversity efforts in order to help the institution optimize its outreach strategy. (CFR 3.1)

At the institutional level, the team heard a clear and consistent message from leadership about the value of diversity and the desire to achieve a more diverse student body and faculty. The new CEO stated his dedication to this endeavor and pointed to his own history in the pharmaceutical industry as evidence of such commitment. The CEO and president indicated a desire to become more “intentional” in their faculty recruitment process as one means of casting a broader net for applicants and, in time, achieving greater diversity. The board chairman was similarly supportive, pointing again to his own track record in biotechnology while nevertheless acknowledging the difficulty of the task in an academic setting. While the team would have preferred official statements in planning and vision documents from the leadership emphasizing diversification as an institutional goal – along with the financial resources and procedural changes that will lead to real progress at the faculty and student level – the team recognized that the individuals leading the institution had experience with the issue and could lay the necessary groundwork for enhancing the institution’s diversity. (CFR 1.4, 3.1, and 3.6)

Student Success

The GSBS has focused its study of student success outcomes on key measures that characterize various dimensions of how students reap the benefits from its educational program, not limited to the basics. Graduation rate and time to degree statistics are published, benchmarked against peer institutions in the GOI group, and incorporated in the program review protocol. GSBS graduates perform

comparably or at a superior rate/percentage completion compared to those from the peer institutions from which it can collect comparable data, according to the program review report that was provided to the external review team (six-year graduation rate at GSBS: 90%). The SBMRI website, created by the institutional research staff, presents cohort entry size (on average, six students per cohort from 2006 cohort to present), retention rates (only 6 of the 53 entering students have left without a degree), and graduation rates, with further detail as to whether students not retained were with the institution after they passed their qualifying examination. The average time to degree presented on the degrees awarded web report was 4.54 years, which compares favorably with other programs in the biomedical sciences. The team commends the institution for its transparency regarding the publication of these statistics, its effort to benchmark its performance against like programs, and its utilization of these statistics in program review. (CFRs 1.2, 1.6, 2.7, 2.10, 4.1, and 4.2)

As has been discussed elsewhere in this report, measures of scientific and professional accomplishment have also served as indicators of student success. A count of student publications has been adopted by GSBS as another dimension of achievement: The average count of publications overall (0.46 per student) as well as the average count of publications with first authorship (0.23 per student) were cited in the program review and are part of the institution's conversation with its peers regarding comparable data becoming available for benchmark development. At the time of the program review conducted in fall 2014, 16 degrees had been

awarded by the program, and an accounting of their careers subsequent to their studies at GSBS indicated that three have attained faculty positions, four have secured non-academic, biomedical science-focused positions (e.g., in pharma or biotech), and the remaining nine currently hold postdoctoral positions. (CFRs 1.2 and 2.10)

SECTION III – COMMENDATIONS AND RECOMMENDATIONS

Commendations:

- The team commends the leadership of SBMRI for embracing the academic program as part of the institution’s mission and its commitment to sustaining the program’s development of scientific leaders and to securing additional resources through fundraising. (CFR 3.6)
- The team commends the GSBS for its solid program learning outcomes and for a curricular map that aligns thoroughly with the mission and unique culture of the academic program. (CFR 2.3)
- The team commends the GSBS’s tutorial model for educating its students, particularly in light of how this instructional delivery method fulfills the unique individual curricular needs of the students and unites the students’

scientific inquiry with cutting-edge research findings of the principal investigators serving as faculty in the program. (CFRs 2.1, 2.2b, 2.5, and 2.8)

- The team commends the students of the GSBS for their engagement with the educational enterprise, which commences during the admissions process – when they identify their potential mentors – and deepens as they tailor their studies across the research programs housed within SBMRI. Their enthusiasm for their career challenges, both within SBMRI as well as beyond the institution, enriches the endeavors of the faculty and contributes to the institution’s culture of passionate inquiry. (CFRs 1.2, 2.1, 2.5, and 2.13)
- The team commends the faculty, at whose initiative the academic program was conceived and in whose hands their students gain the knowledge, skills, and values to attain successful careers. Their pursuit of the intrinsic rewards of having students work and learn in their labs attests to how deeply the academic program is ingrained in the identity of the institution. Their commitment to teaching and the generosity of their service to the academic program provide singular models for the students and postdoctoral scholars at SBMRI to advance science. (CFRs 2.4, 2.8, 2.11, and 3.1)

Recommendations:

- The team recommends that the GSBS and SBMRI continue to develop their faculty governance structures – specifically, the newly-formed faculty senate and its relationship with the Graduate Program Executive Committee. A sharper distinction between the responsibilities of these separate bodies, particularly in how they represent the voices of the faculty and the faculty’s ownership of the program’s curriculum, as well as mutually exclusive leadership would approach a shared governance model, allowing the faculty senate to function at times apart from the academic program’s management. (CFRs 2.4, 3.7, and 3.10)
- Although the team heard a repeated commitment to the goal of becoming an institution characterized by diversity, and the institution’s leaders recognize the challenge this entails, the team recommends that SBMRI continue, expand, and replicate its efforts to attract diverse students and faculty. After the initial successes the GSBS has experienced with pipeline-type recruitment strategies for students, in the absence of extramural funding to support them, the team recommends that the institution deepen its commitment of resources to this effort, including the stated plan to dedicate new professional staff to student recruiting. New initiatives crafted to attract diverse faculty and students will move beyond mere receptivity to diverse candidates toward an active intention to identify and invite such candidates’ interest in SBMRI. (CFRs 1.4 and 3.6)

- The team recommends that the GSBS build on its strong framework of learning outcomes assessment by moving at an accelerated pace toward a summative assessment that focuses on students' qualifying exam and dissertation defense. Recording assessments of these student work products creates compelling evidence of learning outcomes attainment and complements the existing course assessment and course performance data, all of which serve as the basis for program review. (CFRs 2.4, 2.7, 2.10, 4.1, and 4.4)
- The team supports all additions to the staff who are dedicated to the educational program, and recommends a prioritization of the many responsibilities that have been designed into the new professional position added to the GSBS. (CFR 3.1)
- The team recommends that the GSBS continue to attend to faculty development and co-curricular needs of students. By exploring how proposed internship options can be built into the curriculum, and by bringing speakers and seminars on teaching to both graduate students and faculty, the GSBS can demonstrate its capacity for continuous improvement of the co-curricular and training opportunities available at the institution. (CFRs 2.11, 3.3, and 4.4)

- The team recommends that SBMRI and the GSBS promote an expressed desire to raise funds to name the graduate school, have endowed professorships, and provide stipend support for students, perhaps in the form of fellowships. (CFR 3.4)

APPENDIX: MSBS DEGREE

The team was asked to recommend the granting of an MSBS to students who have passed the qualifying exam and have chosen not to complete the dissertation. Given the extensive vetting of the institution and the high quality of research and student learning taking place, the team recommends that the Commission, within the initial accreditation of a doctoral degree, extend initial accreditation to an MSBS that is not “stand alone” but offered to students who have applied and been accepted to the doctoral program, and who have passed the qualifications exam but have chosen not to proceed to a doctorate. If the institution in the future chooses to develop a stand-alone MSBS, a substantive change proposal will be required, but the Commission, by including an MSBS in the initial accreditation, will obviate the need for a structural change proposal.

The institution has created learning outcomes for the MSBS to be awarded in the limited context described above. In addition, the institution has shown that it has program assessment data collection and measurements in place for the coursework leading to the qualifications exam and for the exam itself. All of the aspects of substantive change proposal and structural change proposals have been covered in the course of four on-site visits and four successive reports during the initial accreditation process. Members of the most recent team, three of the four of whom have participated in previous visits, strongly believe that the institution should have the option to grant an MSBS to students who have passed the qualifying examinations and who choose not to proceed to the doctorate.

1 - CREDIT HOUR AND PROGRAM LENGTH REVIEW FORM

Material Reviewed	Questions/Comments (Please enter findings and recommendations in the Comments sections as appropriate.)
Policy on credit hour	<p>Is this policy easily accessible? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Where is the policy located?</p> <p>On the external website at: http://sanfordburnham.org/trainingandeducation/gradschool/Documents/GSBS_credit_hour_policy.pdf</p> <p>On the internal website at: http://intranet/academicsupport/gradschool/Documents/Program%20Policies%20and%20Supporting%20Documents/GSBS_credit_hour_policy.pdf</p> <p>Comments:</p>
Process(es)/ periodic review of credit hour	<p>Does the institution have a procedure for periodic review of credit hour assignments to ensure that they are accurate and reliable (for example, through program review, new course approval process, periodic audits)? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Does the institution adhere to this procedure? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Comments:</p> <p>Course credit hours are reviewed during new course approval by the Curriculum Committee, and during annual course evaluation meetings lead by course directors.</p> <p>Example of change due to syllabus review: in 2014, Statistics was raised to 4 units (from 3) based on review of contact hours.</p>
Schedule of on-ground courses showing when they meet	<p>Does this schedule show that on-ground courses meet for the prescribed number of hours? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Comments:</p> <p>A schedule of courses with their respective credits can be found in the catalog on page 6, available online at http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Sanford-BurnhamGraduateSchoolCatalog.pdf.</p>
Sample syllabi or equivalent for online and hybrid courses <i>Please review at least 1 - 2 from each degree level.</i>	<p>How many syllabi were reviewed? <u>4</u></p> <p>What kind of courses (online or hybrid or both)? <u>Grad Research</u></p> <p>What degree level(s)? <u>PhD</u></p> <p>What discipline(s)? <u>Bio med</u></p> <p>Does this material show that students are doing the equivalent amount of work to the prescribed hours to warrant the credit awarded? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Comments:</p>
Sample syllabi or equivalent for other kinds of courses that do not meet for the prescribed hours (e.g., internships, labs, clinical, independent study, accelerated)	<p>How many syllabi were reviewed? <u>NA</u></p> <p>What kinds of courses?</p> <p>What degree level(s)?</p> <p>What discipline(s)?</p> <p>Does this material show that students are doing the equivalent amount of work to the prescribed hours to warrant the credit awarded? <input type="checkbox"/> YES <input type="checkbox"/> NO</p>

Please review at least 1 - 2 from each degree level.	Comments:
Sample program information (catalog, website, or other program materials)	How many programs were reviewed? 1
	What kinds of programs were reviewed? Graduate
	What degree level(s)? Ph.D.
	What discipline(s)? Biomedical Sciences
	Does this material show that the programs offered at the institution are of a generally acceptable length? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	Comments: Catalog can be found online at: http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Sanford-BurnhamGraduateSchoolCatalog.pdf . Course syllabi attached.

Review Completed By:



Date: 12 MAR '15

2 - MARKETING AND RECRUITMENT REVIEW FORM

Under federal regulation*, WSCUC is required to demonstrate that it monitors the institution's recruiting and admissions practices.

Material Reviewed	Questions and Comments: Please enter findings and recommendations in the comment section of this table as appropriate.	Verified Yes/No
**Federal regulations	Does the institution follow federal regulations on recruiting students?	Yes
	Comments: SBMRI does not incentivize student recruiting to employees or faculty.	
Degree completion and cost	Does the institution provide accurate information about the typical length of time to degree?	Yes
	Does the institution provide accurate information about the overall cost of the degree?	Yes
	Comments: Time to degree can be found online at: http://sanfordburnham.org/trainingandeducation/gradschool/institutionalresearch/Pages/Degrees-Awarded.aspx Program fees are outlined in the catalog on page 15, available online at: http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Sanford-BurnhamGraduateSchoolCatalog.pdf	
Careers and employment	Does the institution provide accurate information about the kinds of jobs for which its graduates are qualified, as applicable?	Yes
	Does the institution provide accurate information about the employment of its graduates, as applicable?	Yes
	Comments: Alumni placement and employment data can be found online at http://sanfordburnham.org/trainingandeducation/gradschool/Pages/Alumni.aspx and http://sanfordburnham.org/trainingandeducation/gradschool/institutionalresearch/Pages/Alumni-Placement.aspx	

*§602.16(a)(1)(vii)

**Section 487 (a)(20) of the Higher Education Act (HEA) prohibits Title IV eligible institutions from providing incentive compensation to employees or third party entities for their success in securing student enrollments. Incentive compensation includes commissions, bonus payments, merit salary adjustments, and promotion decisions based solely on success in enrolling students. These regulations do not apply to the recruitment of international students residing in foreign countries who are not eligible to receive Federal financial aid.

Review Completed By:

Date:


12 MAR 15

3 - STUDENT COMPLAINTS REVIEW FORM

Under federal regulation*, WSCUC is required to demonstrate that it monitors the institution's student complaints policies, procedures, and records.

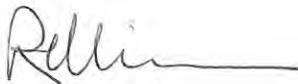
Material Reviewed	Questions/Comments (Please enter findings and recommendations in the comment section of this column as appropriate.)	Verified Yes/No
Policy on student complaints	Does the institution have a policy or formal procedure for student complaints?	Yes
	Is the policy or procedure easily accessible? Where?	Yes
	Comments: The Student Grievance Policy can be found online at: http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Student%20Grievance%20Policy.pdf	
Process(es)/ procedure	Does the institution have a procedure for addressing student complaints? Please describe briefly: Described in the Student Grievance Policy can be found online at: http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Student%20Grievance%20Policy.pdf	Yes
	Does the institution adhere to this procedure?	Yes
	Comments:	
Records	Does the institution maintain records of student complaints? Where?	Yes
	Does the institution have an effective way of tracking and monitoring student complaints over time? Please describe briefly:	Yes
	Comments: All student complaints are tracked by the graduate office and recorded in students' files. Students who's complaint cannot be solved in the graduate office are referred on to the Associate Dean of Student Affairs or Human Resources (HR). After meeting with a student, the Assoc. Dean sends a report of progress to the graduate office where it is followed up on and filed. Any grievances of a more serious nature are also reported to HR and recorded. Students are encouraged to meet with an HR representative as well. Those conversations are confidential and not shared with the graduate office in detail. The Graduate Office, Assoc. Dean and HR work together until a grievance has been resolved. Results are recorded in a students file.	

*§602-16(1)(1)(ix)

See also WASC Senior College and University Commission's Complaints and Third Party Comment Policy.

Review Completed By:

Date:



12 MAR '15

4 – TRANSFER CREDIT REVIEW FORM

Under federal regulations*, WSCUC is required to demonstrate that it monitors the institution’s recruiting and admissions practices accordingly.

Material Reviewed	Questions/Comments (Please enter findings and recommendations in the comment section of this column as appropriate.)	Verified Yes/No
Transfer Credit Policy(s)	Does the institution have a policy or formal procedure for receiving transfer credit?	Yes
	<p>Is the policy publically available? If so, where?</p> <p>The Transfer Credit Policy is available online at: http://sanfordburnham.org/trainingandeducation/gradschool/Documents/TRANSFER%20CREDIT%20POLICY.pdf</p> <p>and</p> <p>Graduate Catalog pages 12 and 23 available online at: http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Sanford-BurnhamGraduateSchoolCatalog.pdf</p>	
	Does the policy(s) include a statement of the criteria established by the institution regarding the transfer of credit earned at another institution of higher education?	Yes
	Comments:	

*§602.24(e): Transfer of credit policies. The accrediting agency must confirm, as part of its review for renewal of accreditation, that the institution has transfer of credit policies that--

- (1) Are publicly disclosed in accordance with 668.43(a)(11); and
- (2) Include a statement of the criteria established by the institution regarding the transfer of credit earned at another institution of higher education.

See also WASC Senior College and University Commission’s Transfer of Credit Policy.

Review Completed By: 
 Date: 12/11/15

Compliance Audit Worksheet

Instructions to team:

Please attach this form as an appendix to the team report. Missing documents should be noted in the recommendations section of the team report.

Name of Institution: Sanford-Burnham Medical Research Institute

Date of Visit: March 11-12, 2015

Type of Visit: Candidacy CPR Candidacy EER
 Initial Accreditation CPR Initial Accreditation EER

CFR	Documents Required	Cand		I.A.	
		CPR	EER	CPR	EER
1.1	Mission statement Inside of GSBS catalog (http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Sanford-BurnhamGraduateSchoolCatalog.pdf) and online at http://sanfordburnham.org/trainingandeducation/gradschool/Pages/PublicStatementonStudentAchievement.aspx				X
1.2	Public posting of student achievement (retention/graduation, student learning) if not in Catalog Public Statement of Student Achievement at http://sanfordburnham.org/trainingandeducation/gradschool/Pages/PublicStatementonStudentAchievement.aspx and Institutional Research pages at http://sanfordburnham.org/trainingandeducation/gradschool/Pages/Institutional-Research.aspx				X
1.3	Organization chart - EER report pages 35 (Program) and 45 (Grad Office)				X
1.4	Academic freedom policy http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Academic%20Freedom%20Statement.pdf				X
1.5	Diversity statements and procedures; also for accommodations of disabilities http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Diversity%20Policy.pdf				X
1.6	Documents setting forth the authority of a controlling or sponsoring entity that is affiliated with the accredited institution, if any NA				
1.7.a	Catalog (online, hard copy) with complete program descriptions, graduation requirements, grading policies http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Sanford-BurnhamGraduateSchoolCatalog.pdf				X

1.7.b	Student complaint and grievance policies http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Student%20Grievance%20Policy.pdf				X
1.7.c	Grade appeals policies – See Grievance Policy at http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Student%20Grievance%20Policy.pdf				X
1.7.d	Faculty complaint and grievance policies Employee Handbook, page 34 – Appendix 29				X
1.7.e	Staff complaint and grievance policies Employee Handbook, page 34 – Appendix 29				X
1.7.f	Employee handbook or equivalent - Appendix 29. Employee Handbook				X
1.7.g	Redacted examples of student transcripts with key that explains credit hours, grades, degree levels, and related interpretive information - Appendix 30. Redacted Transcripts and transcript guide				X
1.7.h	Policies for changing grades – See Grievance Policy at http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Student%20Grievance%20Policy.pdf				X
1.7.i	Tuition and fee schedule http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Sanford-BurnhamGraduateSchoolCatalog.pdf				X
1.7.j	Tuition refund policy http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Sanford-BurnhamGraduateSchoolCatalog.pdf				X
1.7.k	Policy on credit hour/award of credit; processes for review of assignment of credit; examples of reviews of syllabi to ensure equivalency among kinds of courses http://sanfordburnham.org/trainingandeducation/gradschool/Documents/GSBS_credit_hour_policy.pdf				X
1.7.l	Policies on human subjects in research, if applicable - Appendix 31. – Human Subjects Policies and Procedures				X
1.8	Independent annual audit of finances - Provided via email (locked PDF which could not be combine with other non-required data)				X

CFR	Documents Required	Cand.		I.A.	
		CPR	EER	CPR	EER
2.1	List of degree programs, showing curriculum and units for each http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Sanford-BurnhamGraduateSchoolCatalog.pdf				X
2.2	For associate and bachelor's degrees: general education requirements NA				
2.6	Placement data, if available http://sanfordburnham.org/trainingandeducation/gradschool/institutionalresearch/Pages/Alumni-Placement.aspx				X
2.7	Program review process and schedule Appendix 21. GSBS Program Review Guidelines				X
2.8	Policies re faculty scholarship and creative activity http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Faculty%20Scholarship%20and%20Scholarly%20or%20Creative%20Activity.pdf				X
2.10	Policy on student evaluation of faculty - Appendix 32. Faculty Evaluation Policy				X
2.12	Academic calendar http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Sanford-BurnhamGraduateSchoolCatalog.pdf				X
2.13	Examples of recruitment and advertising material - Appendix 33. Grad Program Ads, Materials				X
2.14	Policy on transfer of credit http://sanfordburnham.org/trainingandeducation/gradschool/Documents/Sanford-BurnhamGraduateSchoolCatalog.pdf				X
3.1	Staff development policies Employee Handbook, page 13				X
3.2	List of faculty with classifications, e.g., core, full-time, part-time, adjunct, tenure track, by program as relevant http://sanfordburnham.org/talent/Pages/home.aspx				X
3.3.a	Faculty evaluation policy and procedures Appendix 34. Faculty Evaluation Policy and Procedures				X
3.3.b	Faculty handbook or equivalent Appendix 35: Graduate Faculty Handbook (also on SBMRI intranet)				X
3.4	Faculty development policies Appendix 36: SBMRI Faculty Policies				X
3.4.a	Faculty orientation policies and procedures Appendix 36: SBMRI Faculty Policies				X
3.4.b	Policies on rights and responsibilities of non-full-time faculty Appendix 36: SBMRI Faculty Policies				X
3.5.a	Most recent financial aid audits NA				
3.5.b	Last federal composite score, if applicable NA				

3.5.c	Last report of two- and three- year cohort default rates NA				
3.9.a	List of governing board members with CVs http://sanfordburnham.org/talent/Pages/home.aspx#trustees				X
3.9.b	List of governing board committees with members Appendix 37: Board of Trustee Biographies and Committees				X
3.9.c	Minutes of board meetings for last two years (where located; not the actual minutes) - Located in the office of the Senior Director of Intellectual Property and Legal Affairs				X
3.9.d	Governing board bylaws and operations manual - Appendix 38. Governing Board Bylaws				X
3.10.a	CEO biographical information http://sanfordburnham.org/talent/Pages/PerryNisen.aspx				X
3.10.b	Policy and procedure for the evaluation of president/CEO Appendix 39: President and CEO Evaluation Process				X
3.11.a	Faculty governing body charges, bylaws and authority, if applicable - See Appendix 38: Board Bylaws and Appendices 14, 25 and 26: GSBS Committee Charters				X
3.11.b	Faculty governance organization chart, if applicable - Appendix 40: SBMRI Program Listing				X
4.1	Strategic plan and related documents - Appendix 41. Strategic Overview				X
4.2	Description of planning process including plan for monitoring of implementation - Included in GSBS Section 5-Year Plan: Appendix 42				X
4.4	New program approval process Appendix 43: New Program Approval Policy				X
4.5	Description of institutional research function and staffing - Appendix 12: Institutional Research Staffing and Function				X
4.8	List of major industry or other advisory committees http://sanfordburnham.org/talent/Pages/home.aspx#institutes				X

Team Comments: All present.