### Questions and Answers from the live Accreditation Webinar held Oct 1, 2014.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tr>
<td>Do all students need to do research, or does the opportunity have to be available?</td>
<td>We understand that it may not be possible to provide extracurricular research opportunities for ALL students. However, we do expect that the program provide or facilitate such opportunities for at least a portion of their students. If research is not available on campus, opportunities need to be provided.</td>
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<td>Can you give examples of how we might show institutional support for diversity? (Are things like the following a good way to show commitment-- an office of diversity on campus, student groups/clubs that promote diversity).</td>
<td>Both of these examples are good ones to demonstrate diversity. In general we want to see actions as opposed to words just quoted from a mission statement or handbook. Best is if you can show that you have looked at institutional data and responded to any shortfalls in access or success rates.</td>
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<td>Is the definition of 'experiential learning' spelled out in detail somewhere in the ASBMB guidelines? Other than traditional labs, what other ways can an institution fulfill the 400 contact hrs?</td>
<td>Yes. Please refer to page 4 of our program guidelines Some structured research experiences can be used. Or, if you teach in a combined lab-lecture format you should estimate how much contact time is experiential. The certification exam is our only assessment tool at this time Depends. Women are not really underrepresented in undergraduate BMB fields. But if you can demonstrate that you have increased numbers of women (where you had a problem before in attracting or retaining women) or if you are sending more women to grad school than national trends, that would be evidence of commitment to diversity.</td>
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<td>What assessment tools do you offer? Do women count as diverse?</td>
<td>Yes. For updated core concepts, visit our website: <a href="http://www.asbmb.org/teachbmb">www.asbmb.org/teachbmb</a></td>
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How are you defining diversity? Are women included?

See above. Underrepresented minorities, women if your program felt the need to pay attention to this population, students with disabilities, first-generation students, etc. Anything you can use to show that you are trying to broaden the group of students in BMB.

400 contact hours - how do you calculate that for your purposes? If a student takes 2 lab courses per semester (lab credits are usually 1 credit, but result in at least 3 hours per week actual time), then that's 6 hours per semester? Or do you include lecture time as well?

I just want to check that when we are talking about contact hours there is a recognition that these are different than credit hours

Contact hours are defined as the time spent engaged in direct, hands-on laboratory/research experience. Lecture time is NOT counted towards contact hours

That is correct. See above.

Would projects in biochemistry EDUCATION research for students count towards experiential experience fulfillment?

Certainly these would be good research projects for the research aspects of the program. We are a little hesitant to use them as substitutes for lab experience under the heading of "experiential learning" since we really want significant hands-on hours in the wet lab. But education research that produces and analyzes data can be part of the program.

Our program requires a core selection of courses in combination with upper level electives for which students can choose from a list of courses with and without accompanying laboratories. Does the core have to meet the 400 contact hours of experiential learning for the program to be accredited, or can the program be accredited and accrediting of the individual degree depends on a particular student meeting the 400 contact hour requirement?

We do not accredit degrees. We only accredit programs. So the core program has to offer 400 contact hours of experiential learning for all students

Our university requires ~400 hours of research (for 8 credit hours) of research. Because we have education researchers in our department, they are able to complete their 8 credit hours in a biochemistry education research lab. As researchers, biochemistry educators are engaged with data collection, analysis, and synthesis. We do not distinguish research done in biochemistry education labs from research done in e.g., bioinformatics labs or enzymology labs. Would this count for the experiential learning?

See above, line 13.
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Is passing the assessment exam a requirement for a student to obtain an ASBMB certified exam?

Passing the assessment exam is a requirement for a student to graduate with an ASBMB certified degree.

Yes!

will the exam eventually, once refined, be a different version every time will the difficulty level calibrated between years will the questions be MCAT like

Yes!

Some of our seniors graduate early, at the end of fall semester. Will there be an exam date in the fall as well?

At this time, we are only planning to offer the exam once each year during the Spring.

Is there any data available on the development and validation of the assessment or theoretical foundations of your scoring or ranking procedure?

We are still refining the exam. Each exam is independently scored by three different scorers. We will have more data for the community as the exam matures.

how do you volunteer for scoring- or are these from accredit ate institutions

Anyone can volunteer to be a scorer. Email Pete or myself: pjkennel@vt.edu or wzhao@asbmb.org

Please give full citation for the 'BAMBED' article and also for the 'PULSE' rubric. (Thank you)


If a student were to take the exam as a junior and not score well, would that student be able to take it again the next year?

At the time, the answer is NO.
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My questions relate to the high-Bloom’s questions: 1. Can you give us an example? 2. Scoring high-Bloom's questions requires expertise. Who's going to do this, and will people agree with the rubrics?

We will be posting a couple of examples on the website in the near future. All questions, rubrics, keys are developed by teams of volunteers who must come to consensus. Many of our team members specialize in biochemistry education. Several other key members participated in a series of three, multiple day workshops delivered by established experts where they received training in assessment practices.

When will scoring the exams take place?
Since the process of accreditation is involved, are there going to be limits on the number of programs accredited in any Fall or spring round of applications?
Apologies if this has been addressed, but is there any thought to building flexibility into the exam? For example, you might have 10 questions with students needing to answer 8. Students could choose questions that best represent the background delivered by that particular program (e.g. perhaps stronger chem vs. bio facets of biochem).

Is there any data relating student scores on the assessment to other standardized exams like MCAT, GRE, PCAT, etc.

This is the first year the exam was delivered. We don't have that kind of data yet.

Do you offer accreditation for 4+1 BS/MS programs?

We are focused on accrediting undergraduate programs. If your students fulfill all the BS requirements and then go on for an MS, we would look just at the first part of that combination and evaluate it.

We have a Biochemistry Concentration for our BS in Biology degree. Would this type of program be eligible for consideration?

Yes

Of the currently accredited programs, how many were fully accredited versus provisionally?

10 full, 4 provisional

Will the score be broken out into sub-disciplines to track with nuances in Biochemistry programs?

Yes. Scores are broken down by question, which is further broken down by discipline and Bloom's level.

If we send more women to graduate school because of our program, can’t we view that as pipeline development?

See comments above, line 7.

Where can we find the 'national data' for education and diversity?