BioSci Teaching-Focused Faculty Meeting 12 p.m., April 21, 2017 2312 Williams Hall

Jerry LeBlanc welcomes group and thanks all for coming. Reiterates this is the final teaching-focused faculty meeting of the academic year, and acknowledges the success of the series in tackling the presented agenda items. Notes remaining item was how to better-serve students, on which he consulted with Jane Lubischer, resulting in the email attachment sent earlier in the day to faculty outlining the areas of discussion. He notes the parallel between this document and the department's strategic plan, which includes reading <u>'Vision and Change'</u> document. Asks for show of hands of who has read it (several). States the quality and directness of the document, and asks if anyone will speak about their current implementation of it.

Faculty member notes he just read it, so would love to hear more about where to start.

Faculty member advises to start small—don't attempt to overhaul your courses. Just focus on a concept which may be difficult for students, and look at how to incorporate that concept without dictating the content. Find a small activity they can manipulate and engage in somehow, rather than just spewing it at them. Advises it can take a long time to design good activities that successfully register with students.

Faculty member asks if it may be possible for others to jot down and share some of these ideas to share.

Jerry notes one item he struggled with was focusing more on depth and less on breadth. For example, with physiology, so much information must be covered.

Faculty member agrees that it's a struggle, because with every new activity you attempt to plan, you feel you're losing content.

Jerry notes technology and that students no longer have to memorize since content is literally at their fingertips.

Faculty member notes textbooks aren't geared to this method very well.

Faculty member mentions in physiology they have a common textbook, which is not required, but is recommended as a good reference book. Notes students are no longer buying the books, and when they do it's the e-book.

Faculty member mentions the Professional Society for Microbiology which has guidelines on curriculum, so encourages others to look at their respective discipline's professional societies as a resource. Also notes <u>the National Center for Case</u> <u>Study Teaching in Science</u> as a helpful tool.

Discussion of case study teaching.

Faculty member advises: If you do change something in your course, change a little bit, and take data, before and after, to determine if it works or not.

Faculty member notes <u>iBioSeminars</u> as classroom tool.

Discussion of note-taking, providing slides, etc. Many note observation of their students' note-taking—some use laptops, some quit bringing paper completely, so some faculty find they're providing hand-outs. Faculty note the difference between good typed notes and simply transcribing lectures without retaining anything. Faculty member notes their personal data of handwritten notes correlating to better grades.

Faculty member notes practice of asking successful students to provide feedback for future students. Many agree they currently do the same. Another notes the importance of making students take ownership of their grades—ask them how many times they reviewed material, etc.

Discussion of class participation: Credit for asking questions, credit based on class observation (were they on their phone/laptop during class discussion, etc.). Faculty member notes the difficulty of class participation points for shy students and the value of online forums for this purpose, as well as easier tracking of students/points.

Faculty member suggests contriving activities in which students can choose which topic to cover. If chosen, more motivation to learn.

The subject of CURE lab courses (Course-based Undergraduate Research Experience) comes up.

Faculty member explains current CURE lab she co-runs, and states that students design and complete their own experiments, contributing to scientific knowledge, which is the point of CUREs.

Faculty members note CUREs are based on central research question, using students as little work horses, good at collecting data, and that since it's for an actual question/contribution to science they feel more invested in it.

Faculty member states the goal of CUREs is not to take the place of 1-on-1 labs. Presentation skills, problem solving, experiment design, getting the masses those kinds of experiences is the definite goal. Goal should be getting 900 majors into 181, 183, and getting them all some sort of research experience.

Jerry asks how many of our students get the lab experience they want. Faculty reply 10%.

Faculty state the demand is high, but it's very difficult to provide. Hard to find labs, even if <u>CURIOUS</u> makes it easier, it's on the student to do the leg work.

Another member notes not many have the confidence or ambition early on to seek it out. And by the time they're ready there aren't enough resources. That's why Jim Brown created MB360, to catch these students, expose them to faculty, teach them research and get them prepped up, so when they left that semester, if they wanted to, they may have already made connections with faculty, and if not were prepared to.

Jerry asks faculty about their thoughts on feasibility of seminar where research faculty talk about what they do. An introduction as to who's doing what as a way to get more students into research labs?

Faculty reply some incorporate that idea into their courses now—make it a requirement to go to a seminar, etc., so you're not taking up a whole course.

Building on seminar idea: 1 credit, freshman level, once a week, half page summary on the talk. Credit on asking questions.

What about LSFY, LSC103? Just a 10 minute visit from the program coordinator. Q&A session about what a biochemist does [example]. Notes there aren't many researches (directors of the programs, but not the same as researchers).

Faculty member poses idea of 10 minute faculty videos which can be shown in class. Member replies many like the interaction of question and answers. Point is raised to be sure to tell freshman to go to the undergraduate research symposium. Some classes do this already, but could make it a requirement for intro bio courses.

Jerry notes the group is out of time, and remaining items will remain on the agenda until next semester. Expresses hope that all have a great summer, teaching or not, and if so be sure to have some fun.

Meeting closes at 1:03 p.m.