

Coevolution of Biology and Chemistry in the Development of a New Major

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UAN-ASBMB Members for the 2008-2009 school year (from bottom left): Alexandra Ayala, Melissa Schramm, Stephanie Levin, Alex Charron, Ray Choi, Danielle Clark, Ejaz Ali, Mike Fiske, and Chris Tossing. (Not pictured: Katie Rice.)

As the field of science continues to advance, the Lake Forest College faculty and administration continually modify their curriculum to provide students with the education and skills necessary to be successful in this competitive field. In recent years, more emphasis has been placed on a molecular approach in the field of biology. This, combined with the continued interest of students in pursuing degrees in both biology and chemistry to prepare for graduate or medical school, has been the cause to develop a new, interdisciplinary major for students: Biochemistry and Molecular Biology (BMB).

As noted by Professor Karen Kirk, "This new major is designed to combine both biology and chemistry in a more focused and comprehensive curriculum that is significantly different from existing course sequences." As such, it is its own unique program, designed to meet the requirements in this particular field. While the BMB curriculum is still being finalized, a number of courses have been laid out for the completion of this major. Similar to a biology or chemistry major, BMB majors will be required to complete Organismal Biology, Cellular and Molecular Biology, General Chemistry, as well as Organic Chemistry. However, as an alternative to a Biology Core Seminar and Ecology and Evolution, two courses specific to the BMB major will be introduced. In addition, a full year of physics and calculus will be necessary to participate in upper level BMB courses. After meeting these requirements, students pursuing a BMB major will be given flexibility in their upper-level science courses. Students will need to complete one semester of physical chemistry, as well as at least two 300-level courses that are molecularly based.

As a means to receive student input in the development of this new major and incite interest, the inaugural chapter of the Undergraduate Affiliates Network of the American Society for Biochemistry and Molecular Biology (UAN-ASBMB) was founded in the fall. Currently, Danielle Clark and Ray Choi are serving as co-presidents of this academic club, advised by Dr. Shubik DebBurman and

Dr. Jason Cody. In their first year as an ASBMB chapter, these students hope to help faculty establish a solid foundation for the BMB major and unite the biology and chemistry departments. Additionally, UAN-ASBMB will be holding an inauguration ceremony with an honorary guest speaker this spring open to the student body. In future years, they plan to become more active campus-wide by holding seminars and hosting activities related to the field of Biochemistry and Molecular Biology to spark the interest of other students.

With the faculty's unequivocal desire to help students succeed and introduce new courses, as well as students' interest in meeting the demands of two separate departments, it seems the BMB major meets the approval of both the faculty and students alike. As the co-president of UAN-ASBMB Danielle Clark remarks, "I think that this new major is a great way to combine biology and chemistry, as well as integrate the two departments. Too often we see a division between the branches of science, and it is important to realize that all science is intricately related." With the foundation of this new major firmly planted, the administration hopes to introduce it in the 2010-2011 school year. It is much anticipated to see the success of the Biochemistry and Molecular Biology major as the result of the co-evolution of the biology and chemistry departments.

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