Wow, where do I begin? I guess I’ll start by introducing myself. My name is Mark Bolyard, and I am the new Chair of the Biology Department. I joined the Union Biology Faculty after being a member of the Biology Department at Southern Illinois University Edwardsville for over 15 years. I began working at Union in January, and spent the Winter and Spring terms living on campus, while my family (my wife and three kids) finished the school year at our home in Edwardsville, IL (part of the St. Louis metropolitan area). I can tell you that I put a lot of miles on my car during Spring term! We are now together in our new home in Jackson, and I think everyone is adjusting pretty well.

My academic background has included schools of very different sizes. My bachelor’s degree (Biology) was from Hanover College, a school of about 1000 in southern Indiana. It was there that I really had an understanding about the kinds of mentoring relationships that students and faculty can have. From there I went to the University of North Carolina (Chapel Hill) to complete a Ph.D. in “Experimental Pathology” (basically molecular biology), working on genetic engineering of the human blood clotting protein fibrinogen. From there I worked as a Research Associate at Michigan State University, where I learned about plant tissue culture and molecular biology. Then it was off to Edwardsville, which was a place that valued both teaching and research. All of these experiences have been great preparations for my time here as Chair at Union.

I’m excited about the direction that the Biology Department is headed. We are in a fantastic new facility, we have some excellent new equipment (but we can use more! - see the article “How you can help…” which describes the Housewarming Website), new faculty (myself, and Dr. Marc Lockett, who comes to Jackson from our Germantown campus), great existing faculty, and a good group of students. We have been blessed. But there is so much more to do. We are looking forward to the opening of the Pharmacy school and welcoming additional Biology majors who are interested in pre-pharmacy. We are excited about increasing the research opportunities for our students. We are working toward offering additional courses, and offering some existing courses more often.

We would love to hear from you! Let us know how your experiences at Union prepared you for your career (and your life in general), and send us suggestions that you have for how we might improve. Come and visit us! We’d love to give you a tour of our floor of White Hall, and have you celebrate this new chapter in the life of the Biology Department with us.

Department since you graduated from Union, but some things have remained the same. We hope that you had a great undergraduate experience as a Biology major or minor at Union, but we’re sure that there was a time when you thought, “I wish we had…”. With the building of White Hall, and the purchase of some fantastic new equipment to go with it (such as this ultracold freezer [see photo]), the Biology Department has come a long way (we’d love for you to come visit us and check it out!). However, Biology is such a rapidly expanding (and expensive) field that it is a challenge for the Department and the University to keep up with the latest trends. So, we’d like to ask you to help us in this endeavor.

Have you ever wondered how you could help current students and faculty in the Biology Department? Maybe you could be the one who can provide that item or those materials that you wish you had when you were a student. Now you can. We have launched a new website which we are calling our “Biology Department Housewarming” site. This is your chance to purchase, or contribute toward purchasing, needed equipment and research supplies for Biology students and faculty. On this site you will be able to see our current needs, and, through our secure server, make contributions directly toward the purchase of these items. This site can be accessed directly at: https://www.uu.edu/advance/ giving/biology.cfm or from the Department’s Home Pages [http://www.uu.edu/ academics/coas/biology or soon at http://www.uu.edu/dept/biology]. If you would rather not make your contribution online, please call the Development Office [731] 661-5050 so we can accept your contribution another way. Thanks so much in advance for your help in making our Department, your Department, even stronger in the future.

Chair’s Corner

Mark Bolyard

Department of Biology

How You Can Help

THERE HAVE BEEN A NUMBER of wonderful changes to the Biology Department. We now have launched a new website which we are calling our “Biology Department Housewarming” site. This is your chance to purchase, or contribute toward purchasing, needed equipment and research supplies for Biology students and faculty. On this site you will be able to see our current needs, and, through our secure server, make contributions directly toward the purchase of these items. This site can be accessed directly at: https://www.uu.edu/advance/giving/biology.cfm or from the Department’s Home Pages [http://www.uu.edu/academics/coas/biology or soon at http://www.uu.edu/dept/biology]. If you would rather not make your contribution online, please call the Development Office [731] 661-5050 so we can accept your contribution another way. Thanks so much in advance for your help in making our Department, your Department, even stronger in the future.
THE INTRODUCTION OF THE Natural Resources Management Plan at Milan Army Ammunition Plant (also known as the Milan Arsenal) has placed emphasis on wildlife preservation and research, ranging from different bird and mammal communities to streams and aquatic vegetation. White-tail deer and wild turkeys have been targeted specifically in the project because of their economic value for hunting at the Ammunition Plant. Dr. Andrew Madison, Associate Professor of Biology at Union University, is involved in all phases of the construction of the new science building, White Hall. In place of the “pit” and six labs for all teaching and research, Biology now has seven designated teaching labs with multiple preparation rooms, a central instrument room, three research labs and a student study area. One may wonder how White Hall came into being. Mr. Gary Carter, Union University’s Senior Vice President for Business and Financial Services, assumed the responsibility for coordinating the White Hall project in December 1997. He has sixteen years of experience overseeing construction and renovation projects at Union. Describing himself as “more of a facilitator than anything,” Mr. Carter was involved in all phases of the construction of the new building.

Throughout these years and relocations, one person has remained constant: our very own Mrs. Elsie Y. Smith. A graduate of Union University in 1962 with a BS in Biology, followed with an MS from the University of Illinois in Microbiology and additional studies at the University of Tennessee-Memphis Medical Units, Mrs. Smith has seen both Union and the field of biology transform first-hand. Currently in her 46th year of educating young men and women at Union, when asked why she keeps at it she replied, “I truly believe in what we are doing here at Union; preparing students with a Christian perspective within a Christian atmosphere. Traditionally, our students do well in whatever they pursue.”

The biology department has relocated twice during Mrs. Smith’s tenure, once in the 1970s to the current campus, and again this year to the new White Hall science facility. When asked her thoughts on the transitions, she said, “In terms of space, the move from the old campus to the current [campus] gave us much more space than we had previously. But, in terms of technology, the move from the Pen Nick complex to White Hall has been a giant step forward.”

Mrs. Smith has taught a variety of classes at Union, including microbiology, immunology, and genetics. She has been a cornerstone of the Biology Department for many years and each year she continues to brighten the world of her students, both intellectually and spiritually, with her kind words and compassion.

THE BIOLOGY DEPARTMENT faculty approved and installed a new curriculum. This curriculum is aimed at allowing students to take classes highlighting more specific areas of study within the field of biology. One is able to earn a biology major with one of three specific concentrations including general biology, zoology, and cell/molecular biology. The general biology concentration contains the normal class schedule previously laid down for a biology major. The zoology concentration is similar to the general biology schedule; however, it eliminates requirements of botany and genetics, replacing them with an option of wildlife biology or microbiology, and physiology. The cell and molecular biology concentration defnes a very specific schedule for upper level classes including a requirement of mirroring in chemistry along with taking biochemistry II. Aside from the new concentrations, a new Conservation Biology major is now offered. This major, like the cell biology concentration, defnes a very specific class schedule surrounding this sUbfield of biology. It also should be noted that all concentrations and majors still require the series of research and seminar classes previously required for the major. Students and cell amy also be very pleased about these changes that provide students with more flexibility in choosing classes that peak their interest most. These curricular changes, along with the completion of White Hall, make it a very exciting time to be a biology major at Union University.

Now, as White Hall continues its first full semester in operation, the reaction has been very positive. Among other things, Dr. Andy Madison noted, biology students and faculty now have a much greater capacity for research, since there are now three designed research labs to improve and create a variety of projects. In addition, the provision of a generous equipment budget has allowed the Biology Department to acquire long-needed instrumentation and equipment, including a -80 C freezer, a UV spectrophotometer, a microplate reader, and a laboratory photodocumentation system. One downside, however, has been noted by both students and faculty: the view from science classrooms to the library, cafeteria, or chapel is now significantly longer. Even this has a positive side, though, for now science students and faculty definitely have an opportunity to get some exercise! With all of this taken into consideration, it is safe to say that in research labs, the new building is truly proving its worth.