Welcome to the second edition of our Newsletter. As you might guess, every aspect of our program in the Biology Department has been impacted by the tornado that ripped through the campus on February 5. While White Hall sustained minimal damage to the roof, the campus schedule has been altered, and our courses are being offered at different times than were scheduled originally. Lots of changes have taken place across campus, and I encourage you to visit Union's website to keep track of how the larger University is managing the damage. It is actually quite amazing.

In spite of the tornado, exciting things continue to happen in our department, and I want to share some of them with you. As we told you in the first Newsletter, we are now fully moved into White Hall, and the last of our equipment arrived at the end of January. Recently, we installed our large autoclave, bomb calorimeter, inverted microscope, a water purification system, and a micropipette reader, as well as hoods for plant and animal cell culture. We are making great strides in improving the equipment that is available for teaching laboratories and for joint student-faculty research projects.

These joint projects received a much needed "shot in the arm" with a grant from the Dean of the College of Arts and Sciences, Dr. Gene Fant, to pay for food for Student-Faculty Scholarship Lunches. During the first meeting (in addition to eating pizza), Dr. Madison shared with about 20 students the Department's vision for projects in which students would have the option of joining faculty in their ongoing research. Students also would continue to have the option of identifying a faculty mentor to help them with a project of their own design. In this edition of the Newsletter, we highlight past student research projects in a conversation with Dr. Wofford, who directed the student research course sequence, recently turning that responsibility over to Dr. Madison. We also held a Faculty Scholarship Lunch, during which the faculty met to talk about their own ideas for research projects. A number of collaborative ideas resulted from this discussion. Recently during Spring Semester we invited the students enrolled in the first research course (Biology 425) to lunch as the faculty shared their ideas for joint projects with students.

Another exciting development for the Biology Department is the advent of Union's School of Pharmacy. We look forward to having the privilege of training Biology students who have an interest in Pharmacy, and to developing relationships with the Pharmacy faculty as they arrive on campus.

Finally, we have some bittersweet news. Our beloved Mrs. Sherry Crossett is retiring from Union after 16 years of service. We will miss her, but we know that she has other exciting things in store for her. We have included an interview with her in this issue of the Newsletter, and look forward to introducing you to her replacement in the Fall.

Thanks to those of you who contacted us in response to our first Newsletter, and we hope you all will pay us a visit the next time you are in Jackson. Please consider putting Homecoming '08 on your calendar and plan to come see us in November!
One of the unique aspects of the biology program at Union is the process of engaging students in undergraduate research. For many years now, every biology major that has graduated from Union has performed original research on some subject, whether that be the behavioral characteristics of gorillas, wildfire characteristics, the testing of potential antimicrobial agents. From the spring of 1989 through the spring of 2007, Dr. Wayne Woford was the biology research coordinator, guiding over 300 students through their research projects. Now, Dr. Andy Madison is acting in this role, and together with the new department chair, Dr. Mark Bolard, a new and different research process is emerging. This article will look at the undergraduate research process in the recent past, give an overview of the current state of affairs, then look ahead to the changes that are envisioned for the biology research process in the future.

When Dr. Woford began teaching the research class in 1989, biology students took a two-credit hour class in which they wrote a research proposal, did their actual research, and prepared a research paper, all in one semester. One of Dr. Woford’s first changes was to break the research sequence down into a series of one-hour classes over the course of three semesters, allowing students more time for research projects which often could be rather extensive. Also, students began giving oral presentations on the results of their research projects, allowing the entire biology department to become familiar with the work of students’ work. At outside scientific meetings, four students won awards for their research presentations, and in 1998 Dr. Woford started the Outstanding Biology Research Award for student presentations given at Union. As the research program expanded, Dr. Woford and several students were able to collaborate with the Tennessee Department of Environment and Conservation in a stream survey project that ran from 2004 - 2006.

Currently, although Dr. Woford has turned over the undergraduate research process to Dr. Madison, he still is involved in research that not only includes science but goes beyond as well. As an avid participant in the dialogue between faith and science over the years, Dr. Madison’s latest project is the compilation of a “Faith and Science Bibliography.” As the literature on this subject increases every month, the overall goal of the task force is that an individual trying to study this topic is increasing. Thus, this bibliography is an effort to organize science and faith literature efficiently, and plans are underway to make it accessible from the Union website.

As Dr. Woford continues with his endeavors, Dr. Madison now coordinates undergraduate research. In the past, students developed their own research ideas and often worked in relative independence; however, that is changing more of what Dr. Madison calls a “graduate school model.” Under this system, professors conduct individual research projects in their particular areas of expertise and research students identify a segment to work on within the overall project of a particular professor. This will allow more in-depth research projects to be pursued and increase the likelihood of both students and faculty publishing their work. However, such ongoing research projects will require more funding than previous efforts. To address this need, Mr. Madison’s goal is to actively pursue external funding. This should provide students with more opportunities for in-depth projects at Union University.

BIOME, Biologists In Observation of the Master’s Earth, is an on-campus organization for any students interested in biology. The four main purposes of BIOME are (1) to provide a group for students with similar interests and struggles to network, develop friendships, receive accountability, and fun, (2) to provide an atmosphere in which students and faculty can relate outside of the classroom, (3) to create a professional organization through which students can develop better leadership skills and become better prepared for professional schools and the future, and (4) to attain a greater appreciation of our Creator, Jesus Christ. Each of these purposes is attained throughout monthly meetings and events. BIOME events are aimed at strengthening student fellowship, scholarship, and teacher-student relations. These events range from shaving cream softball and pizza to seminars from university professors to community service opportunities. With the vision and hard work of an excellent president and faculty advisor, BIOME has enjoyed an exciting year. We have had great turn-outs at events, with high levels of student participation. BIOME has been a great opportunity for personal growth and networking and we hope it will continue to flourish for years to come.