

Skills Workshop # 1: Technical Writing and Presentation

Speaker: Dr. Ronald W. Millard, Professor, Pharmacology & Cell Biophysics, College of Medicine, University of Cincinnati

Date: June 25, 2009

Time: 8:00 to 11:00 a.m. (3 hours)

Prepared by

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This workshop was given by Dr. Ronald W. Millard, Professor, Pharmacology & Cell Biophysics, College of Medicine, University of Cincinnati on June 25, 2009 from 8:00 to 11:00 a.m. (3 hours). Dr. Millard is the Director of two REU Sites: NSF REU Site Program in Membrane Science and ASPET SURF Program. He is also directing a NSF RET Supplement for two teachers who are participating in the professional development programs offered in our RET Site. His area of research is molecular dynamics in heart failure. The photographs shown below were taken during the workshop.



Dr. Millard Teaching (left) & Participants During the Workshop (right)

This seminar was jointly held for the 14 RET and 14 REU participants participating in a concurrent NSF REU Program. Dr. Millard presented three hours of instruction on communication of scientific research through writing and presentation. He began with a clip from Michael Wesch called "*A Vision of Students Today*." This clip featured college students relaying information about their own behaviors and attitudes in the classroom. This clip segued into a discussion on the rapid changes that are occurring in our means of communication and learning strategies that manifest as a result. Changes that were highlighted included the movement from typed print to electronic media, the switch from face-to-face interaction to texting and cell phone use, and a decreasing span of attention in today's youth because of television programming. The negative behaviors to which he particularly referred were texting and Facebook updating during lecture, skipping class altogether, and cruising through courses without completing reading assignments.

The first activity that Dr. Millard assigned to the participants was a little ice breaker activity in which he handed out the Science Times portion of The New York Times to everybody and asked everybody to pick 5 words that they did not know. After everybody had selected five words he then asked each person to say one of their words that they thought nobody else in the room would know. With each word somebody was then selected to try and define the word as well as make an attempt to spell the word. This activity not only helped the participants feel more comfortable with each other, but it also gave us a chance to use words that might not be a part of our every day vocabulary. In this activity Dr. Millard also expressed the importance of pronouncing words correctly. This is very important because depending on what

people hear it might change what word they think your saying, which could affect the definition and the entire meaning of what you were trying to express.

Next Dr. Millard went over a PowerPoint presentation that he had developed. In this presentation he went over several points of interest that would help the participants with their poster, report, and PowerPoint presentations. In Dr. Millard's presentation he expressed the importance of making sure you cite the information you use correctly. He also went over several different examples of creative writings, articles from scientific magazines, and technical writings. All of the examples that Dr. Millard showed dealt with a specific creek in Cincinnati. In showing different forms of writing about the same creek Dr. Millard explained the importance of knowing who your audience is. In one of the creative writing examples he presented one was able to tell that the article was written for a mainstream audience and the vocabulary used in the article was easy to read and understand. The article from the magazine "Popular Science" used more scientific words to express the conditions of this particular creek, but the words were still easily understood for the majority of people who would read an article from that magazine. The technical article used very specific scientific words. The vocabulary used in this article was for people who had an extensive scientific background and was not meant for the average reader. Dr. Millard explained that we need to know the difference between each of these types of writings because based on who your intended audience is affects which words you should use.

Dr. Millard finished his presentation by going over several examples of past posters and PowerPoint presentations from research. On posters Dr. Millard explained that one should not have solid reds and greens on their poster; he stated that one should try using red or green dots or lines instead. On the poster he also said that is important to break up some of the text with pictures or diagrams, to attract more attention to the poster since one never knows who might be in the audience. In regards to the PowerPoint, Dr. Millard also said that it is very important not to have too much text on the slides. He explained that the slides should just be a guideline and everything that you plan on saying should not be included on the slide. Dr. Millard also explained that one should be careful when using a laser pointer because you never know if somebody in your audience is color blind. Dr. Millard suggested instead of using just a regular red pointer try using a bright green pointer since it would be easier to see if somebody was color blind. Also on PowerPoint presentations, it is important that the text is not too small and that if the pictures on the slide are very clear since they will be what people focus on first.

Dr. Millard's workshop was very helpful in helping the participants to be better prepared for their poster, PowerPoint presentation, and technical report. His workshop showed the importance of knowing who the audience is and based on that making sure to explain the information to the people who may or may not be familiar with the topic. The lessons learned in this workshop will go a long way to help the participants be better prepared not only in their upcoming presentation, but any presentation that they might have to do in the future whether that is in school or our eventual careers.