

July 2007
Sabbatical Report
Submitted by Eunice Carlson

Sabbatical report for Spring 2007 for work on book: "*The Emerging Age of Fungi: story text and laboratory exercises*".

The thesis of this project is that students can be best inspired with relevant, interesting, historical stories, sometimes funny and sometimes tragic, along with necessary facts and hands-on projects.

1. Currently all planned 18 essays/chapters with 16 laboratory projects and three appendices are drafted or under research.
2. Initial contact was made with 10 expert consultants; queries/interviews have been completed with 5 (I may contact them again) with other contacts in progress. (The expert contacts have been extremely inspiring to the essay writing and I will continue to identify new experts as I complete this writing project).
3. The essays and laboratories on the subjects of medicinal mushrooms and *Armillaria* involved complicated topics about which I was unfamiliar and this necessitated much more research and laboratory work than I had anticipated to familiarize myself to a point where I could write the planned essays and laboratories. For example, the medicinal mushroom essay and laboratory included instructions for growing various mushrooms. There are at least three ways to culture medicinal mushroom and I am currently learning how to do this myself so that I can provide instructions. Of the three methods I have successfully completed one using *Pleurotus ostreatus* and am currently working on the other two methods.
4. While researching the career option essay I found that there is a serious crisis in medical mycology training in the US. There are no Departments of Mycology or Medical Mycology in the US (interestingly a number of such departments exist in Europe and the East). There is an increasing need for medical mycologists as more and more of our citizens have compromised immune systems due to AIDS, organ transplants, other medical practices, and a poisoned environment. Physicians receive only a few hours of training in mycology and no programs exist for degrees in medical mycology. I am researching this situation separately for possible publication.
5. Work on the career path chapter was surprisingly complex and required a surprising amount of research and contact with several new experts. I believe this is an very important part of this book and this chapter will help students plan postdoctoral work to enable them to find the career they desire. Reorganization of the book places a short Career Path box as part of each laboratory lesson and a detailed discussion in the essay titled *I took mycology so where are the jobs -- ethno-mycology anyone?* The hands on

part of this lesson would help students identify a career in mycology and plan the type of post graduate study that would get them there. (It would be very helpful if textbooks routinely had such a chapter).

6. As I wrote I followed my research and interests and made a number of changes from the proposed plan necessitating contact with additional experts with some deviation or postponement of the original plan.

7. I read many articles and books as research for this project--my writing while reading produced an added bonus: a keenly enhanced appreciation for good writing!

8. As a result of my work on this book I believe even more strongly that the best way to teach is by the use of historical relevant stories along with necessary facts and hands on experience. My work on the mycology essays has inspired me to began a *Reader* (published and original essays) for my toxicology students.

9. The table of contents and list of expert consultants (proprietary materials) has been provided to the sabbatical committee.

10. The project required a new laptop computer which I activated myself and as it was defective it took more than a month to activate. After much testing I received a new hard drive in the mail and with phone instructions installed all new soft ware-- (time consuming and frustrating but a good learning experience).

11. I would like to thank the Department of Biological Sciences, the University Sabbatical Committee and MTU for this sabbatical opportunity.