Plant Monograph Paper Guidelines

Emory University
HLTH 385-000/ANT385-003: Botanical Medicine and Health
Spring 2012

Important Dates:

January 23rd – You must post your choice of plant to use as the focus of your monograph in the monograph discussion board. The plants are available on a first-come, first-serve basis. I encourage you to choose early.

February 6th – A list of at least 15 references that you will be using to write your paper is due. These should be from scientific articles and texts. I suggest that you start your search by going to the PubMed website at http://www.ncbi.nlm.nih.gov/pubmed. Next, type in the scientific (binomial) name of your plant and any other keywords on information that you are seeking (e.g. cytotoxicity, bioassay, antibacterial, diabetes, and etc). You may also use any additional Emory library resources to find books and articles to use as references.

<u>NOTE:</u> I will be submitting all final papers for analysis by software that checks for plagiarism. <u>You will receive a zero on this assignment if you plagiarize.</u> Refer to the Emory Student code of conduct for more information on this topic. Your monograph must be written in your own words based on what you learn in your research, and it must be referenced appropriately. <u>No websites are permissible as references without the instructor's express written permission</u>. See instructions for formatting below.

Mach 19th – First (well-written) draft is due. Send as a Word document attachment to the assignment submission web link.

March 30th – Peer review reports on 2 of your classmates' papers are due. Submit the review report and the edited document (with tracked changes) as an attachment using the assignment submission web link. Use this feedback to edit and improve your paper for your final submission.

April 16th – Monograph presentation slide decks are due as an attachment in blackboard. If you have trouble submitting this as a PowerPoint file, you may alternatively save your slides as a pdf and submit that way.

April 18th - Final, revised version of your monograph is due as an attachment using the assignment submission web link.

Format of your paper:

Please follow these instructions very carefully. At the end of this project, the class should be able to produce a set of medicinal plant monographs that adhere to the same formatting and setup.

<u>Technical formatting guidelines:</u>

- Use 11 point Arial font. The entire document should be single-spaced and single column (Dr. Quave will format all final papers to double columns in the final document). The outer margins should be 1".
- All Tables and Figures should be placed at the end of the document after the References Cited section. Refer to the tables and/or figures in numerical order throughout the text. Ex., Table 1, Table 2...etc.
- Include a description of all tables and legends with the figure or table at the end of the document

- The monograph should be 3,500-5,000 words in length (not including references). If you submit a paper under the word limit, points will be deducted based on the percentage of words short it is of the 3,500 word minimum.
- Download Endnote (free from Emory Software Express) using the link provided in the Monograph folder. Use the APA 6th format style
- Resources for help with writing are available at the Emory Writing center http://writingcenter.emory.edu/index.html
- Regarding the scientific name of the plant: write out the full genus and species name in the beginning of each subsection, then use the abbreviated genus for the remainder of each subsection. See the existing E-book for examples.

Headings and sections for the paper

Your monograph will be divided into several predetermined sections that must be adhered to. Each section heading will be on a line of its own and highlighted in bold. Subheadings (if any are needed) will be highlighted in bold and italicized.

Genus species author epithet, Family

Your Name

Introduction

In this section, you should give an introduction to the plant by listing its scientific name and family, common names, and a brief overview of how it is used, what are its main constituents, etc. This should serve as a brief introductory summary about the plant, and the following sections will be used to describe the detailed information.

Botanical Description

In this section, you should describe the morphological characteristics of the plant. For example, describe its habit (tree, shrub, herb, etc), its habitat (marshy areas, arid plains, etc), its flower and fruit characteristics (color, smell, shape, be detailed in giving a thorough botanical description!). What are its relationships with other species? For example, is the pollinator known? You may wish to include a picture of the plant as a figure. Make note of the figure here and place the actual figure (picture) at the end of the document. Remember to cite the source of the figure.

Traditional Uses

In addition to writing about ethnomedical uses of the species, there may be some other documented ethnobotanical uses (food, decorative, construction, clothing, etc). You should mention this here and you may wish to create a sub-heading for this to separate it from the section on traditional medicinal applications. When discussing traditional medical uses – please specify which culture(s) use this. Do they use it in the same way, or different, how so? How is the remedy prepared traditionally? Is it boiled, or steeped in alcohol? Is it drunk or rubbed on the body? etc. Also – is the use of this plant documented in ancient texts? Usually, this kind of information can be found in current scientific articles. Has the use changed over time? Is the traditional use relevant to the modern CAM applications?

Chemistry and Pharmacology

What are the main known chemical constituents of this plant? If available, also describe the percent in which they occur. You may wish to present this in a table format. You may wish to include images of the chemical structures as a figure at the end of the document.

Biological Activity

In this section, you should discuss any *in vitro* and *in vivo* (animal) laboratory studies conducted on extracts or fractions or purified compounds from this species. Is a mechanism of action for the drug's

activity known? If not, is there a basic understanding of how it may work? Are there any issues with the development of drug resistance?

Clinical Studies

Have any clinical studies been conducted? (Specifically, what studies have included tests on human subjects?) If so, what were the findings and recommendations?

Contraindications

Are there any dangers associated with the use of medicines from this plant? Toxicities? What are they? Have any interactions with other drugs been documented? For example, some drugs interact with grapefruit juice.

Current Use in Allopathic and CAM Therapies

Are there any drugs currently on the market that were derived from this plant? It can include over the counter or prescription drugs. Also discuss if any drugs were created by modifying the original plant compound's structure. Are there any herbal supplements on the market based on this plant? How are they sold? What are they marketed as? Is there a recommended dosage for either the prescription form of single compounds or herbal supplement mixtures?

Discussion

Summarize your findings. How does this all piece together? Explain why this particular plant has been important to human health and what role do you think it will play in the future of human health.

References Cited

Use the APA 6th style for reference citations (selected from drop-down box in Endnote). Do not cite websites (other than the USDA database, TROPICOS, Moerman's Native American Ethnobotany database, and Duke's Ethnobotanical Database OR the sources of pictures included in the text) in your paper. Do not cite any of Dr. Quave's lectures. Your paper is to be a thorough review of the scientific literature concerning your plant and should include peer-reviewed journal articles and scientific texts/books.

Tables

Give your table a description and title. Tables will be placed at the end of the manuscript. Do not embed them in the main text. Do not cut and paste an image of a table from another source. Create your own table using the information and cite the source(s) appropriately in the table description.

Figures

Give your figure a description and title. Tables will be placed at the end of the manuscript. Do not embed them in the main text.

The Peer-review process

Learning how to give a thorough peer-review is almost as important as learning how to write a paper yourself. In making a critical assessment of someone else's work, you will often find that the experience helps you to view your own writing in a different way and helps to improve your scientific writing skills. For this exercise, I will randomly select 2 papers from 2 of your classmates and email them to you for your review. You have 2 main tasks when reviewing these papers:

- 1) Create a peer-review report with comments and constructive criticisms with the goal of helping your classmate improve the manuscript
- 2) Make changes to the manuscripts using the "track changes" option under the Tools menu in Word. You can also enter comments into the document by using the "add comment" function. Your classmate can then view the changes and choose whether or not to keep them.

Your peer-review of these 2 papers is worth 50 points (~6% of your final grade), and you will need to take the time to give each paper a thorough review. If you have questions or doubts about the material being presented in the paper, take the time to do some literature searches (using Pubmed) of your own to check the validity of the information presented in the monograph.

Your peer review report should follow the following format:

- Major Compulsory Revisions (which the author must respond to before turning in the final version)
- **Minor Essential Revisions** (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
- **Discretionary Revisions** (which are recommendations for improvement but which the author can choose to ignore)

When assessing the work, please consider the following points:

- 1) Is the grammar and quality of written English acceptable? Please make suggested changes using the track changes function in Word.
- 2) Does the author adequately address all of the required sections (i.e. introduction, traditional uses, clinical studies, etc.)?
- 3) Does the author's review seem to be accurate? You may need to do some brief literature searches of your own to verify this.
- 4) Are figures and tables used appropriately in the paper?
- 5) Is the information reported properly referenced? Please make note of any statements that need to have references added.
- 6) Is the length of the manuscript appropriate? Are the sections well-balanced? Is the content clear and understandable?

Overall, please make detailed suggestions in a constructive manner to help the author improve the manuscript. *Use an encouraging tone in your review*. The goal of this exercise is to help your classmates improve their monographs - <u>not to discourage or insult them</u>. At the end of the semester, an electronic book of all of your papers will be made and distributed to all of the authors. This is your opportunity to help improve the overall quality of the E-book. You may also wish to use the criteria in Dr. Quave's final paper grading rubric as a guide when writing your critiques.

Grading Rubric for the Final Monograph Submission

Grading Criteria	Number of Points
Quality of grammar and written English	6
Structure of paper (sections and subsections) follows the formatting instructions	4
Appropriate use of tables	5
Appropriate use of figures (pictures and graphs)	5
Proper formatting of references (APA 6 th from Endnote)	4
Citations are appropriately included for information presented throughout the text	8
References come from a variety of sources and the author does not rely too heavily on only a few sources. No websites (other than the USDA database, TROPICOS, Moerman's Native American Ethnobotany database, and Duke's Ethnobotanical Database OR the sources of pictures included in the text) are used.	10
Quality of the content of individual sections:	
Introduction	12
Botanical description	12
Traditional uses	12
Chemistry and pharmacology	12
Biological activity	12
Clinical studies	12 12
Contraindications	12
Current uses in allopathic and CAM therapies	12
Discussion	12
TOTAL POINTS	150

**Note: Before any points are assigned, all papers will be checked for plagiarism using SafeAssign software. Plagiarized works will receive a zero and be turned directly over to the Emory Honor Code board for evaluation for any additional repercussions. In addition, the word count for all papers will be checked prior to grading (this excludes the references cited section and any tables). Papers not meeting the minimum word count will have points deducted based on the proportion of content missing. For example, if a paper with 2,500 words is submitted, then (2,500/3,500)*100 = 71%, meaning that the student completed only 71% of the assignment. Thus, 29% of the points (43 points) will be deducted before any of the grading criteria in the rubric are even considered.